

**« J'ai tout le temps eu de misère » :
A Variationist Study of Adverb Placement in Quebec French**

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ABSTRACT

This study investigates variable positioning of adverbs in compound verb tenses in vernacular Quebec French using the sociolinguistic framework of Variation Theory (Weinreich et al. 1968; Labov 1969). While variable adverb placement is addressed in both the prescriptive and linguistic literature, whether their explanations for it hold in practice remains to be determined; quantitative research of this phenomenon in usage-based corpora is limited, and rare in French. The research objectives are therefore to determine the productivity of variable adverb placement in French in these verbal contexts, to uncover the linguistic and/or social factors which constrain it, and to evaluate the extent to which current treatments of this variable in the literature accurately reflect what occurs in speech. Data is thus extracted from a corpus of spontaneous discourse, is coded for several linguistic and social factors, and is quantitatively analysed using standard variationist methodology (Poplack & Tagliamonte 2001). Overall rates of variant use suggest that variable adverb placement is robust, with adverbs occurring just slightly more frequently after the past participle than between the auxiliary and the participle; placement at the beginning of the sentence is rare. The results of the distributional and multivariate analyses largely confirm the purported conditioning effects of the tested linguistic factors, suggesting that prescriptive and theoretical linguistic approaches are generally correct in their accounts of this phenomenon. However, closer investigation reveals these effects to be sensitive to the lexical identity of the adverb, namely, their particular placement preferences; once these positioning predilections are taken into consideration, the conditioning effects of the linguistic factors essentially disappear. Sociodemographic factors are also found to be mildly implicated in variable adverb placement, and these too are sensitive to the influence of the lexical identity of the adverb. Ultimately, it is argued that this variable is primarily lexically-constrained, a finding which can be only minimally and indirectly inferred from the relevant literature. Taken together, the results of this study provide new and vital insight into the mechanisms underlying variable adverb placement in French, and also highlight the importance of quantitatively investigating such variable language phenomena in corpora of vernacular speech.

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CHAPTER 1

Introduction

1.1 General introduction

As Ernst (2002) proclaims in the very first sentence of his book-length monograph on the topic, “Nobody seems to know exactly what to do with adverbs.” Indeed, the adverb has emerged as a fundamentally interesting, yet frustratingly perplexing, topic of research. This is undoubtedly the case because the adverb is a category which is associated with a variety of functions, which are performed by a variety of items, which themselves demonstrate a number of puzzling behaviours.¹ One such curious behaviour is that adverbs may occur in various positions in a sentence. Consider the examples in (1.1), taken from the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989), which show that the same adverb may occur before the subject (1.1a), between an auxiliary and its participle (1.1b), and after the verb phrase (1.1c).

- (1.1) a. **Souvent** je l'ai vu à l'hiver. (117:1553)²
“Often I saw him in the winter.”
- b. Ils ont souvent déménagé. (045:1621)
“They often moved.”
- c. J'ai déménagé souvent. (004:97)
“I moved often.”

¹As summarized by Austin, Engelberg and Rauh (2004), some of the peculiar behaviours associated with adverbials include (among others): stable vs. variable ordering with respect to other adverbs; stacking (where a series of adverbials seem to act as one constituent); mirror ordering in preverbal vs. post-verbal positions; differences in acceptability before gaps; differences in the possibility of being extended to the right in head-initial phrases; discourse-related functions of adverbials in the left periphery; positional restrictions on ‘lite’ adverbs; and effects of positional variance on interpretation. Insofar as several of these issues can be investigated systematically in a spoken corpus, they will be considered in the present work.

² Codes refer to speaker number and line number from the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989). Examples are reproduced verbatim from speaker utterances.

While variable adverb placement like that illustrated in (1.1) is certainly recognized in the literature, a clear, unified description of it remains elusive. Rather, among French prescriptive grammars, there is divergence in the extent to which variable placement is admitted and, where it is acknowledged, there are a variety of explanations given to account for it (e.g. adverb type, adverb length; see citations in Chapters 3 and 4), which in some cases are conflicting. Additionally, even in outlining their explanations, many grammarians add the caveat that they are general and subject to exceptions, making unclear the extent to which these descriptions might hold in practice.

Conversely, the situation in the linguistic literature seems more conclusive at first glance, with variable adverb placement taken to be a well-established fact. In these approaches, variable positioning is almost exclusively related to adverb type, notwithstanding the occasional exception (e.g. complexity and ‘weight’ factors as in Alexiadou 1997; Abeillé & Godard 2000; 2003; 2004). Crucially, most of the discussion concerns distributional³ differences between adverb classes, not, as was illustrated in (1.1), for the same lexical adverb, or even for members of the same class. Moreover, the accuracy, or even practicality, of linguistic explanations for variable adverb placement have yet to be confirmed, since they are mostly formulated with respect to theory-specific processes, such as verb movement and its landing site(s), Merge sites for adverbs, topicalization and focalization, and interactions between compositional rules and lexicosemantic requirements, among others. Overall, while these linguistic analyses usually claim to have solved at least a piece of the adverb puzzle,

³ As pointed out by Laenzlinger (1998:321 fn 13) “The term ‘distribution’ is potentially confusing. It refers either to the (im)possible occurrence of an adverbial in some particular constructions (interrogative, negative contexts, etc.) or to the position of an adverbial within the phrasal structure (sentence-final/initial, VP-internal, etc.);” throughout the current work (as in Laenzlinger), the term ‘distribution’ refers to the latter of these two interpretations.

none has yet emerged as the uncontested model in accounting for (variable) adverb placement, especially as concerns the possibility of variation among members of the same class and for the same lexical adverb.

Despite this confusing state of affairs, or perhaps because of it, corpus-based empirical work on variable adverb placement in spoken varieties is generally limited, and rare as concerns this phenomenon in French. So, while the development of sophisticated analyses may be key in the pursuit of a universal theory of adverb syntax, and while normative descriptions may provide some approximations of where adverbs may be positioned in a sentence, little is known about adverb placement outside of these domains. This is so despite the potential for corpus-based analyses to reveal where adverbs actually occur, their frequency in these positions, and how adverb placement may be influenced by components of the linguistic and social context. As such, information emerging from corpus-based analyses can help evaluate the extent to which prescriptive and theoretical linguistic explanations accurately reflect adverb use by native speakers. Given the considerable amount of valuable insight which can be gleaned from an analysis of variable adverb placement as instantiated in a corpus of spontaneous speech, it is not surprising that Austin, Engelberg and Rauh (2004:40) earnestly advise, “it seems high time to supplement the highly developed state of theory construction with some more descriptive corpus-oriented work.”

1.2 The study: An overview

The present study thus aims to address this lacuna in adverb research by adopting the sociolinguistic framework of Variation Theory (Weinreich, Labov & Herzog 1968; Labov 1969; 1972) to investigate variable adverb placement in actual usage, here, spoken

vernacular Quebec French. In particular, here the phenomenon exemplified above in (1.1) is examined in the context of compound verb tenses (e.g. *passé composé*, *plus-que-parfait* etc.), which are generally considered in the prescriptive and syntactic literature to admit variability. This study is limited to examining adverb placement with compound verb tenses since the prescriptive literature claims that adverb placement is essentially invariable with a verb conjugated in a simple tense; grammarians agree that the adverb is placed after the verb. In order to investigate this phenomenon, the present work draws on the spontaneous speech data of a subsample of speakers from the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989) and applies to this data the methodological machinery of Variation Theory. By examining variability in the placement of adverbs in the vernacular speech of native speakers of French, this study takes a novel approach to the issue, and thus provides vital insight into a phenomenon about which, despite figuring prominently in the prescriptive and linguistic literature, much remains to be clarified.

1.3 Research questions

Given the issues outlined above, the research questions to be addressed in this study are the following

- How common is variability in adverb placement, and what linguistic factors constrain it?
- To what extent are descriptions of adverb placement in the theoretical and prescriptive literature true reflections of adverb use among native speakers?
- How, if at all, is variable adverb placement socially embedded in the variety examined, and is there any evidence of change over time?

In exploring these research questions, this study had to grapple with a number of complex characteristics which are inherent to the adverb category, including morphological diversity (1.2), polysemy (1.3), functional diversity (1.4), and the effects of adverb position on adverb interpretation (1.5), among others.

(1.2) a. Derived adverb:

Fait qu'on s'est en allés **directement**. (101:1657)

b. Adjectival adverb:

Ça lui prenait beaucoup plus de temps disons que si il était allé **direct**.
(117:1226)

c. Adverbial locution:

Elle avait cinq, six ans puis elle a appris l'anglais **tout-de-suite**. (95:1234)

(1.3) a. Adverb:

Le service social lui a **beaucoup** aidé. (95:832)

b. Indefinite pronoun (direct object function):

Elle a appris **beaucoup** ici en ville, hein? (94:2041)

(1.4) a. Modification of a verb:

J'en ai cassé **souvent** des vitres. (77:325)

b. Modification of an adjective:

Moi j'ai eu une **très** bonne santé (120:376)

c. Modification of an adverb:

J'en ai pas faite **trop** souvent. (81:1465)

d. Coordinating function:

Donc je lui avais signé vingt-cinq piasses par mois. (81:279)

e. Aspectual function (A) and manner function (M):

On a **toujours** (A) **bien** (M) mangé, pas rien que du T-bone. (84:513)

- (1.5) a. **Franchement** j'avais assez aimé ça. (90:879)
‘Frankly (= “in my opinion”) I liked it well enough.’⁴
- b. Je lui ai dit **franchement** que j'avais assez aimé ça. (my example)
‘I told him **frankly** (= honestly) that I liked it well enough.’

Additionally, any empirical study which draws on spoken language data must contend with the additional challenges presented by the nature of spontaneous speech itself, including potential functional ambiguity among polysemous forms (1.6),⁵ concurrent use of multiple adverbs (1.7), and non-standard uses of adverbs (1.8), among others.

- (1.6) Si ça aurait pas marché **bien** je m'aurais en revenu par icitte. (74:86)
= discourse marker or manner adverb?

“If it had not worked out **well**, I would have come back here.”

“If it had not worked out, **well** (then) I would have come back here.”

- (1.7) a. Une grenouille ça a **toujours bien** appris à- à nager. (105:2210)
- b. On a **beaucoup, beaucoup** écouté le- la radio. (117:1406)

- (1.8) Ils auraient bien **proche** eu dix-huit ans. (90:1236)
“They would have been **almost** eighteen years old.”

Further details on the methodological issues exemplified in (1.2)-(1.8), including how they were specifically addressed here, are outlined in ensuing chapters.

⁴ Here, and elsewhere, glosses provided are approximate translations, rather than literal ones.

⁵ While not done in this study, it might be possible to use the realized pronunciation of *bien* to distinguish adverbial from discourse marker uses (i.e. use of initial [bj] vs. [b], respectively).

1.4 Theoretical framework

In order to address the above-mentioned research goals, this study embeds itself within the theoretical framework of Variation Theory (Labov 1963; 1969; Weinreich et al. 1968; Sankoff 1988), which centers on the observation that a particular linguistic function, referred to as a *variable*, may be fulfilled by two or more competing forms, known as *variants*. In contrast to fields of linguistics which exploit native speaker intuitions in developing their theories about language, Variation Theory holds that the ideal object of linguistic inquiry is language as it is used spontaneously, in its social context, by members of a speech community (Labov 1972). The underlying assumption of Variation Theory is that alternation in speech between different variants of a given variable, or the *variation*, is inherent, and furthermore, is constrained, or *conditioned*, by a variety of contextual factors, linguistic and/or social (Poplack & Tagliamonte 2001). A fundamental methodological aspect of variationist research is its focus on the quantitative analysis of data, which enables the researcher to empirically determine which factors condition the use of different variants, and, more importantly, *how* these factors condition a variant's use, i.e. by promoting or discouraging it (these are known, respectively, as *favouring* or *disfavouring* a variant). Thus, the methodology adopted by variationist research is ideally suited for the purposes of this analysis since it is specifically designed to scientifically uncover and explain the variability which occurs naturally in speech, such as that observed in the placement of adverbs in French.

1.5 Organization of the dissertation

The remainder of this dissertation is organized as follows. Chapter 2 provides a more detailed review than the one presented above of the theoretical framework in which this

study is couched, explaining how the variationist framework is ideal for investigating the phenomenon addressed here. Chapter 3 then provides an overview of various adverb-related issues relevant to this study, including how the adverb category is defined, why the empirical study of this category is potentially challenging, how variable adverb placement is addressed in the prescriptive and linguistic literature, what corpus-based research has to say about this topic in English and in French, and how adverbs have been classified into distinct types. In Chapter 4, the specific methodology of the study is outlined. This includes details on the corpora used and the speakers sampled, on circumscribing the variable context, on operationalizing hypotheses into factors, and on methods of data extraction, coding and analysis. Chapter 5 presents the results of the quantitative analyses for the linguistic factors, focusing on both distributional trends and on variant conditioning as revealed by multivariate analyses. Chapter 5 also compares the present findings to the explanations for adverb distribution offered in the syntactic literature reviewed here. Chapter 6 then considers the role of social factors in adverb distribution. Finally, Chapter 7 contains a discussion of the results presented in Chapters 5 and 6, relating them back to the original research questions, and closes this study by presenting general conclusions.

CHAPTER 2

The Variationist Framework

Overview

This chapter outlines the methodological underpinnings of Variation Theory (VT; Weinreich et al. 1968; Labov 1969; 1972), as it will be useful for the reader to be familiar with these before delving into the literature review. In particular, this chapter explains the key elements of VT as they are applied in variationist research, contrasting them to their counterparts in mainstream theoretical linguistics, where relevant. And, while the present study does exploit the proposals of latter in the analysis, the present chapter will highlight where these, as well as the other frameworks reviewed in Chapter 3, do not necessarily comply with variationist principles. Generally speaking, the fundamental aspects of VT which make it an ideal framework for examining variable adverb placement, and which distinguish it as a unique branch of linguistics, include the type of data it uses (§2.1), its view of language variation and adoption of the construct of the (*linguistic*) *variable* (§2.2), and its focus on quantitative analysis (§2.3).

2.1 The data

While theoretical linguistics traditionally gathers its information about language from elicited native speaker intuitions and grammaticality judgements, the variationist framework focuses instead on language as it is used in social context, spontaneously, by members of a speech community. The reasoning for this follows from Labov's (1972:183) observation that "Language is a form of social behaviour [...] it is used by human beings in a social context, communicating their needs, ideas and emotions to one another." As such, Labov (1972:184)

maintains that “it seems natural enough that the basic data for any form of general linguistics would be language as it is used by native speakers communicating with each other in everyday life.” In other words, VT takes speech to be the ideal locus of linguistic investigation, and, more specifically, speech which is used in daily life, referred to as *the vernacular*.

Originally defined by Labov (1972:208) as “the style in which the minimum attention is given to the monitoring of speech,” the vernacular is attributed a privileged status in the variationist framework because it is thought to be “the most systematic data for linguistic analysis” (Labov 1984:29). Given its systematic nature, the vernacular is the register in which the inherent patterns of variation, which are primordial in VT (see §2.2 below), can be “seen most clearly” (Labov 1972:208).

Of course, any attempt to collect samples of the vernacular, which, by definition, is reserved for intimate and informal situations, is hampered by the formality that is naturally created by the data collection situation itself. Labov identified this issue early on in sociolinguistics as the Observer’s Paradox, which can be articulated as “the aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain these data by systematic observation” (Labov 1972:209).

In order to circumvent, or at least lessen, the effects of the Observer’s Paradox, and thus increase the chance of accessing the vernacular, variationist research relies largely on a collection technique pioneered by Labov in his early research known as the sociolinguistic interview (Labov 1966; 1984). This data collection strategy involves recording informants

(with their consent) as they respond to a series of open-ended questions presented by the researcher in a strategic manner (Labov 1984). Crucially, the Labovian sociolinguistic interview is carefully designed so as to maximize the amount of speech produced by the interviewee, while simultaneously minimizing the amount of attention the interviewee pays to the way they are speaking. As Labov (1984:32) explains, one of the goals of the sociolinguistic interview is “to elicit narratives of personal experience...where style is regularly shifted towards the vernacular.”

In the fifty years since the inception of variationist sociolinguistics, the sociolinguistic interview has been widely successful in obtaining large quantities of vernacular language data (e.g. Labov 1966; Shuy, Wolfram & Riley 1968; Sankoff & Sankoff 1973; Trudgill 1974; Poplack & Tagliamonte 1991; Poplack, Walker & Malcolmson 2006 etc.), including the data used in this study (Poplack 1989; see §4.1.) Indeed, it is this study’s exploitation of such vernacular language data which affords it the opportunity to evaluate previous attempts at explaining adverb distribution. In particular, discussions of adverb placement in the theoretical literature are based on the researcher’s own intuitions, his/her casual observations, and/or invented examples (e.g. Abeillé & Godard 2003; Cinque 2004 etc.). The prescriptive literature also draws largely on these intuited and invented sources for their descriptions, though in addition they may unearth assorted illustrative examples from literary works of various genres (e.g. Gaiffe et al. 1936; Chevalier et al. 1971; Grevisse 1993; 2011 etc.). Given the selective nature of such data, the extent to which observations extracted from it accurately reflect adverb use by a community of speakers requires judicious assessment. Indeed, research (e.g. Poplack & Dion 2009; Poplack, Lealess & Dion 2013) has shown that theoretical linguistic accounts and/or prescribed usage may diverge (substantially if not

entirely!) from actual usage, an observation which is detrimental to the former, considering that the value of a theory is tied to its ability to account for observed behaviour. A prime example of this is in the case of the French particle *ne* in negative polarity constructions; while *ne* is prescribed to be categorically used in such contexts, in practice, this particle is essentially categorically absent (e.g. Sankoff & Vincent 1977; 1980; Poplack & St.-Amand 2007). Similarly, prescriptive and theoretical approaches have devoted substantial attention to accounting for the alternation of mood selection (subjunctive vs. indicative) and of the expression of future temporal reference (periphrastic vs. inflected future) in French, typically ascribing the different variants of each to (supposedly) distinct functions. However, close inspection, via quantitative analyses, of these phenomena in spoken language data reveals that the theoretical and prescriptive accounts fail to correctly identify the key patterns which characterise use of the variants in vernacular speech (Poplack & Turpin 1999; Poplack & Dion 2009; Poplack et al. 2013). Thus, the impetus for comparing prescriptive and theoretical descriptions of adverb placement against the distributional patterns occurring in practice seems obvious. On the other hand, while the corpus-based approaches which are reviewed in Chapter 3 (§3.4) have the virtue of being based on quantitative analyses, the findings obtained in those which look at this topic in French also need to be further evaluated, since they are based on data drawn from written sources. As will be discussed in Chapter 3, written language may diverge from spoken language in unpredictable ways (e.g. Poplack & Malvar 2007; Poplack & St.-Amand 2007; Poplack & Dion 2009), which means that the former cannot necessarily be substituted for the latter, and the patterns observed in written language cannot be assumed to hold in spoken language. Furthermore, as will also be discussed in Chapter 3, the findings of these French corpus-based studies also need to be evaluated given elements of the methodologies they adopted.

Therefore, given reported differences between theoretical and prescriptive accounts and actual usage patterns, discrepancies in the patterns observed in written versus spoken language, and bearing in mind VT's contention that the vernacular, as the most systematic form of language, constitutes the ideal object of study, the present research, by making use of the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989; see §4.1) as its primary source of data, constitutes an important attempt to implement the variationist mandate of focusing on vernacular speech as it investigates variable adverb placement in French.

2.2 Variation and the linguistic variable

Another crucial way in which variationist research differs from traditional linguistic research, is the role attributed to language variation in each of these fields. On the one hand, theoretical linguistics generally adheres to a theory of *form/function symmetry*, where every form is ascribed one distinct function, and every function is fulfilled by one distinct form. Indeed, as previously mentioned, theoretical approaches account for variation in the use of indicative and subjunctive mood (Poplack 1992; Poplack et al. 2013) and in the expression of future temporal reference (Poplack & Turpin 1999; Poplack & Dion 2009) by attributing each of the different forms contrasting semantic and/or pragmatic roles. Labov (2008) explains that theoretical approaches may explain away variability by attributing it to performance factors (e.g. Chomsky 1965) and/or (code-)switching between co-existent language systems (e.g. Fries & Pike 1949; cited in Chambers 2003). On the other hand, VT holds that in specific well-defined contexts one function may be fulfilled or expressed by more than one form, resulting in *form/function asymmetry* (Sankoff 1988). This means that, as its name suggests, Variation Theory recognizes variation as a legitimate and inherent part of language. Furthermore, as both Labov (1972) and Chambers (2003) explain, in theoretical

linguistics, where variation is acknowledged, it has usually been viewed as ‘free’ or ‘random’; conversely, VT holds that the inherent variation is structured, or patterned, according to any number of social and/or linguistic factors (Labov 1969; 2008; Sankoff 1988), a phenomenon known as *orderly* (or *structured*) *heterogeneity* (Weinreich et al. 1968).

In practice, form/function asymmetry is realized in variationist research as *the linguistic variable* (Labov 1966). More specifically, the variable is the function which may be realized by different forms. The forms are the alternate and competing ‘ways’ of fulfilling the same function, and are referred to as *variants*. Given VT’s assumption of structured heterogeneity, variationist research seeks to quantitatively discover the patterns associated with different variants’ use, since this can be predicted to some (lesser or greater) extent according to the specific linguistic and/or social factors co-occurring in the moment of the variant’s occurrence. In fact, throughout VT’s history, the study of the linguistic variable has repeatedly attested to the structured heterogeneity which characterizes vernacular speech.

The emergence of the linguistic variable as a valuable heuristic device for studying language variation can be traced back to Labov’s seminal research on phonological variation in Martha’s Vineyard (1963) and in New York City (1966). With Labov’s (1972:271) characterisation of a variable’s variants as being “identical in reference or truth value,” Lavandera (1978:174) explains that phonological variables were ideal for early variationist research since variants like “/gard/ and /ga:d/ can more convincingly be shown to be used to say referentially the same thing” than other types of variants. Crucially, the exploitation of the linguistic variable in this early work allowed Labov to show that use of different variants could in fact be correlated with social and/or stylistic factors, such as a speaker’s sex and socio-economic status, and the formality of the context. This represented an important

departure from the traditional view of variation as free/unmotivated, since in extending “the notion of meaning...to include social and stylistic significance,” Labov was able to provide “specific evidence for the hypothesis that most if not all differences in form convey some information” (Lavandera 1978:174-175). As Romaine (1984:412) observes, “Labov’s work thus put the study of stylistic meaning on par with that of cognitive meaning.”

Given the success with which the linguistic variable was applied to study phonological variation, it is perhaps not surprising that the possibility of applying it to study variation at other levels the language was proposed not long after Labov’s initial research. In particular, in G. Sankoff (1972:58), the author posited that “the extension of probabilistic considerations from phonology to syntax is not a conceptually difficult jump. Whenever there are options open to a speaker, we can infer from his or her behaviour an underlying set of probabilities.” Similarly, D. Sankoff (1988:152-153) later points out that, just as there are differences among speakers in terms of “articulations of a given phonological form” so too are there differences among speakers “at the syntactic, lexical and pragmatic levels,” and furthermore, that “it would be advantageous to be able to analyze all types of variation within a common framework.”

However, the proposal to employ the linguistic variable to study variation beyond phonology has not been without opposition. The debate over this possibility is essentially rooted in the traditional and widely accepted definition of the linguistic variable, namely, its dependence on, and requirement of, equivalence in referential meaning among variants. As Lavandera (1978:175) points out, while phonological variants have no referential meaning of their own, “units beyond phonology, let us say a morpheme, or a lexical item, or a syntactic construction, each have by definition a meaning.” She goes on to explain:

phonological variables which can be shown to have social and stylistic significance need not have referential meaning, while non-phonological variables are defined so that even when they do carry social and stylistic significance, they also have referential meaning, although this *referential meaning is held to be the same for all the variants*” (Lavandera 1978:176; emphasis from original).

For her then, what is contentious is the task of showing, and/or accepting the assumption, that non-phonological variants have the same referential meaning, and she argues that the study such variables “suffer from the lack of an articulated theory of meanings” (Lavandera 1978:171).⁶ In Romaine (1984:410), the author takes up the torch ignited by Lavandera (1978) and asks “whether sociolinguistic methods are applicable in all respects to syntactic problems,” and furthermore, “what is a syntactic variable?” Like Lavandera, Romaine is concerned with the differences between phonological and non-phonological variants in terms of referential meaning, as well as the need to both define and assume equivalence of cognitive meaning among the latter. Given her definition of a true syntactic variable as involving “a whole construction or arrangement of items which alternate,” she questions “whether there are cases of complementary distribution within some syntactic construction which are analogous to phonological and morphophonemic alternations based on complementary distribution within a paradigm” (Romaine 1984:420).⁷

⁶ Lavandera also disapproves of what she sees as the abandonment of the original impetus for conception of the linguistic variable, i.e. to associate differences in form with differences in social and/or stylistic meaning. She notes that G. Sankoff’s (1972) arguments in favour of a broader application of the variable is made based on cases which (at least at the time) “seemed not to be the carrier of social and stylistic significance” (Lavandera 1978:173). Likewise, she is critical of Labov and Weiner’s (1977) study on the alternation between the active and passive in agentless sentences, where they do not find any external factors to be implicated. Furthermore, she argues against the Labovian method of circumscribing the variable context (see §2.3 below, and Chapter 4, §4.2), maintaining that by eliminating exactly those contexts where proposed variants contrast (i.e. where they do **not** mean the same thing), “the possibility of *explanation* of the variation is ruled out” (Lavandera 1978:179; emphasis from original).

⁷ In her paper, Romaine’s (1984) also goes on to argue that “a lack of precision in defining terms like ‘referential’ is confusing the issue,” (Romaine 1984:412) and she further suggests that the problem with studying syntactic variation is that it “cannot be done except within the framework of some specific grammatical theory” (Romaine 1984:414). Ultimately, she argues that any “integrative sociolinguistics theory” must necessarily incorporate “a pragmatic account of meaning, i.e., meaning relative to function” and must also

As it turns out, this study is well poised to show whether it is possible to undertake a successful study of syntactic variation, since variable adverb placement manifests as the epitome of a syntactic variable. For instance, whether we use Romaine’s definition (above) for the syntactic variable, or the one provided to her by Trudgill, which would confine “the notion of pure syntactic variation...to word order variation,” (Romaine 1984:434, fn 7) adverb distribution clearly involves the alternating orders of items (words) in a construction (a sentence). Second, in terms of referential meaning, the literature would largely seem to predict, and therefore accept, that the truth-value of an utterance would remain the same wherever the adverb occurs, notwithstanding some exceptions discussed in more detail in Chapters 3 and 4.

In addition to the above, this study’s focus on the variability inherent in adverb placement also affords it the opportunity to evaluate theoretical linguistic accounts of adverb distribution. For instance, in adhering to a theory of form/function symmetry, syntactic analyses generally ascribe different functions (e.g. focalization, topicalization, parentheticality) to specific adverb positions or occurrences, though it is not clear whether these functions hold in practice. On the other hand, by accepting the possibility of form/function asymmetry, this variationist study has the opportunity to assess whether and where such distinctions emerge in practice. Furthermore, while the two major frameworks which will be reviewed in Chapter 3 admit that different adverb *types* may occur in different positions, the possibility of variable placement among adverbs of the same type, or even for the same adverb, is a possibility which is often overlooked, downplayed, or explained away using various theoretical processes and/or constructs. In failing to acknowledge that there

see “grammar in terms of the imbrications of the ideational, textual and interpersonal components of the semantic system discussed by Halliday and Hasan (1976)” (Romaine 1984:430-431).

may be inherent variability in adverb placement, these approaches risk missing aspects of native speaker knowledge that allow them to participate in community-wide patterns of variation, i.e. the community grammar. Since a theory is only useful to the extent that it accurately accounts for observed behaviour patterns, uncovering the latter is crucial. By embracing VT's view of inherent variability, and all that this entails, the present study is thus well-equipped to provide a faithful description of variable adverb placement as it occurs in practice.

2.3 Variationist methods of analysis

Finally, an additional fundamental aspect of variationist research is its commitment to systematic quantitative analysis of data, which ultimately enables the researcher to empirically determine the underlying nature of the structured heterogeneity (Labov 2008). This is achieved by first circumscribing the *variable context*, namely, identifying which variants are possible expressions of the variable under study, and determining the contexts in which alternation between them is possible with no change in referential meaning (Labov 1969; 1972). This stage of the process also involves identifying and excluding cases where there is no variation (i.e. categorical cases) as well as contexts which are ambiguous (Labov 1969; 1972; Guy 1993). After the variable context has been defined, the data set is searched for all possible occurrences, or *tokens*, of the variable under investigation, in adherence to the Principle of Accountability (Labov 1972). More specifically, the Principle of Accountability insists that the variationist researcher “report values for every case where the variable element occurs in the relevant environments as we have defined them” (Labov 1972:72). The resulting tokens are then coded for a number of social and/or linguistic factors, which are hypothesized or claimed to constrain, or *condition*, variant choice. Factors which are

complements (i.e. women and men; long adverbs and short adverbs) are referred to together as factor groups, with Tagliamonte (2006:104) explaining that “each factor group can...be thought of as a hypothesis about what influences the choice process.”

Quantitative data analysis usually begins by considering overall frequency patterns of variant use. Then, the data are subjected to multivariate analyses that generate three types of evidence which are used in determining the underlying characteristics of the system governing variant use (Poplack & Tagliamonte 2001). First, whether or not a factor group reaches *statistical significance* (at the .05 level) is taken as an initial indication of the factor group’s importance in conditioning the variation. Second, for factor groups which are selected as statistically significant, it is possible to determine the relative strength of their influence by looking at the *range* between the highest and lowest factor weights within each group; the greater the range, the more of the variance the factor group accounts for. Finally by looking at the ordering of factors within each factor group, or the *constraint hierarchy*, it is possible to specifically determine which factors promote, or *favour*, and which factors discourage, or *disfavour*, a given variant’s use. Information encoded in the constraint hierarchy essentially reveals the underlying rules of use, or a portion of the *grammar*, associated with the variants under investigation, making it a useful and vital methodological tool for the variationist researcher (Poplack & Tagliamonte 2001). In a final stage of analysis, the variationist researcher must interpret the quantitative analyses with respect to the hypotheses, claims and research questions which are specific to the study being undertaken (Guy 1993).

It is perhaps this study’s commitment to variationist methods of analysis which constitutes a crucial contribution to existing knowledge of variable adverb placement. Of

course, given the nature of the data used in theoretical and prescriptivist approaches, quantitative analyses are not particularly feasible. This can limit their ability to correctly describe, or possibly even identify, any structured heterogeneity associated with variable adverb placement. Moreover, though these approaches consider the role of different linguistic factors on adverb placement, there is little attempt to judge their relative importance. Finally, seldom, if ever, do these studies consider whether theory-external constraints (such as extra-linguistic factors) may affect the variability. The corpus-based studies on French which are reviewed in Chapter 3 (Oates 1969; Brill 1987) do acknowledge inherent variability in adverb placement, drawing on corpus-based data and undertaking quantitative analyses to reveal distributional frequency patterns. Furthermore, in the case of Brill (1987), conditioning of variant choice by linguistic and demographic factors is also examined, thus allowing her to specifically investigate the structure of the variability. However, as will be detailed Chapter 3 (§3.4), these earlier quantitative studies also suffer from some methodological shortcomings (including failing to properly define the variable context and to distinguish contexts associated with different behaviours). These reduce the confidence we can have in their results. By avoiding similar methodological limitations, the quantitative results of this study will provide a more accurate reflection of the nature of variable adverb placement in spoken Quebec French.

2.4 Chapter Summary

This chapter provided a description of the fundamental tenets of the specific framework, Variation Theory (Labov 1969 etc.), in which this study is couched. It was argued that previous efforts to reveal the processes involved in variable adverb placement may be inadequate because they fail to acknowledge and/or comply with one or more of the key

elements of Variation Theory, including VT's acceptance of inherent variability and structured heterogeneity, its focus on systematic and quantitative analyses, and its exploitation of vernacular speech as a data source. In contrast, existing approaches to adverb placement may deny inherent variability by ascribing distinct functions to different positions, or might ignore the possibility that adverbs of the same type, or even the same adverb, may occur in different positions without a change in function. Furthermore, since prescriptive and theoretical approaches draw on invented, intuited or idiosyncratic data, quantitative analyses are impossible; thus, the extent to which these approaches correctly predict adverb placement must be assessed, especially considering that research has revealed there to be important differences between prescription and praxis (e.g. Poplack & Dion 2009; Poplack et al. 2013 etc.). Finally, even the results obtained from studies which do draw on corpora (Oates 1969; Brill 1987) need to be evaluated for their accuracy in predicting adverb use by native speakers, since these analyses are based on written sources of language, which have elsewhere been shown to diverge from spoken language (e.g. Poplack & Malvar 2007; Poplack & Dion 2009). Overall, it is argued that Variation Theory's focus on vernacular speech, its acknowledgement of inherent variability, and its use of quantitative analysis to discover the structure of this variability, together provide a methodological framework which is ideally suited for the purposes of this study.

CHAPTER 3

Background on Adverbs and Adverb Placement

Overview

This chapter focuses on existing literature and research which pertain to adverbs and adverb placement, paying particular attention to these issues with respect to French. First, §3.1 explores how the adverb, as a category, has been defined in the literature, highlighting some of the characteristics of adverbs that make a variationist study of them challenging. Then, given the robustness of the French normative tradition, §3.2 provides an overview of how variable adverb placement is accounted for in French grammars.¹ Section 3.3 reviews adverb distribution as it is addressed in the theoretical linguistic literature, focusing on a few prominent syntactic approaches to this issue.² This is followed in §3.4 with a review of corpus-based studies on variable adverb placement in English and in French. Section 3.5 summarizes various schemata used for classifying adverbs into distinct ‘types’, as this topic is inextricably linked to any discussion of adverb placement, and as such, is implicated in the methodology implemented in this study. Finally, §3.6 provides a general summary of this chapter.

¹ The grammars consulted in this study were primarily drawn from the *Recueil historique de grammaires du français* (RHGF; Poplack, Dion, Jarmasz, LeBlanc & Rosen 2002). The sample includes 28 of the RHGF grammars which had been published during the lifetime of the OH speakers who were included in the subsample analyzed here (i.e. 1893 or later). A few additional prescriptive references not contained in the RHGF were also consulted for supplementary information. See Appendix A for a list of all the grammars consulted.

² The focus here on syntactic approaches to adverb placement follows from Waters’ (2011:14) observation that while “linguistic research on adverbs takes many forms, including morphological, syntactic, semantic and pragmatic” it is the syntactic analyses which are “in particular copious.” Furthermore, it is elements found in the syntactic approaches which can be most straightforwardly evaluated in this study.

3.1 Adverbs: An introduction

While the very existence of a category labelled *adverb* implies that there is some definable homogenous group of elements and/or functions subsumed under it, the opposite is actually true, as aptly noted by Radouant (1922), Alexiadou (1997), and, more critically, by Frontier (1997):

On réunit sous le nom d'adverbe des mots d'origine très variée et de caractère très divers. (Radouant 1922:248)

Adverb as a grammatical category has been notoriously difficult to define [...] the conglomeration of words that has been lumped together under this label is too heterogeneous to come together as a single category. (Alexiadou 1997:4)

La variété qu'on observe dans [la] morphologie [de l'adverbe] aussi bien que dans ses emplois a quelque chose d'embarrassant. (Frontier 1997:260)

This section thus explores how the adverb, as an intrinsically heterogeneous category, has been characterised in both the prescriptive and linguistic literature, and then introduces some of the challenges inherent in this category which are necessarily encountered by any empirical study of it, especially a variationist one. More specifically, these challenges make it difficult to circumscribe the variable context, the construct which is primordial in variationist research.

To begin, a review of the French prescriptive literature reveals that the adverb is most commonly first identified as “un mot invariable”³ (e.g. Michaut & Schricke 1934:252; Cayrou, Laurent & Lods 1949:222; Wagner & Pinchon 1965:373; Chevalier et al. 1971:414; Grevisse 1993 §917; Charaudeau 1992:45; Le Goffic 1994:32; Frontier 1997:260). Many grammarians then go on to explain that the adverb modifies “le sens” of a verb, an adjective

³ This criteria (of being invariable) is not absolute, as Grevisse (2011 §954, R1) notes that “certains adjectifs employés adverbialement varient.”

or another adverb,⁴ or functions as a “complément” to these items (e.g. Grevisse 1993 §917; Frontier 1997:260). Some grammarians also define the adverb in terms of a few key characteristics, including optionality, intransitivity, and/or dependence on another element in the sentence (Arrivé, Gadet & Galmiche 1986; Riegel, Pellat & Riol 1998). For some, the adverb category may be further defined in terms of what it does not include, as opposed to what it does:

Les adverbes forment une catégorie résiduelle où l'on range traditionnellement les termes invariables qui ne sont ni des prépositions, ni des conjonctions ni des interjections. (Riegel et al. 1998:375)

La catégorie de l'adverbe, très composite, regroupe tous les mots invariables sauf les prépositions. (Le Goffic 1994:32)⁵

Additionally, in an attempt to succinctly clarify the role of the adverb, many grammarians (e.g. Galichet 1967; Arrivé et al. 1986; Frontier 1997; Riegel et al. 1998) explicitly analogize it to the adjective, along the lines of Grevisse (1986 §917):⁶

L'adverbe...joue, a l'égard du verbe, le même rôle que l'adjectif a l'égard du nom; on a pu dire que c'était l'adjectif du verbe.

While the linguistic literature also mentions the facultative and intransitive properties⁷ of adverbs (e.g. Alexiadou 1997; Molinier & Levrier 2000), these approaches are more

⁴ As Arrivé, Gadet and Galmiche (1986:45) note, an adverb may also modify a noun (*des gens bien*, *la roue arrière*; usually this occurs by way of a preposition *la patte de derrière*) and it may adjoin itself to a preposition (*tout contre*), a conjunction (*il sortait juste comme nous arrivions*), as well as a group of words or a proposition (*il arriva longtemps avant la nuit*).

⁵ Opposite Riegel et al. (1998), Le Goffic (1994) maintains that conjunctions and interjections *are* adverbs.

⁶ Despite this common analogy, it is interesting that Grevisse's (2011) *Le Bon Usage* devotes more than three times the number of pages to its discussion of the adverb than to its discussion of the adjective, a fact which at least implicitly suggests substantial differences between these two categories.

⁷ Exceptions to these properties are noted though, as in the case of case adverbs which are lexically selected by certain verbs (making these adverbs obligatory), among which verbs of movement, situation, and behaviour (e.g. McConnell-Ginet 1982; Grimshaw & Vikner 1992). Similarly, it has been pointed out that some adverbs

concerned with providing linguistic theory-based definitions. So for instance, from a functional/semantic perspective, adverbs have been variably considered **modifiers** (e.g. Zubizarreta 1987; Sportiche 1988; 1994), **predicates** (e.g. Roberts 1985; 1987; Rochette 1990) **operators** (e.g. Thomason & Stalnaker 1973; Lewis 1975; McConnell-Ginet 1982), or a **combination** of these (e.g. Croft 1984).⁸ From a syntactic perspective, adverbs have been argued to be non-projecting heads (e.g. Travis 1988), though Austin et al. (2004:7-8) explain that “the prevailing view is that adverbs do project maximal phrases” and more specifically, “phrases which function as adverbials” (i.e. AdvPs). The continuing debate thus concerns whether these AdvPs occur (under an X-bar schema) as specifiers (e.g. Alexiadou 1997; Laenzlinger 1998; Cinque 1999), as complements (e.g. Alexiadou 1997) or as adjuncts (e.g. Haider 2000; Ernst 2002; Costa 2004).

Abstracting away from such theory-based conceptualizations, linguistic analyses, like prescriptive approaches, usually consider adverbs to be single-word lexical items, whether this characterization is merely implied (e.g. McConnell-Ginet 1982; Rochette 1990; Laenzlinger 1998) or more explicitly stated (e.g. Alexiadou 1997; Molinier & Levrier 2000; Ernst 2002; Cinque 2004; Mertens 2013), as do Austin et al. (2004:2):

If we use the term adverb, we do this intentionally to highlight their nature as lexical units or otherwise non-extended expressions.

Furthermore, most linguists differentiate between adverbs and *adverbials* (e.g. Ernst 2002; Cinque 2004), along the lines of Alexiadou (1997:15):

do occasionally take complements, as in *independently of him* (e.g. Jackendoff 1972; McConnell-Ginet 1982; Ernst 2002).

⁸ Analysis-dependent differences may also occur even for a given adverb type, as in the case of McConnell-Ginet (1982), who argues for a variable-binding theory of adverbs, versus Thomason and Stalnaker (1973), who advance a functional operator analysis.

If the term adverb denotes a syntactic category, the term adverbial denotes purely a function that other phrasal categories can have as well.

In fact, the distinction between *adverb* and *adverbial* noted by Alexiadou (1997) highlights one of the first challenges which must be addressed in a variationist investigation of adverbs. More specifically, since many different types of items may function as adverbials, a possibility referred to by Waters (2011:45) as *morphological diversity*, it must be decided which adverbials will, or even can, be included in the same variable context, and furthermore, how to identify these items. Examples of this morphological diversity are illustrated in (3.1).

- (3.1) a. Paul a **souvent** mangé son repas **rapidement**.
b. Paul est allé à Paris **quelquefois**.
c. Paul a passé **par-dessus**.
d. Paul est allé à Paris **avant-hier**.
e. Paul est venu **ici hier**.
f. Le billet a couté **cher**.
g. Paul est arrivé **tout à coup**.
h. Paul est allé à Paris **à nouveau**.
i. Paul est allé à Paris **des fois**.
j. Paul a assisté aux cours **chaque jour de la semaine** **à une université différente**.
(Translated from Cinque (1999:28, ex. 120a))

Single-word items like *souvent*, and words derived by suffixation of *-ment* to an adjective, like *rapidement*, are uncontroversial as adverbs (3.1a). So too are items which, while etymologically stemming from two or more independent words, are considered a

single word today, like *quelquefois* (3.1b). Grevisse (1993, §927) considers this latter adverb to be an *adverbe composé*,⁹ along with hyphenated items like *par-dessus* (3.1c) and *avant-hier* (3.1d). While *ici* and *hier* (3.1e) are widely considered adverbs (e.g. Chevalier et al. 1971; Grevisse 1993; 2011; *Le Nouveau Petit Robert* 1996; etc.), it has been argued that, due to some distributional restrictions, they are not ‘true’ adverbs (e.g. Laenzlinger 1998) and/or that they are “better analysed as PP [prepositional phrases] and NP [noun phrases]” (Abeillé & Godard 2004:15). Adjectives like *cher* are also usually considered adverbs¹⁰ where they are interpreted to be functioning as such, as in (3.1f),¹¹ though Abeillé and Godard (2002) argue that they are not adverbs even in such contexts. The multi-word strings in (3.1g) and (3.1h) are considered to be adverbial locutions (Grevisse 1993, §928; *Le Nouveau Petit Robert* 1996), which Grevisse (1990:212) defines as “une réunion des mots [qui] équivalent à un adverbe,” while the multi-word string in (3.1i) is a nominal phrase. Finally, the underlined strings of words in (3.1j) are productive prepositional and noun phrases which are nonetheless providing (temporal and locative) adverbial modification.

The initial challenge posed by the morphological diversity illustrated in (3.1) to a variationist study is that not all of the items are said to behave the same in terms of placement. Specifically, in addition to the distributional restrictions mentioned above for *hier* and *ici* (and see §3.4 below), it is generally held (e.g. Dauzat 1958; Chevalier et al. 1971, Abeillé & Godard 2002 etc.) that the adverbials in (3.1f-j) cannot occur between an auxiliary

⁹ For Grevisse (1993, §927), *adverbes composés* result from “la fusion de syntagmes, soit qu’il y ait agglutination pure et simple, soit qu’un trait d’union joigne les éléments.”

¹⁰ More specifically, they have been referred to as “adjectifs adverbialisés” (Wagner & Pinchon 1965:377) or considered “adjectifs employés adverbialement” (Grevisse 1993 §926), “adjectifs devenant adverbes par emploi” (Galichet 1967:50), “adjectifs pris adverbialement” (Grevisse 1990, §187), “adjectif... en emploi adverbial” (Arrivé et al. 1986:54), etc. (see also Chevalier et al. 1971:417, Frontier 1997:280).

¹¹ As many point out, a number of adjectives exhibit this behaviour, e.g. voler *bas*, voir *clair*, marcher *droit*, travailler *dur* etc. (Grevisse 2011, §963)

and its participle,¹² while items considered adverbs proper (i.e. single-word items like in (3.1a-b)) are widely accepted to occur in such a position.

Given these claimed differences in placement behaviour, it could be argued that it would be inappropriate to consider all of them together in the same variable context. And while it might seem reasonable to only include items considered ‘true’ adverbs, the use of a label like ‘adverb’ for determining admissible items presents its own challenges. For example, Le Goffic (1994:33) comments that while *quelquefois* is an adverb and *chaque fois* a nominal group, “les décisions, fondée sur la graphie, sont nécessairement arbitraires, par rapport au continu de la réalité;”¹³ as such, it could be argued that similarly-functioning and/or adverbial synonyms should not be excluded on the basis of potentially arbitrary orthographically-based labeling alone. Furthermore, even the labeling of some items is not consistent, meaning it is not clear what behaviour is expected of them, nor whether they should be retained in the variable context. For instance, Grevisse (2011) seems unsure how to label some multi-word items made up of a preposition and a locative adverb, like *par-dessus* and *au-dehors*; in one section (§109c 4°) they are referred to as adverbial locutions, but elsewhere they are grouped with the *adverbes composés*, a group which includes well-established unhyphenated adverbs like *bientôt* and *partout* (§964). Thus, if adverbial locutions are to be excluded from the variable context, but *adverbes composés* like *bientôt* included in the variable context, then it is not clear whether items like *par-dessus* should be retained or not. Moreover, Grevisse (2011, §965e) considers the compositionally comparable *en dehors* (and similar constructions) to be an adverbial locution, and not an *adverbe*

¹² Except when they are used parenthetically, which are claimed to be distinct from occurrences which are non-parenthetical; this issue is revisited later in this chapter and again in Chapter 4.

¹³ Similarly, Grevisse (1993 §967c) reports that *des fois*, which is a nominal phrase, is used in popular language instead of the synonymous adverbs *quelquefois* and *parfois*.

composé; so even if adverbial locutions are excluded, but items like *par-dessus* are retained based on his labeling them as *adverbes composés*, then it seems unreasonable to exclude items like *en dessus* based simply on their labeling as adverbial locutions, given their (structural, not to mention semantic) similarity to *adverbes composés* like *par-dessus*. And all this presumes that there is even inter-grammarians agreement on the identification of these items, which is not the case (cf. Poplack et al. 2013 on the French subjunctive). Furthermore, while in his section on adverbs Grevisse (2011, §964) uses the presence of hyphenation as criteria for distinguishing between *adverbes composés* and adverbial locutions, he elsewhere admits that:

*Il n'est pas facile d'expliquer pourquoi les locutions adverbiales ou prépositives formées avec **au** ou **par** ont le trait d'union, alors que celles dont le premier élément est **en** s'en passent...Telle est la façon de faire de l'Académie." (Grevisse 2011, §109c 4°)*

Indeed, *Le Nouveau Petit Robert* (1996) does not use hyphenation for distinguishing between adverbial locutions and adverbs, since it considers *au-dessus* to be among the former and *avant-hier* to be among the latter. Grevisse (2011, §109c 4°) also notes that “le *Robert* donne du trait d'union une présentation moins cohérente, et les usagers sont eux aussi divisés.” Thus, a decision to include in the variable context items like *par-dessus*, but exclude items like *en dessus* based only on labeling and hyphenation, is questionable.

A related issue concerns the exclusion of adverbial locutions from the variable context altogether. For one thing, there is the issue of (supposed) different placement properties of such items; this claim is one which can only be evaluated through systematic analyses of data, such as will be undertaken here. Also, since Grevisse (1990) considers adverbial

locutions to be equivalent to adverbs,¹⁴ it could be argued that they should be retained in an analysis of “alternate ways of saying the same thing” (Labov 2008:2), which is indeed what some researchers have done (e.g. Oates 1969, Brill 1987). However, given the morphological diversity of adverbials in general, this creates the additional challenge of distinguishing adverbial locutions from other (more or less fixed) adverbials. While some grammarians (e.g. Chevalier et al. 1971; Frontier 1997) explain that a string of words can be considered an adverbial locution if it is impossible to insert modifiers in between the individual elements (e.g. **par pur cœur* (=adv. locution) vs. *par pur plaisir* (≠ adv. locution)); from Chevalier et al. 1971:416), Frontier’s (1997:266) assertion (below) also suggests that only the individual can judge what is fixed or not, and that this may vary in practice, which means that the inventory of adverbial locutions is not necessarily consistent from one person or situation to the next:

Ce qui distingue une locution adverbiale d’un syntagme nominal ne peut être que son caractère d’expression figée par l’usage. Elle est sentie comme adverbiale dans la mesure seulement où elle apparaît dans la conscience linguistique de celui qui parle comme un groupe tout fait, fourni tel quel par la langue, et dans lequel il serait impossible d’insérer des éléments composés. [...] dans la pratique, la distinction n’est pas toujours évidente, parce qu’une expression peut être plus ou moins sentie comme figée.

Overall then, the morphological diversity of adverbials presents a challenge to a variationist study of variable adverb placement because such a study must, amid the variety, decide which adverbial items can and/or should be considered together, as well as determine the criteria which will be used to identify these items.

¹⁴ Similarly, Chevalier et al. (1971:414) explain that an adverb “peut être composé d’éléments très divers, d’un seul mot, ou de plusieurs (on parlera donc de locution adverbiale).”

Another potentially empirically challenging characteristic of lexical items which are considered adverbs is that they may be *polysemous*, in that some of their occurrences are not in adverbial functions. As such, different occurrences of these items may not all mean “the same thing,” (Labov 2008:2) and they should therefore not all be included in the variable context. These distinctions can be seen by comparing the bolded items in (3.2) and (3.3).

(3.2) a. Paul est resté **derrière**. (adapted from *Le Nouveau Petit Robert* (1996)).

b. Paul a **bien** fait ce travail.

c. Paul l’aime **beaucoup**.

(3.3) a. Paul a marché **derrière** la maison.

b. Paul, **bien**, il a mal chanté.

c. **Beaucoup** l’admirent. (from Arrivé et al. 1986:46)

The examples in (3.2) illustrate adverbial uses of *derrière*, *bien* and *beaucoup*, while in (3.3) the same lexical items are functioning as a preposition, as a discourse marker, and as an indefinite pronoun, respectively. Since only adverbial uses of such polyfunctional items should be considered in a variationist analysis of variable adverb position, it is important that adverbial uses be distinguished from non-adverbial ones. As such, adverbs cannot be identified based solely on lexical identity; rather the contexts in which the items occur must be carefully reviewed so that their function in those occurrences can be accurately ascertained, and non-adverbial uses discarded.

In addition to polysemy, there is the complicating matter of diversity in adverbial functions, as illustrated in (3.4); here this issue will be referred to as the problem of *functional diversity*.¹⁵

- (3.4) a. Paul (n') a **pas** chanté.
- b. **Pourquoi** Paul a-t-il chanté?
- c. Paul était malade, **donc** il n'a pas chanté au concert.
- d. Paul a fini ses devoirs et il est sorti **ensuite**.
- e. **Linguistiquement**, ces exemples sont intéressants. (Translated from Ernst (2004:103)).
- f. Paul a **même** dansé au concert.
- g. Paul a parlé **heureusement/franchement**. (adapted from Riegel et al. 1998:375)
- h. **Heureusement/Franchement**, Paul a bien chanté au concert.
- i. Paul a **probablement** chanté au concert.
- j. Paul a parlé **très** franchement.

While all of the highlighted items in (3.4) are functioning as adverbs, the specific roles they play in these occurrences differ drastically. For instance, the adverbs in (3.4a) and (3.4b) perform negating¹⁶ and interrogative functions, respectively, while Grevisse (2011, §958) considers the ones in (3.4c) and (3.4d) to be anaphoric adverbs which “concernent des

¹⁵ Here, the terms *polysemy* and *functional diversity* are being used to refer to two distinct issues: polysemy concerns cases of the same lexical items which perform adverbial and non-adverbial functions; functional diversity is limited to different adverbial functions specifically, and may or may not involve the same lexical items. So, *bien* can be a discourse marker or an adverb (polysemy; same item, one function is non-adverbial) while the adverbs *souvent* and *récemment* both perform adverbial functions, albeit it different ones (functional diversity; *souvent* indicates frequency and *récemment* provides temporal information).

¹⁶ While the prescribed negator in French is *ne*, the absence rate of this particle is extremely high or categorical in spoken varieties of French (e.g. Sankoff & Vincent 1977; 1980; Coveney 1996; Ashby 2001; Armstrong 2002; Poplack & St.-Amand 2007; etc.) making the adverb *pas* the veritable negation marker in spoken French.

relations logiques.”¹⁷ The adverb in (3.4e) provides the context, or domain, in which the rest of the proposition is considered to be true (Laenzlinger 1998; Ernst 2004), while the one in (3.4f) performs a focusing function (Laenzlinger 1998). In (3.4g), the lexical adverbs *heureusement* and *franchement* are usually claimed to be event-internal (e.g. Molinier & Levrier 2000) and specifically, process-related; they modify the verb by describing the manner in which Paul spoke. In (3.4h), the very same adverbs are said to be event-external and contribute no information about the event itself, but rather convey the speaker’s “opinion on [...] attitude toward the content of the following proposition” (Laenzlinger 1998:43; Alexiadou 1997) and “the speaker’s (self-described) manner of speaking” (Waters 2011:51), respectively. Finally, the adverb in (3.4i) concerns the truth values of the proposition in which it is found (Laenzlinger 1998:43), while the adverb *très* in (3.4j) performs an intensifying¹⁸ function, modifying the adverb *franchement*.

So, while all of the lexical items in (3.4) are functioning as adverbs, they clearly cannot be considered as performing equivalent adverbial functions. This functional diversity is potentially problematic for a variationist analysis where typically only items fulfilling the same function are compared, given the definition of the variable context. As such, it must be determined whether any of these functions are dissimilar enough to preclude their being studied together, or whether any of them are essentially analogous and/or may be fulfilling

¹⁷ While Grevisse (2011, §958) admits that adverbs which “[concernent] les relations logiques sont souvent rangés par parmi le conjonctions de coordination,” he provides several reasons for why the former are to be distinguished from the later (e.g. differences in distribution, conjunctions cannot co-occur but anaphoric adverbs can occur with conjunctions, as in *et pourtant*, etc.). One example provided by Grevisse (2011, §958) for *donc* in adverbial function is “Il est malheureux, **donc** nous devons l’aider.” On the other hand, *Le Nouveau Petit Robert* (1996) considers *donc* to be a conjunction.

¹⁸ In such a role, adverbs may “scale a quality up” (Bolinger 1972:17) or may scale a quality down. Adverbs providing such scaling functions have been variably referred to as *intensifiers* (e.g. Ito & Tagliamonte 2003; Tagliamonte 2008), *intensifying adverbs* (Stoffel 1901), *amplifiers* (which includes *maximizers* and *boosters*) (Quirk, Greenbaum, Leech, & Svartvik 1985:445-6, 589), *degree adverbs* (Bolinger 1972:18) and *downtoners* (e.g. Stoffel 1901; Quirk et al. 1985).

some general adverbial function, which would then allow them to be considered together. Moreover, this functional diversity threatens to undermine a variationist study of variable adverb placement since function may interact with adverb distribution. For example, in some functions, the literature accepts that adverb placement is invariable (or essentially so) (e.g. negation, focusing, intensifying, restrictive functions (Cinque 1999; Molinier & Levrier 2000; Grevisse 2011, §972a 3°, 1020)). In other cases, variable placement possibilities associated with one function may be claimed to differ from the positioning possibilities associated with another function (e.g. verb-modifying manner vs. locational). And in yet other cases, function is *dependent* on placement, such that a change in adverb position is accompanied by a change in adverb function. This scenario crucially impacts the circumscription of the variable context, and so deserves further discussion here.

In particular, it is commonly reported in the literature (e.g. Laenzlinger 1998; Austin et al. 2004; etc.) that there is an interaction between position and interpretation for a number of *-ment* adverbs, in that they have different readings depending on where they occur in the sentence. Consider the examples below in (3.5)-(3.7), taken from Laenzlinger (1998:47-48, ex. 17 and 18). Laenzlinger (1998:47) explains that in a sentence-initial position, the adverb in (3.5a) has a subject-oriented reading,¹⁹ with the interpretation of the sentence being “it was courageous of John to have read Chomsky’s book.” He explains that this is also the received interpretation when the adverb occurs sentence-finally (3.5b) and before the auxiliary (3.5c). On the other hand, the post-participle position of the adverb in (3.6) apparently results in it modifying the process denoted by the verb. So, Laenzlinger (1998:48)

¹⁹Alexiadou (1997:14) explains that in the case of a subject-oriented reading, the adverb expresses “some additional information about the subject.” In example (3.5) then, John is seen as courageous for having read Chomsky’s book, though he could have read Chomsky’s book in a non-courageous manner (assuming such a thing is possible to do).

explains that (3.6) is interpreted as “John read Chomsky’s book in a courageous manner.”

Finally, Laenzlinger claims that when the adverb occurs between the auxiliary and the participle, as in (3.7), the interpretation is ambiguous between the readings associated with the adverbs in (3.5) and (3.6).

(3.5) a. **Courageusement**, Jean a lu le livre de Chomsky.

“Courageously John read Chomsky’s book.”²⁰

b. Jean a lu le livre de Chomsky, **courageusement**.

“John read Chomsky’s book courageously.”

c. Jean, **courageusement**, a lu le livre de Chomsky.

“John courageously read Chomsky’s book.”

(3.6) Jean a lu **courageusement** le livre de Chomsky.

“John read Chomsky’s book courageously.”

(3.7) Jean a **courageusement** lu le livre de Chomsky.

“John read Chomsky’s book courageously.”

A similar interaction between position and interpretation is observed for the adverbs in (3.8) and (3.9) (repeated from (3.4g-h)). In particular, when they occur after the participle in (3.8), the adverbs *heureusement* and *franchement* are said to receive event-internal, process-related, manner interpretations (e.g. Molinier & Levrier 2000), just as *courageusement* did in (3.6). In (3.9), when these same adverbs occur sentence-initially, sentence-finally (preceded by a comma), or between the subject and the auxiliary, they are claimed to be event-external, being associated with the speaker; they provide information about the speaker’s assessment

²⁰Glosses for these examples are taken directly from Laenzlinger (1998:47-48).

of the message expressed in the proposition or their own manner of expressing the proposition.²¹

(3.8) a. Paul a chanté **heureusement** au concert.

“Paul sang happily at the concert.”

b. Paul a parlé **franchement** à Marie.

“Paul spoke honestly to Mary.”

(3.9) a. (**Heureusement**,) Paul (, **heureusement**,) a chanté au concert (, **heureusement**).

“(Fortunately,) Paul (, fortunately,) sang at the concert (, fortunately).”

b. (**Franchement**,) Paul (, **franchement**,) a parlé impoliment à Marie (, **franchement**).

“(Honestly,) Paul (, honestly,) spoke impolitely to Mary (, honestly).”

Since variationist research is concerned with examining variability that is not accompanied by changes in meaning or function (see Chapter 2, §2.2), cases like (3.5) and (3.9) cannot be considered with cases like (3.6) and (3.8) as variants of the same variable, as the position change is said to lead to a meaning change for the adverbs in question. Thus, the interaction between positional variation and interpretation clearly has important implications in determining which *-ment* adverbs can be considered together in the same variable context in a variationist study of adverb distribution.

On the other hand, while (where addressed) the relevant adverb literature is specifically preoccupied with accounting for the differences in the perceived readings between the same lexical adverbs in their positions in (3.5) and (3.6),²² it overlooks, and thus fails to account

²¹ Unlike *courageusement* in (3.5), they are **not** associated with a subject-oriented reading.

²² Less attention is given to accounting for the meaning difference between (3.8) and (3.9), though presumably it shares the same (or a similar) underlying explanation as the one triggering the difference observed in (3.5) and (3.6).

for, the fact that examples (3.5) (and (3.9)) show variable adverb positioning of the same lexical adverb without any apparent change in meaning; presumably such cases are seen as being in “free variation” (see Chapter 2, §2.2). So, even if (3.6) and (3.8) cannot be considered with (3.5) and (3.9), there is still the need to account for variable adverb placement like that shown in (3.5) and (3.9), a need which a variationist study, like the present one, can specifically address.

A further issue, which may have been intuitively observed in the discussion above, concerns the role of comma use in the interaction between adverb position and interpretation. Also, comma use, as the widely accepted indicator of parentheticality, becomes important in determining which adverb occurrences to retain and exclude in the variable context, as outlined below.

In particular, the adverbs in the positions in (3.10) (repeated in part from (3.5); these arguments also apply to cases like (3.9)) are typically shown in the relevant literature occurring with commas. Commas are typically interpreted as signaling an intonational break or pause in speech, and so cases like (3.10) are said to have comma intonation (Fillmore 1994). According to Laenzlinger (1998:47) the adverb *probablement* (and presumably also *courageusement*) in (3.10a) and (3.10b) would be “marked with an intonational break;” use of *probablement* in (3.10c) is apparently occurring in a ‘parenthetical’ position, which presumably is also marked with an intonational break given its co-occurrence with commas. Similarly, Laenzlinger (1998:47) states that the adverb *courageusement* occurs in “peripheral or parenthetical positions” in (3.10).

- (3.10) a. **Courageusement/probablement**, Jean a lu le livre de Chomsky.
b. Jean a lu le livre de Chomsky, **courageusement/probablement**.
c. Jean, **courageusement/probablement**, a lu le livre de Chomsky.

Crucially, Bonami, Godard and Kampers-Manhe (2004:146) explain that “so-called ‘parentheticals’ ...are known to have different pragmatic, semantic, prosodic and/or positioning properties” and so are “often introduced in adverb studies only to dismiss some of the data.” For example, Ernst (2002:14) “excludes[s] at least some parenthetical expressions...because they show quite different properties from those pronounced with a normal, smooth intonation contour.” Likewise, Cinque (1999:181, fn 87) cites Browning (1996:23, fn2) in explaining that “a parenthetical intonation of the adverb... ‘signals that it is not actually part of the syntactic representation’” and so he has “no interesting account to propose” for them (Cinque 1999:32).

Thus, the adverbs in (3.10c) would be excluded from a syntactic analysis of adverb placement on the basis of their being ‘parenthetical’. Cinque (1999) (but not Laenzlinger 1998) also claims that the adverbs in (3.10b) are parenthetical, and so they too would be dismissed from his theory (or rather, he explains that their occurrence in this position, which is not predicted by the syntactic theory he is advancing, is because they are parenthetical, and since they are parenthetical, their occurrence in this position is tolerated, and ultimately not problematic for his analysis!) On the other hand, the adverbs in (3.10a), though subject to the same comma intonation as in their occurrences in (3.10b-c), are apparently not considered to be parentheticals, and so they are admitted in syntactic analyses and do warrant syntactic explanation (this last point is addressed shortly).

So, comma intonation is associated with parentheticality, and parenthetical adverbs are said to be different than non-parenthetical ones. However, a closer inspection of adverb distribution in examples provided in the linguistic and prescriptive literature reveals an intimate relationship between comma use and adverb interpretation. For instance, it is believed that comma intonation can be used to distinguish between an evaluative reading and a manner reading for the problematic *-ment* adverbs mentioned above when they occur in a sentence-final position, as in (3.11) (Molinier & Levrier 2000). Likewise for distinguishing between a subject-oriented reading and a manner one when the affected *-ment* adverbs occur in sentence-final position (Cinque 2004), as in (3.12). Furthermore, Bonami et al. (2004) claim that comma intonation is (almost) always present with sentence-initial uses of adverbs, as in (3.13).²³

- (3.11) a. Paul a parlé, naturellement. (=evaluative reading: “Paul spoke, of course.”)
b. Paul a parlé naturellement. (=manner reading: “Paul spoke in a natural manner.”)

- (3.12) a. Paul a lu le livre de Chomsky, courageusement.
“It was courageous of Paul to read Chomsky’s book.”
b. Paul a lu le livre de Chomsky courageusement.
“Paul read Chomsky’s book in a courageous manner.”

- (3.13) Courageusement*(,) Paul a lu le livre de Chomsky.

Of course, such comma-based interpretation distinctions are readily admissible in invented examples, like those in (3.11)-(3.12). On the other hand, it is not necessarily the case that such distinctions can be so easily recognized in speech, where intonational breaks

²³ Bonami et al. (2004:149) note some exceptions to this, for example, when certain adverbs are followed by *que*, as in *Heureusement que Paul est venu*.

or pauses may occur in the discourse for any number of reasons *other* than as indicators of parentheticality (e.g. momentary distractions, processing constraints etc.; e.g. Labov 1972). Thus, while parentheticals are typically regarded in the literature as ‘different’ from non-parentheticals, and are excluded from analyses for this reason, that parentheticality is purportedly signaled by comma intonation, and that comma intonation in speech may be an unreliable indicator of parentheticality, means that decisions regarding including or excluding adverbs co-occurring with comma intonation from any analysis must be carefully considered. Furthermore, since there is even some division in the literature regarding which cases, in which positions, are parenthetical (cf Cinque 1999, Laenzlinger 1998), this being based in part on differences in the theoretical analyses being developed, the motivation for excluding so-called parentheticals from the variable context also needs to be appraised.

Finally, while not a challenge inherent to the category of adverbs, an additional issue which needs to be addressed in a study of variable adverb placement is the ascription of specific functions to specific positions. More specifically, in addition to the reported interaction between position and interpretation noted above, it is often claimed in syntactic approaches that adverbs located at the beginning of a sentence are actually occurring in topicalized or focalized projections (namely, TopP or FocP) (e.g. Laenzlinger 1998; Ernst 2002; also Waters 2013.) If this is the case, then it would be unacceptable to retain and compare such sentence-initial occurrences to adverbs placed in other positions in a variationist analysis, since they would be performing different functions in the different positions; as discussed in Chapter 2 (§2.2) variationist methodology dictates that only items fulfilling the same function can be considered together in the same variable context.

On the other hand, the assignment of distinct functions to sentence-initial use of adverbs is consistent with the longstanding pursuit in both the prescriptive and linguistic literature to impose form-function symmetry on observed cases of variability. Indeed, Poplack and Dion (2009:569) report on the “herculean efforts” that have been made to ascribe distinct meanings to the different exponents of future temporal reference in French (see also Poplack & Turpin 1999); a similar (or perhaps even greater) investiture of scholarship has been devoted to the notorious alternation in French between subjunctive and indicative ‘mood’ (Poplack 1992; Poplack, Lealess & Dion 2013). Despite such tenacious commitment to “impose order on the chaos of variability” (Poplack et al. 2013), the outcome of such efforts have lead to a plethora of normative injunctions and theoretical constructs which are vague, inconsistent and/or contradictory, and which, moreover, fail to hold in spontaneous speech. Thus, while the theoretical syntactic literature may contend that sentence-initial adverb use is associated with a specific function, it is not necessarily the case that this association will apply in practice. This can only be assessed by consulting exemplars of spontaneous language use, as is done in the present study.

In summary, this section aimed to provide a general introduction to the adverb category, by describing how it is defined as such in the literature, and by highlighting category-specific features which are potentially challenging to a variationist study of it. In particular, while there is no absolute consensus on how to define the adverb category, there is general agreement that adverbs are optional intransitive items (minus a few exceptions) which contribute semantic information to, or modify, all or some element(s) of a sentence. Likewise, it is typically agreed that the term *adverb* refers to a single lexical item or orthographic word, while the term *adverbial* characterizes a set of functions that can be

performed by various items, including fixed and productive strings of words. In fact, this distinction highlights one of the first challenges outlined above, namely, that adverbials are morphologically diverse, and this diversity is associated with differences in terms of possible positioning. Crucially then, a study of variable adverb placement undertaken within the variationist framework must first determine, amid the morphological variety, which adverbials can be studied together in the same variable context, and, furthermore, what criteria should be used for identifying these items. The second challenge confronted by a study of adverbs is the occurrence of polysemous lexical items. More specifically, non-adverbial (and ambiguous) uses of lexical items which can also function as adverbials must be identified and excluded, since the former cannot be included in the variable context when they do not function as adverbials. A third obstacle presented by adverbials which must be overcome concerns diversity among adverbial functions (i.e. functional diversity). Since variationist research typically only considers together items which fulfill the same function (see Chapter 2, §2.2), and since adverbial functions can differ in terms of the positions in which the adverb fulfilling the function are allowed to occur, this functional diversity can complicate the identification of adverbials which can justly be analysed together. The last three challenges are all partially related, and include the reported interaction between position and interpretation for some *-ment* adverbs, the role of comma intonation in this phenomenon as well as in signalling parenthetical uses of adverbs, and the ascription of specific functions to certain positions. Crucially, these issues are problematic for the current study since they directly affect which adverb occurrences are included (i.e. cases where a change in adverb position leads to a change in adverb meaning cannot be considered together; comma intonation may not reliably indicate parentheticality in discourse (if indeed parentheticals even need to be considered for exclusion); and where different positions

perform distinct functions, they cannot be included in the same analysis). Each of these six challenges, and how they were addressed here, is revisited in Chapter 4, where the methodology adopted in the present study is outlined. Having now provided an introduction to the adverb and the general issues confronted in studying it, it is now possible to turn to a review of how variable adverb placement has been approached in the prescriptive, linguistic, and corpus-based literature.

3.2 Adverb placement in the prescriptive literature

While variable placement of adverbs with compound verb tenses is largely acknowledged in the prescriptive literature, there is no systematic account of it. For instance, some grammarians seem to suggest that adverb placement in these contexts is essentially arbitrary:²⁴

*l'adverbe se place à peu près **indifféremment** après le participe ou entre l'auxiliaire et le participe* (Grevisse 1990:216)

*l'adverbe se place, à peu près **indifféremment**, avant ou après le participe* (Le Bidois & Le Bidois 1971:107)

*l'adverbe peut se placer **soit entre** l'auxiliaire et le participe passé...**soit après** le syntagme [le participe]* (Martinet 1979:137)

*l'adverbe se place **avant ou après** le participe* (de Boer 1954:246)

Other writers echo this sentiment of arbitrariness, but suggest that one position is more common than the others:

*l'adverbe est **souvent** enclavé entre l'auxiliaire conjugué et le participe passé* (Frontier 1997:272)

²⁴ Items in bold indicate my emphasis.

*l'adverbe s'intercale **généralement** entre l'auxiliaire et le participe* (Dauzat 1958:420)

l'adverbe français tend à être postposé (Frei 1929:201)²⁵

Some authors maintain that rules governing adverb placement do exist, though acknowledge the general and/or non-binding nature of these rules:

*On peut établir, quant à la place d'un adverbe, un certain nombre de **règles générales*** (Arrivé et al. 1986:50)

*[l'adverbe] obéit en tout cas à un certain nombre de **règles plus ou moins contraignantes*** (Frontier 1997:270)

Finally, many grammarians acknowledge the existence of at least some rules governing adverb placement, and further attempt to specify these rules, appealing to such factors as adverb type and length, among others:

*les **adverbes temporels** s'intercalent d'ordinaire entre l'auxiliaire et le participe* (Le Bidois & Le Bidois 1971 :107, §978)

*les adverbes de **manière**, de **degré**...se mettent le plus souvent entre l'auxiliaire et le participe, mais peuvent aussi se placer après le participe, surtout s'ils ont une **certaine longueur** (les adverbes **monosyllabiques** sont rarement postposés)* (Grevisse 1993, §934, 2°)

Overall, the constraint most commonly cited by normative approaches as determinative of adverb placement is **adverb type** (e.g. Dauzat 1958; Chevalier et al. 1971; Grevisse 1993; see Chapter 4, §4.4.1.1. for additional references), though **adverb length** is also a widely-invoked conditioning factor (Le Bidois & Le Bidois 1971; Martinet 1979; Grevisse 1993;

²⁵ It should be noted that Frei's (1929) *La grammaire des fautes* is being included in this section on normative literature since it seeks to show that "dans un grand nombre de cas la faute...sert à prévenir ou à réparer les déficits du langage correct." However, in its pursuit of this objective, the monograph draws not on traditional grammars, but also on several usages-based sources, such as newspapers and, notably, letters to/from French prisoners of war in World War I (obtained from the International Prisoners-of-War Agency, part of the International Committee of the Red Cross).

Ollivier 1999). Other factors claimed to influence adverb placement include the **lexical identity** of the adverb (e.g. Michaut & Schricke 1934; Chevalier et al. 1971; Frontier 1997; see additional references in Chapter 3, §4.4.1.2.), **adverb specificity** (Togoby 1984), the ‘**commonness**’ of the adverb (Ollivier 1999), the ‘**heaviness**’ of **verb phrase complements** (Togoby 1984), and whether the adverb is actually an **adjective** being used in an adverbial function (Grevisse 1993, §934).²⁶

Taken together, the prescriptive literature seems to concur that with compound tenses, adverb placement is indeed variable, and furthermore, that there are some linguistic constraints governing this variability. In Chapter 4 of this dissertation, each of the linguistic constraints identified above (in bold) will be operationalized into factors (see Chapter 4, §4.4) and tested against the data of actual usage, in order to determine whether, and if so how, they influence variable adverb positioning in speech.

3.3 Adverb placement in the theoretical literature

In the theoretical linguistic literature, adverbs have garnered a considerable amount of attention, especially in the last two decades, as numerous analyses have been developed to account for their complex behaviour.²⁷ While a comprehensive overview of the different theories falls beyond the scope of this work, this section provides an overview of the key elements of three prominent syntactic approaches, namely, those advanced by Cinque (1999), Alexiadou (1997), and Laenzlinger (1998), and identifies specific observations

²⁶ Others factors not included here concern considerations of rhythm (e.g. Michaut & Schricke 1934; Le Bidois & Le Bidois 1971; Grevisse 1993, §934).

²⁷ For a helpful review of key issues addressed, and needing to be addressed, in theoretical linguistics, consult Austin et al. (2004).

emerging from these analyses which the present study can evaluate.²⁸ This section also identifies some predictions regarding adverb placement emerging from the weight-feature theory postulated by Abeillé and Godard (2000; 2001; 2003; 2004).

I begin with Cinque (1999),²⁹ who has played a key role in the attempt to develop a universal and comprehensive theory of adverb syntax, and who is a leading proponent of the specifier theory.³⁰ Cinque's theory posits a fixed and universal order of the main adverb classes within the IP 'space', shown in (3.14), and of functional projections,³¹ shown in (3.15); putting the two hierarchies together generates the one shown in (3.16) (examples (3.14) – (3.16) are adapted from Cinque 1999:11, 13, 106, examples (44b), (58) and (92).)

(3.14) ³²franchement > heureusement > évidemment > probablement > maintenant³³ > peut-être > intelligemment > généralement > pas > déjà/encore > plus > toujours/jamais > complètement/partiellement > tout/rien > bien/mal > rapidement > souvent

²⁸ While, admittedly, these analyses are over a decade old, they have remained central to current discussions of adverb syntax, which tend to refine, expand, refute etc. specific elements of the theories they postulate.

²⁹ Cinque's (1999) analysis relies primarily on adverb use in Italian, and, to a lesser extent, in French. He also presents a number of examples drawn from several other (Romance and non-Romance) languages to support his claims.

³⁰ As explained by Austin et al. (2004), the two main approaches to adverb syntax are the specifier approach and the adjunct approach. The specifier approach assumes that adverbs occur as "specifying phrasal categoriress (that is, as AdvPs) in a Spec-head configuration" (Austin et al. 2004:11). Conversely, the adjunct approach assumes that "adverbials occur as AdvPs or other phrasal categories adjoined [on the left or on the right] to any projection in which they are interpretable" (Austin et al. 2004:14).

³¹ Cinque (1999:141) also argues that the "hierarchy of functional projections...is present in all languages, and in every sentence of each language, even when no morphological material overtly realizes the corresponding head or specifier."

³² The items in (3.14) are clearly lexical items, even though Cinque (1999:8) takes them to be "representative of a larger class of adverbs, whose exhaustive list is besides the point here." He eventually provides category labels for some, but not all, of these adverbs. The lexical items aligned with specific classes include: *franchement* = pragmatic adverbs; *heureusement* = evaluative adverbs; *evidemment*, *probablement* = modal adverbs; *maintenant* = speech time adverbs; *intelligemment* = subject-oriented adverbs; *bien*, *mal* = manner adverbs.

³³ Despite their position in the hierarchy, Cinque (1999:12-13) explains that 'speech-time' adverbs can "either follow or precede 'modal,' 'evaluative,' and 'pragmatic' adverbs," but must precede 'perhaps' (and consequently, they would also be expected to precede 'subject-oriented' adverbs).

(3.15) Mood_{speech act} > Mood_{evaluative} > Mood_{evidential} > Mod_{epistemic} > T(Past) > T(Future) > Mood_{irealis} > Mood_{necessity} > Mood_{possibility} > Asp_{habitual} > Asp_{repetitive(1)} > Asp_{frequentative(1)} > Mod_{volitional} > Asp_{celerative(1)} > T(Anterior) > Asp_{terminative} > Asp_{continuative} > Asp_{perfect(?)} > Asp_{retrospective} > Asp_{proximative} > Asp_{durative} > Asp_{generic/progressive} > Asp_{prospective} > Asp_{singular completive(1)} > Asp_{plural completive} > Voice > Asp_{celerative(2)} > Asp_{repetitive(2)} > Asp_{frequentative(2)} > Asp_{singular completive(2)}

(3.16) [*frankly* Mood_{speech act} [*fortunately* Mood_{evaluative} [*allegedly* Mood_{evidential} [*probably* Mod_{epistemic} [*once* T(Past) [*then* T(Future) [*perhaps* Mood_{irealis} [*necessarily* Mood_{necessity} [*possibly* Mood_{possibility} [*usually* Asp_{habitual} [*again* Asp_{repetitive(1)} [*often* Asp_{frequentative(1)} [*intentionally* Mod_{volitional} [*quickly* Asp_{celerative(1)} [*already* T(Anterior) [*no longer* Asp_{terminative} [*still* Asp_{continuative} [*always* Asp_{perfect(?)} [*just* Asp_{retrospective} [*soon* Asp_{proximative} [*briefly* Asp_{durative} [*characteristically(?)* Asp_{generic/progressive} [*almost* Asp_{prospective} [*completely* Asp_{singular completive(1)} [*tutto* Asp_{plural completive} [*well* Voice [*fast/early* Asp_{celerative(2)} [*again* Asp_{repetitive(2)} [*often* Asp_{frequentative(2)} [*completely* Asp_{singular completive(2)}]

Cinque argues that AdvPs occur in a Spec-head configuration with the functional projection to which they are semantically related, i.e., an AdvP expressing habitualness, such as *généralement*, will occur in the specifier position of the functional projection hosting habitual aspect, namely, Asp_{habitual}P³⁴ (see towards the end of the 3rd line in (3.16).) Drawing on Pollock (1989, 1993), Cinque maintains that AdvPs are fixed in these Spec-head positions and that variable adverb position with respect to the verb occurs not from adverb movement,

³⁴ According to Cinque (1999:77) “In many cases a transparent specifier/head relation between a certain adverb class and the right adjacent functional head is immediately recognizable. This makes it plausible to assume that such a relation should hold across the board, even in those cases where a functional head apparently finds no corresponding adverb class to its left or where an adverb class finds no corresponding appropriate functional head to its right. In such cases we should not be too discouraged. It could simply be that we have failed to recognize the existence of the relevant adverb class, or of the relevant functional head (and projection).”

but rather from verb movement.^{35,36} In particular, after the adverb is Merged in the appropriate functional projection, the VP raises leftward to “one (or more) of the different [functional] head positions interspersed in the [fixed] sequence of AdvPs” (Cinque 1999:142). So, depending on where the adverb is Merged in the hierarchy in (3.15) and depending on the landing site in this hierarchy of the raising VP, the same adverb may variably occur in a pre-VP and in a VP-final position. This is exemplified in (3.17) (inspired by Cinque 1999:21, ex. (93)), where the adverb *already*, which is base-generated by Merge in the pre-VP position of Spec-T(Anterior) (see the end of the fourth line in (3.16)), may appear in a post-VP position when the VP constituent [*lost his mind*] is raised to a position above T(Anterior)P; alternatively, *already* may remain in a pre-VP position when the VP constituent [*lost his mind*] does not raise to a position higher than T(Anterior)P.

(3.17) At Christmas, I think he had already [lost his mind].



While Cinque’s analysis is primarily concerned with establishing and justifying the linear order of adverbs with respect to each other,³⁷ he does make a few claims which can be specifically addressed in the present study. First, according to Cinque (1999:146), a French active past participle “does not need to (cannot) raise past *bien*,” which he argues is merged in Spec-Voice. This suggests that *bien* and all of the adverbs higher than *bien* in (3.14) (i.e. higher than *well* in (3.15)), such as *toujours*, *déjà* etc., should always occur before the

³⁵ Cinque (1999) explains that the only exceptions to this are special cases involving *wh*-movement, Focus movement or movement for parenthetical use of the adverb. However, he provides only a basic description of such phenomena, offering them as an explanation for why the relative order of the adverbs found in the hierarchies in (3.14) and (3.16) may sometimes be violated (e.g. a manner adverb may precede an adverb like *already* when they occur in a *wh*-sentence: ‘How *badly* is he *already* treating his assistant’ (Cinque 1999:17).

³⁶ Cinque (1999:143) admits that “what triggers the [verb] movement to a particular position remains to be understood.”

³⁷ Evaluating the relative order of adverbs with respect to one another is not an objective in this study.

participle.³⁸ Likewise, he postulates that the projection occupied by *bien* may also be the position for measure adverbs like *beaucoup* and *peu*, as well as for “manner adverbs in general...unless they are modified, coordinated, or focused” (Cinque 1999:7). Thus, it would be expected that such adverbs should also always occur before the participle, notwithstanding the noted exceptions. Additionally, Cinque distinguishes the classes of adverbs outlined in (3.14) and (3.16) from the class of VP-internal *circumstantial* adverbs, which “follow the verb’s complements within the VP [and] comprise a varied selection of elements: place, time, manner, means, company, reason, purpose, and so forth” (Cinque 1999:28).³⁹ Placement between the auxiliary and participle is presumably not possible with these circumstantial adverbs since Cinque (1999:28) claims that they “cannot appear in any of the pre-VP positions open to AdvPs proper.”^{40,41} Note that since he lists manner adverbs among the group of circumstantial adverbs, then it may be possible for them to occur both after and before (in the same position as *bien*) the participle after all; hence, their placement may indeed be variable. Furthermore, he notes that the Italian adverbs *ieri* ‘yesterday’ and *domani* ‘tomorrow’ cannot appear within the IP functional space at all, only “sentence initially or sentence finally”⁴² (Cinque 1999:87); it could thus be expected that the French

³⁸ Cinque (1999) does note an exception to this, as pointed out by Pollock (1989:417), in that the French past participle can precede some AdvPs which are found higher than *bien* (*well*) in the hierarchies in (3.14) and (3.16), namely, *presque*, which occurs in Asp_{prospective}P, and the *souvent* which occurs in Asp_{frequentative(1)}P (Note though that *souvent* also occurs in Asp_{frequentative(2)}P, which is lower than *bien*, meaning *souvent* may indeed occur before or after the participle; in other words, *souvent* is predicted to be variable with respect to placement around the participle.)

³⁹ According to Cinque (1999:28), circumstantial adverbs are “are typically realized (with the partial exception of manner adverbials) in prepositional form (*for three hours, in the kitchen...in a rude manner...etc.*) or in bare NP form (*the day after, tomorrow, this way, here, etc.*)” and are not, like the adverb classes shown in (3.14), “rigidly ordered with respect to one another.”

⁴⁰ ‘AdvPs proper’ presumably being those in (3.14) and (3.16), though Cinque (1999) does not provide any specific criteria/reasoning for such a distinction.

⁴¹ Cinque (1999:28) notes an exception to this, that such adverbs may occur in the “absolute initial position of ‘adverbs of setting,’ a topic-like position.”

⁴² According to Cinque (1999:87) the sentence initial and sentence final positions are “reserved to ‘adverbs of setting’ and ‘circumstantial adverbials,’ respectively.”

equivalents (i.e. *hier, demain*) would also not occur between the auxiliary and the participle.⁴³ Finally, Cinque’s analyses predict that all the adverbs higher than and including *généralement* in (3.14) will never occur after the participle (and its complements), unless they are de-accented. Taken together then, Cinque’s analyses essentially suggest that **adverb type**, and to some extent **lexical identity of the adverb** and **adverb modification**, can be used to predict adverb placement, and so these hypotheses are operationalized in three of this study’s factor groups in Chapter 4 (§4.4.1.1, §4.4.1.2, and §4.4.1.10).

Also a proponent of the specifier approach to adverb placement, Alexiadou (1997) develops an analysis which depends on a distinction between *specifier-type adverbs* and *complement-type adverbs*,⁴⁴ the former are generated through Merge as specifiers of (their relevant) functional projections (in line with Cinque (1999)), while the latter are generated as complements within the VP, and then Move (contra Cinque (1999)) to the specifier position of the relevant functional projection when they have specific structural properties.

Although her analysis primarily concerns adverb use in Greek,⁴⁵ Alexiadou (1997:1) suggests that the principles formulated in her analysis “should be valid across languages.” Thus, if we assume that her claims regarding the targeted projections for different adverbs when they are Merged holds for French, and bear in mind her claim that “in French the

⁴³ Cinque (1999:87) explains that the only temporal adverbs which can occur in the IP functional space are “purely deictic ones,” namely, *once, now* and perhaps *then*.

⁴⁴ In Alexiadou’s (1997) analysis, *specifier-type adverbs* include those which modify sentences (namely, evaluative, conjunctive, speaker-oriented, modal, domain and subject-oriented adverbs) as well as the verb-modifying aspectual/frequency adverbs. *Complement-type adverbs* include those which she claims modify verbs (adverbs of time, location, manner and completion/resultative adverbs) as well as *predicate adverbs*. *Predicate adverbs* are adverbs of place, time and manner which are obligatory for some verbs, especially verbs of movement, situation and behaviour; e.g. **John resides* vs. *John resides close to my house* (Alexiadou 1997:6). She notes that she follows McConnell-Ginet (1982) and Grimshaw and Vikner (1992) in isolating *predicate adverbs* as a distinct category.

⁴⁵ While her analysis is based largely on Greek, Alexiadou (1997) does refer to a number of other languages, (e.g. Spanish, English, Italian, French, Catalan etc.) in developing her theory.

participle remains in a rather low position, which could be Voice⁰ (as Cinque proposes) or maybe it does not leave the VP” (Alexiadou 1997:152), it will be possible to evaluate here some of the arguments she makes regarding adverb placement. First, her claim that the verb-modifying aspectual/frequency adverbs are Merged directly in the specifier of an aspect projection (i.e. [Spec, AspP]), being licensed there under feature matching, means that these adverbs should always occur before the participle in French, since both V⁰ and Voice⁰ (the potential targets of participle movement), are below AspP. Second, Alexiadou claims that temporal adverbs are base-generated as complements to the VP and then raise either overtly or covertly through feature movement to [Spec, TP],⁴⁶ these adverbs are thus predicted to variably occur before and after the participle. Finally, Alexiadou maintains that manner adverbs are also generated as complements to the VP and then, when non-complex or bare, raise out of it to [Spec, VoiceP], meaning that such cases should always occur before the participle. For her then, the sentence-final use of *bien* shown in (3.18a) is precluded, as the adverb will always raise to the position shown in (3.18b) when it occurs unmodified. Conversely, sentence-final use of modified *bien* (3.18c) is entirely acceptable, though pre-participle use in (3.18d) would not be expected to occur, since it is only lack of complexity which triggers movement in her theory.⁴⁷

- (3.18) a. *Jean a parlé le français **bien**.
 b. ✓ Jean a **bien** parlé le français.
 c. ✓ Jean a parlé le français **très bien**.
 d. *Jean a **très bien** parlé le français.

⁴⁶ Overt movement to [Spec TP] would account for their placement before the participle, since the participle moves to Voice⁰, and this is lower than TP. Covert movement would account for their placement after the participle, since it would leave the temporal adverb in the complement position of VP, hence lower than VoiceP (if the participle moves to Voice⁰) or to the right of V⁰ (if the participle remains in the VP).

⁴⁷ The examples in (3.18), and their associated (un)grammaticality markings, are not specifically provided by Alexiadou (1997) but were created using the predictions gleaned from her analysis.

Ultimately, the hypotheses extracted from Alexiadou’s theory concerning the role of **adverb type** and **adverb modification** in adverb placement are operationalized into two factor groups (§4.4.1.1 and §4.4.10) and tested in the spoken data analyzed here.

Finally, another proponent of the specifier approach is Laenzlinger (1998),⁴⁸ who maintains that “variations in the position of adverbs around the participle are due to verb movement.”⁴⁹ The one component of his analysis which is particularly relevant here is his discussion of the distributional properties of (certain types of) adverbs; he describes these at the beginning of his study, presumably assuming that such facts are widely-attested.⁵⁰ The present study can thus specifically evaluate these distributional claims.

First of all, while he leaves aside evaluative (*heureusement*), speaker-hearer oriented (*franchement*) and domain (*logiquement*) adverbs, Laenzlinger (1998:47) indicates that modal adverbs (*probablement, peut-être*) can occur in essentially all positions in a sentence, namely, in “a sentence initial or sentence final position marked with an intonational break (3.19a)...a parenthetical position between the subject and the verb (3.19b)...[and] preverbally or postverbally in compound tenses (3.19c);” note that no specific reason is provided to account for the variable positioning. (Examples in (3.19) adapted from Laenzlinger (1998:47, ex. (16))).

- (3.19) a. (**Probablement,**) Jean a lu le livre de Chomsky(, **probablement.**)
b. Jean, **probablement**, a lu le livre de Chomsky.
c. Jean a (**probablement**) lu (**probablement**) le livre de Chomsky.

⁴⁸ Laenzlinger’s (1998) analysis focuses on Romance and Germanic languages, primarily French and German (and to some extent English, especially in comparison to French.)

⁴⁹ Also like Cinque (1999), Laenzlinger (1998:92) explains that some cases of variable adverb position may be due to the “syntactic phenomena” of extraposition, topicalisation, and focalisation, as outlined earlier in §2.1.

⁵⁰ Laenzlinger (1998) discusses neither phrasal adverbs (i.e. focusing/restrictive) nor adjective adverbs (his terminology).

Laenzlinger claims that time and location adverbs may variably occur sentence initially, after the participle, and sentence-finally after verbal complements, as in example (3.20) (from Laenzlinger 1998:48, ex. (19)).

- (3.20) a. **Hier/ici**, Jean a lu le livre de Chomsky.
b. Jean a lu **hier/ici** le livre de Chomsky.
c. Jean a lu le livre de Chomsky(,) **hier/ici**.

On the other hand, Laenzlinger (1998:48) maintains that while “a temporal true adverb like *récemment*” may occur between the auxiliary and the participle, adverbs with nominal properties⁵¹ (e.g. *hier*, *demain*, *ici* and *là-bas*) cannot, except when “they are used parenthetically;” compare the examples in (3.21), taken from Laenzlinger (1998:48, ex. (20)).

- (3.21) a. ✓Jean a **récemment** lu le livre de Chomsky.
b. *Jean a **hier/ici** lu le livre de Chomsky.
c. ✓Jean a, **hier/ici**, lu le livre de Chomsky.

Aspectual adverbs of motion and frequency, like *lentement* and *fréquemment* are said to occur sentence-initially or between the auxiliary and the participle, though Laenzlinger (predictably) claims that the change in position is also associated with a change in interpretation (as already observed above in §3.1 with respect to topicalization). More specifically he claims that (3.22a) means “there was a slow (factive) event which was John’s reading a book of Chomsky” while (3.22b) means “John’s reading of Chomsky’s book was a slow process” (examples from Laenzlinger 1998:50, ex. 22); the adverb in (3.22a) is thus an

⁵¹ According to Laenzlinger (1998:49), an adverb has nominal properties if it has the “ability to function as a noun complement,” as in *le journal de hier/d’ici/de ce matin* vs. **le journal de récemment* (Laenzlinger 1998:49 ex. 21e)

“Event modifier” while in (3.22b) it “modifies the process denoted by the verb” (Laenzlinger 1998:50). Laenzlinger does not explicitly indicate which interpretation obtains when these aspectual adverbs are located somewhere after the participle, as in (3.22c), though presumably they should align with the reading in (3.22b), since his analysis predicts that the adverb in such a position occurs within the VP (and so would be VP-modifying).

- (3.22) a. **Lentement**, Jean a lu le livre de Chomsky.
“Slowly, John read Chomsky’s book.”
- b. Jean a **lentement** lu le livre de Chomky.
“John slowly read Chomsky’s book.”
- c. Jean a lu (**lentement**) le livre de Chomsky (**lentement**).
“John read (slowly) Chomsky’s book (slowly).”

Furthermore, as noted in §3.1, Laenzlinger asserts that adverbs like *courageusement* have the reading of a manner adverb when found after the participle (3.23a), but a subject-oriented reading⁵² when found sentence-initially (3.23b), sentence-finally (3.23c), and between the subject and auxiliary (3.23d). Between the auxiliary and the participle (3.23e), Laenzlinger maintains that the interpretation of such adverbs is ambiguous between a manner reading and a subject-oriented one. Note again that no explanation for the variable placement of the subject-oriented readings in (3.23b-d) is offered.

⁵² Alexiadou (1997:14) also notes this behaviour among some adverbs, and explains that subject-oriented adverbs “express some additional information about the subject;” on the other hand, a manner adverb provides additional information about the action expressed by the verb.

- (3.23) a. Jean a lu **courageusement** le livre de Chomsky.
b. **Courageusement**, Jean a lu le livre de Chomsky.
c. Jean a lu le livre de Chomsky **courageusement**
d. Jean, **courageusement**, a lu le livre de Chomsky.
e. Jean a **courageusement** lu le livre de Chomsky.

Finally, since Laenzlinger (1998:51) claims that VP-Adverbs (which include manner adverbs (like *péniblement*) and aspectual quantifiers (like *entièrement* and *assez*)) are “structurally confined to the VP domain,”⁵³ this means they should only occur somewhere after the auxiliary (so, either between the auxiliary and participle or after the participle, but not sentence-initially), as in (3.24) (from Laenzlinger 1998:52, ex. 25d).⁵⁴ On the other hand, Laenzlinger maintains that some of these adverbs, such as *bien*, *mal*, *beaucoup*, *trop* and *peu*, can only occur before the participle, unless they are modified (see (3.18c) above).⁵⁵

- (3.24) (***Entièrement**) Paul a (**entièrement**) lu (**entièrement**) le livre de Chomsky
(**entièrement**).

Thus, like both Cinque (1999) and Alexiadou (1997), Laenzlinger’s (1998) proposals give primacy to **adverb type** in predicting adverb placement. Laenzlinger also seems to suggest that specific **lexical adverbs** may have idiosyncratic distributional behaviours, as did Cinque, and that **adverb modification** may influence adverb placement, as predicted by

⁵³ In particular, they must occur in a Spec-head configuration with the participle or its trace (Laenzlinger 1998).

⁵⁴ Laenzlinger (1998:322, fn 20) explains that while most of these adverbs may occur in extraposed or peripheral positions, such cases are “largely syntax-independent” since they rely on “pragmatic, informational factors.”

⁵⁵ Laenzlinger (1998:101-2) argues that these items are weak, and so are subject to a “restricted distribution in a way similar to the distributional restrictions on bare quantifiers and weak pronouns (see Cardinaletti & Starke 1993);” specifically, “they must occur in a Spec-head relation with the lexical verb” (and not just with the participle’s trace, as is possible with non-weak manner and quantificational adverbs).

Alexiadou. These hypotheses are thus operationalized into three factor groups in Chapter 4 (§4.4.1.1, §4.4.1.2, and §4.4.1.10) and tested against the data.

Finally, in a series of articles couched within the Head-driven Phrase Structure Grammar (HPSG) framework, Abeillé and Godard (2000; 2001; 2003; 2004) posit that adverb placement results from the interaction of linear precedence constraints, adverb function, and lexically specified weight features. Without going into the details here, their theory posits that *lite*⁵⁶ adverbs, which include a number of scalar, quantitative and (some) manner adverbs, occur before the past participle. Since weight is associated with lexemes, not some externally accessible criteria (like syllabicity), the present study can only evaluate this claim for the adverbs they explicitly identify in their articles as being *lite*. As such, given their claims, the following adverbs are considered *lite*, and should thus be restricted to occurring before the participle: *bien*, *beaucoup*, *mal*, *peu*, *plus*, *presque*, *soudain*, *toujours*, *trop* and *vraiment* (Abeillé & Godard 2000; 2001; 2003; 2004: *passim*); this will be assessed by considering adverb placement according to **lexical identity of the adverb** (§4.4.1.2).

Overall, what emerges from the theoretical syntactic literature reviewed here is that variable adverb placement stems largely from the interaction between verb movement and adverb type. Specifically, different adverbs are Merged in (and may possibly Move to) different clausal projections depending on their type, and verb movement occurs to different heads among these different clausal projections, thus resulting in variable adverb

⁵⁶ Abeillé and Godard (2000) argue that, in addition to the distinction between heavy and non-heavy constituents, and the acknowledged effects of the former on general word ordering, there is also a distinction among non-heavy constituents between ‘light’ and ‘middle-weight’ ones, since this also seems implicated in word ordering. They formalized this distinction among the non-heavy constituents in terms of the *lite* vs. *non-lite* WEIGHT feature. They use the irregular spelling of *lite* “to distinguish [this property] from semantic lightness, and light verb constructions” (Abeillé & Godard 2004:13).

placement.⁵⁷ As a result, these theories predict that some adverb types are precluded from certain positions, as in the case of aspectual/frequency adverbs occurring after the participle (Alexiadou 1997), while other subsets of types must occur in certain positions, such as non-complex/unmodified manner adverbs occurring before the participle (Alexiadou 1997; Laenzlinger 1998). Thus, in the theoretical linguistic literature, adverb type emerges as the main determinant of adverb placement, with additional contributing factors being lexical identity (for some adverbs) and some construal of adverb bareness, complexity or weight. However, the syntactic literature does not specify the relative importance of these factors in determining adverb distribution, nor do they indicate which factors will prevail over the others when the factors are in conflict. On the other hand, the variationist methodology applied in the present study is specifically designed to determine which factors are significant when all are considered simultaneously, as well as determine the relative magnitude of effect of these factors. Thus, the claims pertaining to these factors are operationalized into three of this study's factor groups, **Adverb Type**, **Adverb Modification** and **Lexical Identity of the Adverb**, and then these are each tested against the spoken data to determine whether, and if so how, they might influence variable adverb placement.

3.4 Corpus-based research on adverb placement

Finally, while there are various descriptions of adverb placement in the prescriptive (§3.2) and theoretical linguistic literature (§3.3), corpus-based research on this issue is somewhat limited, and particularly rare in French. Nonetheless, reviewed below are some of

⁵⁷ On the other hand, adverb movement to focus and topic functional projections, and parenthetical uses of adverbs, is posited to account for otherwise unexpected positioning of adverbs (usually as concerns unexpected relative ordering between different adverb types). The implication of these issues for the present study were noted above in §3.1, and are further addressed in Chapter 4.

the corpus-based studies which have looked at this variation in English, as well as two studies which specifically look at adverb use in French corpora, albeit written corpora.^{58,59}

Corpus-based research on variable adverb placement in English is typically limited to comparing pre- vs. post-auxiliary placement, as in (3.25) (from Waters 2013:179); sentence-initial and sentence-final adverb placement is either ignored or explicitly excluded. The variant of interest in English is the pre-auxiliary one, as in (3.25a).

(3.25) a. It **potentially** might escape.

b. It might **potentially** escape.

In his seminal work on the issue, Jacobson (1975) considers variable adverb placement in a corpus he compiled consisting of a variety of written and spoken genres of American English. He finds that rates of pre-auxiliary placement are higher in newspapers than in other types of written material. In his analysis of the spoken materials, Jacobson's results indicated that pre-auxiliary placement is most common with the auxiliary *should* and the lexical adverb *certainly*, while least common with auxiliaries *have* and *be* and with the adverb *never*. In her study on the topic, Granath (2002) compares the pre- vs post-‘operator’ (i.e. finite auxiliary or constructions of copular *be* + complement) placement of fourteen modal adverbs⁶⁰ and

⁵⁸ Another, more recent, corpus-based study is Aune (2004), who looked at post-subject/pre-verbal placement (e.g. “la famille **alors** se récrie”) of eleven temporal adverbs in simple verb tenses in 49 French novels written between 1984 and 1994. Though the author reports that post-subject/pre-verbal placement is certainly not rare, occurring roughly 14% (N=284/2000) of the time, no such occurrences occurred in the data considered here, and so no further discussion of this study is presented.

⁵⁹ There has also been some corpus-based research on variable adverb placement in Spanish (e.g. Ocampo 1995; Mayoral Hernández 2004), though this research is limited to adverb distribution in simple tense constructions, and not compound tense constructions as is investigated here.

⁶⁰ These included: *actually, apparently, certainly, clearly, definitely, evidently, maybe, obviously, perhaps, possibly, probably, really, simply, surely*.

fourteen temporal (including frequency) adverbs.⁶¹ Her data are drawn from a variety of text types and spoken registers of British and American English at two points in time (1961 and 1990s). She reports some quantitative differences between language varieties and genre, with pre-operator placement being higher in American English and in spoken language as compared to British English and newspapers. She also finds that modal adverbs are consistently more frequent in the pre-operator position than are temporal ones. For their part, Hsieh and Wagner (2006) use genre to investigate stylistic variation in pre-auxiliary adverb placement with respect to four auxiliaries (*could, should, would, will*) in American English; their data consists of the same twenty-eight adverbs studied by Granath (2002). They report pre-auxiliary placement to be most frequent in speech and newspapers, and least frequent in academic texts. They also find slight differences in rates of pre-auxiliary use among the two adverb types, with pre-auxiliary placement significantly more common with modal adverbs than with temporal ones, consistent with Granath (2002). Finally, in a recent study, Waters (2011, 2013) looks at pre- vs. post- (finite) auxiliary adverb placement in vernacular spoken British and Canadian English using the same variationist framework adopted here.⁶² Among the three linguistic factors (lexical auxiliary/auxiliary structure,⁶³ adverb type, and subject type) and four social factors (region, speaker age, speaker sex, and education of the speaker) considered in the multivariate analyses, region, lexical auxiliary/auxiliary structure and adverb type were all found to be statistically significant to adverb placement before an

⁶¹ These included: *already, always, ever, eventually, finally, generally, never, often, recently, seldom, sometimes, soon, still, usually*.

⁶² Waters (2013:184, 185) extracts all cases of adverbs (“more than 100 different adverbs”) occurring adjacent to the modals *can, could, may, might, must, should, will* and *would* and then twelve “reasonably frequent (over 100 occurrences per corpus)” adverbs adjacent to *have, has* and *had*.

⁶³ In particular, she considered each of the lexical auxiliaries (e.g. *can, could, may, might, must, should, will, would*, and *have/has/had*) as well as modal + *have* auxiliary constructions.

auxiliary (as in (3.25a)).⁶⁴ In particular, the auxiliaries modal + *have*, *will*, and *would* all favour pre-auxiliary use, as do predicational adverbs (e.g. *actually*, *certainly*, *maybe*); pre-auxiliary placement is disfavoured with the auxiliary *have*, with the auxiliary *can* (in Canadian English), with functional adverbs (e.g. *always*, *sometimes*, *still*) (in British English), and with the lexical adverbs *never* and *always* (in both dialects). While there are some minor differences in the constraint hierarchies, these differences are minor enough to allow Waters (2013:191) to conclude that “adverb placement with respect to an auxiliary is very similar [linguistically and socially] between the two communities.”

Taken together then, research on variable adverb placement in English has been typically limited to considering extra-linguistic factors, finding that genre/style and language variety affects rates of pre-auxiliary adverb placement. Likewise, the linguistic factors of adverb type, lexical adverb, and lexical auxiliary/auxiliary structure have also been tested and found to be implicated in adverb distribution. However, since research in English has been most interested in factors conditioning adverb placement before the auxiliary, a position which is accepted as rare in French (and which never occurred in this study’s data), and since these same studies exclude adverb placement after the verb (a.k.a. participle), which is a main position for adverb placement in French, it will be more useful to consider how variable adverb placement has been addressed in research exploiting French corpora, even though such research is rare.

⁶⁴ Waters (2011, 2013) undertakes three multivariate analyses, one which only included the linguistic factors and region, and two which included both the linguistic and social factors but was undertaken within each region independently. She does not provide the results for the first analysis, but indicates that the effect of the linguistic variables is stronger than that of region; given the distributional results, pre-auxiliary placement is presumably favoured in Canadian English.

One corpus-based study of adverb placement in French which is of potential relevance is Oates' (1969) doctoral dissertation. His study uses the linguistic model of tagmemic analysis⁶⁵ with the goal of developing a classification system for French adverbs based on the interaction of their function, distribution, and form. His data include 1151 tokens of adverbs, across 67 types,⁶⁶ drawn from “a corpus of seven modern plays” (Oates 1969:14)⁶⁷ The analysis considered adverbs belonging to “five ‘meaning’ or function classes” (Oates 1969:71) (namely, temporal, locational, manner, degree and frequency) in several different positions in the sentence.⁶⁸ In terms of form, Oates compared short phrases (e.g. *à* + noun, *sans* + infinitive) to single word adverbs.⁶⁹ While Oates research objectives were quite different from those of the present study, and while a number of methodological issues make it difficult to extract from his study specific placement tendencies which would be relevant to the present one (see below) a few of his findings do deserve mention. First, adverb position is indeed variable. For instance, the adverbs *beaucoup*, *bien*, *soudain* and *toujours* were all

⁶⁵ According to Oates (1969:25), in the tagmemic model “the tageme is the correlation of a grammatical function, or slot, with the class of mutually substitutable items that fill that slot.”

⁶⁶ The extraction method used by Oates (1969) deserves some mention. In particular, he was initially concerned with determining the positions in which an adverb occurred in his corpus; for this, he consulted his entire corpus and, once a given adverb was found in a given position, further occurrences of it in that position were ignored. After determining the various positions in which different adverbs could occur, he then limited his extraction to the first 1/5 of each play, and to those adverbs which occurred at least four times in this subset of the corpus. Thus, the 1151 tokens, and 67 types, are those adverbs which occurred four or more times in 20% of the corpus; all adverbs which occurred less than 4 times in the first 1/5 of the plays (regardless of their overall frequency in the entire corpus) were therefore not included in Oates' final analyses.

⁶⁷ The plays were all written in the 1940s and 1950s and include Jean Anouilh's *Colombe* (1950) and *L'Alouette* (1953), Jean Genet's *Les Bonnes* (1958), Albert Camus' *L'Etat de Siège* (1948) and *Les Justes* (1949), Jean-Paul Sartre's *Huis Clos* (1944) and Eugène Ionesco's *Victimes du Devoir* (1953).

⁶⁸ Oates (1969:170) initially considered six different positions in the sentence, though, this resulted “in many subclasses which only have one member.” He then refined the number of positions to three (pre-predicate, mid-predicate, post-predicate) which resulted in seven position subclasses, which Oates found to be sufficient for isolating the different classes of adverbs.

⁶⁹ He also further aimed to compare single word adverbs ending in *-ment* to those single word adverbs not ending in *-ment*, though such a comparison was impossible given the rarity of *-ment* adverbs in the data he ultimately extracted.

found to occur both between an auxiliary and participle⁷⁰ as well as after a participle,⁷¹ and the latter two adverbs also occurred sentence-initially; these positions are shown in (3.26) (repeated from Chapter 1). Second, Oates found that placement after a participle (3.26b) was the most common position across all adverb classes. Third, placement between a subject and the verb, as in (3.27),⁷² was found to be rare, with only ten such cases.⁷³ Finally, while Oates does not provide an absolute frequency count for the *-ment* adverbs in his corpus, the fact that only one of these (*doucement*) was frequent enough to be included in his analyses given the extraction criteria he used, suggests that repeated use of the same *-ment* adverb is limited. Note that *doucement* only ever occurred after the participle.

(3.26) a. Ils ont **souvent** déménagé. (045:1621)

b. J'ai déménagé **souvent**. (004:97)

c. **Souvent** je l'ai vu à l'hiver. (117:1553)

(3.27) Les gens **souvent** vont dire ça. (020:282)

The second, and more relevant, corpus-based study is Brill's (1987). This is also a variationist analysis, where the author investigates determinative⁷⁴ adverbs "that modify and can potentially interrupt a compound verb of which one element is a past participle" (Brill

⁷⁰ This would be considered the mid-predicate position in his study, and includes cases of adverbs occurring between a finite verb and an infinitive.

⁷¹ This is a position he refers to as post-predicate, and includes placement of the adverb after an infinitive in finite verb + infinitive construction. Note that it is not clear whether use of these adverbs in the post-predicate position occurred with compound tenses or only with simple tenses.

⁷² While the example in (3.27) was extracted from one of the subsample speaker's interviews, it did not figure in the present analyses, as the adverb occurred in a verb tense which was not part of the variable context (i.e. auxiliary + past participle constructions).

⁷³ All of these were of the short phrase type.

⁷⁴ According to Brill (1987:359) determinative adverbs are "those that are not predicative, interrogative or exclamatory;" no further details or criteria are provided.

1987:360). The data are drawn from 231 personal letters⁷⁵ written between 1930 and 1981 by 53 native French speakers from France, Switzerland and Northern Africa. Analysing 939 tokens, Brill reports that determinative adverbs occur in mid-predicate position (i.e. between the auxiliary and the participle, as in (3.28) below) 43% of the time, that rate of occurrence in the post-subject/pre-auxiliary position was rare (occurring only once; shown in (3.29)), and, furthermore, that several linguistic and social factors condition the variability, as revealed by a variable rule analysis.

(3.28) Je me suis **souverainement** emmerdée. (from Brill 1987:363)

(3.29) X **ce soir** m'a dit... (from Brill 1987:363)

While Brill does not indicate whether all or only some of the factor groups were selected as significant, an examination of the input probabilities indicates that the linguistic factor group exerting the strongest influence on mid-predicate adverb placement is Type of Adverb, with adverbs of manner, affirmation and doubt (grouped together) strongly favouring, temporal and frequency adverbs (grouped together) strongly disfavouring, and locational adverbs never occurring, in the mid-predicate position. Several other linguistic factors also show important effects on mid-predicate adverb placement: pluperfect and present passive constructions, one- and two- syllable adverbs, and simple verb heads all favour this position, while past infinitive and past passive constructions, adverbs with three or more syllables, and more complex VPs (like *faire plaisir*) all disfavour mid-predicate placement. Among the social factor groups, the geographic background of the author seems to exert the strongest effect (Parisians and North Africans favour mid-predicate position the most), though speaker

⁷⁵ The author draws on and assumes Söll's (1980) arguments that "personal correspondence...can be considered representative of spoken, as opposed to literary French" (Brill 1987:361).

sex and education might also be implicated, since female writers and those with an education higher than a BAC slightly disfavoured the mid-predicate position. Brill (1987:363) concludes that “the data tend to support most generalizations found in modern French grammars regarding adverb position,” though she does not specify exactly what these generalizations are.

While both of these studies represent noble attempts to shed light on a traditionally challenging topic, and Brill (1987) in particular is commendable for trying to account for a phenomenon which is variable using methodology specifically designed for this purpose, there is a need to judiciously assess their findings given aspects of the methodologies they each adopted. For instance, even though Oates (1969) was neither aiming to explain variable adverb placement, nor apply variationist methodology to his study, but rather to develop a classification system for adverbs using their meaning and distribution, the methodology he did apply makes it difficult to arrive at a good understanding of patterns of adverb distribution in French. For instance, he collapses the results for adverb placement in simple tenses and in compound tenses, despite the fact that position between the auxiliary and participle is simply not possible with simple tenses. As such, his results for adverb position (which found placement after the participle to be most common) must grossly underestimate the frequency of adverbs in the mid-predicate position, with the consequence of also overestimating the frequency of adverbs occurring after the participle. Also, though admittedly not one of his objectives, the potential role of linguistic factors in conditioning adverb placement can be only partially and circuitously gleaned from the information he provides about the positions in which different adverbs types and lexical adverbs occurred. Finally, in limiting the extraction to adverbs occurring at least four times in the first 1/5 of

his corpus, only one *-ment* adverb figured in his study, making it difficult to draw useful conclusions about the distribution of these derived adverbs.

In the case of Brill's (1987) study, albeit couched within the same variationist framework adopted here, the variable context is not well defined from the very beginning. In particular, while her study "deals specifically with determinative adverbs that modify and can potentially interrupt a compound verb of which one element is a past participle" (Brill 1987:360), it is not obvious what she considers to be a "determinative" adverb; no useful definition, criteria, reference, or examples are provided to that effect, beyond what can be deduced from the factor labels in her factor group of **Adverb Type**, and from the types of adverbs she identifies as not being 'determinative' (these being predicative, interrogative, and exclamatory adverbs, though even here it is not clear what she would consider a 'predicative' adverb to be). Likewise, it is unclear how the author determined which adverbs "can potentially interrupt a compound verb;" whatever her criteria, they were apparently not followed, since she included location adverbs, even though these are widely claimed to be excluded from the mid-predicate position (and this is indeed what she found). Similarly, while she includes "frozen adverbial locutions" in the study on the basis of Grevisse's claim that these are equivalent to adverbs (Brill 1987:360), no information is given on the criteria used for identifying frozen locutions from productive (or less frozen) ones, which, while perhaps obvious in some cases, must certainly be less obvious in other cases, as previously explained here.⁷⁶ A further issue concerning the variable context is the inclusion of negative polarity sentences; as will be explained in Chapter 4, negation interacts with certain adverbs (like *souvent*) to change their scope, and hence their 'meaning,' which presents a challenge

⁷⁶ In fact, even including such items in the study should have meant adding a factor group to test whether they behaved differently than single-word adverbs, a crucial methodological step which was overlooked.

for the standard variationist definition of a sociolinguistic variable (cf §2.2). Likewise, she does not address how cases involving the subject-oriented/manner *-ment* adverbs were dealt with; again, since differences in position are claimed to lead to differences in meaning for these adverbs, how they were handled has important implications for the results.

Furthermore, it is not clear whether or how she might have dealt with possible topicalization or focalization of adverbs in the sentence-initial position, nor whether parenthetical adverbs were included or excluded, both issues which were previously identified here as needing to be addressed in any variationist study of variable adverb placement. A similar issue concerns how passive contexts were distinguished from copular ones, since at least the latter need to be excluded from the variable context (see Chapter 4, §4.4 and Appendix C). In terms of coding, despite alluding to some differences between different adverb types, Brill groups several types together for the multivariate analyses, thus obscuring inter-type differences. Finally, Brill only provides overall distribution results for the mid-predicate position; though she indicates that the majority (57%) of tokens “represent all other positions” she does not explicitly identify what these positions actually are or the frequencies of adverb occurrences in them,⁷⁷ which would certainly be useful information.

An additional methodological limitation of both Oates’ and Brill’s analyses concerns the type of language data on which they are based. In particular, both of these studies rely on written sources (plays and letters, respectively) for their data, though written representations of language may not be faithful reflections of spoken language. Thus, extending to speech findings which are based on written sources should only be done with caution (Poplack & Malvar 2007; Poplack & St.-Amand 2007; see also Ayres-Bennett 1994; 2000). For example,

⁷⁷ Exceptions to this are her reporting “one post-subject sample,” (see (3.29)) as well as a reference to adverbs occurring “at the beginning or end of a sentence” (Brill (1987:361).

Poplack and St.-Amand (2007) report considerably higher rates of *ne*-omission in 19th century spoken French (99.9%) than those reported by Martineau and Mougeon (2003) in diaries (40%) and plays (57%) written in the same period, and this even though the speakers, diarists and characters were all of comparable social provenience. Furthermore, in comparing the audio recordings of the 19th century data with original transcriptions of them, Poplack and St.-Amand (2007) discovered countless discrepancies, which lends additional support for the caution against using written representations of language as surrogates for actual vernacular speech. Additionally, even though Poplack and Malvar (2007) report many parallels in rates and conditioning of variant use for future temporal reference in Brazilian Portuguese in data drawn from 20th century plays and speech, they do admit there are some discrepancies between the different genres. Specifically, in the representations of speech drawn from plays, there is an “overrepresentation of the outgoing variants and concomitant underrepresentation of the emergent variant” (Poplack & Malvar 2007:155), as well as conditioning effects (grammatical person/animacy and verb type) which are absent in speech.

Taken together then, even though there exists corpus-based research on variable adverb placement in English, and to a lesser extent in French, the objectives of, and methodologies applied in, these studies mean that their results may not be ideal for understanding adverb distribution in French, and particularly in spontaneous speech. Thus, further investigation is both warranted and required. It is hoped that the present research, as the first study to specifically look at variable adverb placement in a corpus of spoken vernacular French, will be able to provide valuable insight into the mechanisms underlying this phenomenon.

3.5 Adverb classification

This section presents an overview of various systems that have been proposed in the prescriptive and linguistic literature, as well as those adopted in the corpus-based research considered here, for classifying adverbs according to ‘type’. Such an overview is warranted here not only because invocation of adverb type is ubiquitous in the adverb literature in general, but more importantly, because it is particularly prevalent in discussions of adverb placement specifically. In fact, adverb type easily emerges as the factor most commonly associated with adverb distribution, as is evident from the review of the literature outlined above in §3.2, §3.3 and §3.4. Given the apparently inextricable link between adverb type and adverb placement, the present study is necessarily charged with the task of discovering the true nature of this relationship, if indeed there is one. However, in order to quantitatively assess the role of adverb type in adverb placement, it is first necessary to ascertain how many distinct types of adverb exist, what these types are, and what lexical items are contained within their inventories, a task which, as will become obvious in what follows, proves to be a thorny undertaking.

3.5.1 Prescriptive literature

In the French prescriptive literature, the typical strategy for classifying adverbs, whether or not explicitly acknowledged, has been to use “les critères sémantiques” (Arrivé et al. 1986:49). This generally leads to the identification of at least six main adverbs types, namely, **place**, **time**, **quantity**, **manner**, **negation**, and **assertion** (Radouant 1922; Académie française 1933; Michaut & Schricke 1934; Gaiffe et al. 1936; Cayrou et al. 1949;

Dauzat 1958; Galichet 1967; Chevalier et al. 1971).⁷⁸ However, not all grammarians concur in the number or types of adverb classes to be distinguished, and so normative writings are characterised by at least some diversity in this respect. For instance, other adverb types which have been posited in addition to, or instead of, the traditional main six mentioned above include: aspect and degree (Grevisse 1993^{79,80}), intensity (Grevisse 1990;⁸¹ Wagner & Pinchon 1965), interrogation (Cayrou et al. 1949), cause (Larousse 1988; Wagner & Pinchon 1965), opinion, comparison, and adverbs of “liaison” (Wagner & Pinchon 1965:385), and adverbs which indicate “une relation logique” (Grevisse 1993, §919c).⁸² Note that some of these alternative categories do seem to correspond to types listed among the traditional main six; for example intensity and degree adverbs may coincide with quantity adverbs and/or constitute sub-categories of the latter (e.g. Wagner & Pinchon 1965; Grevisse 1990; 1993; Togeby 1984). Note also that, while some of these alternative types suggest a classification system based (at least in part) on inherent meaning (e.g. aspect, degree), others indicate that function is the main criterion used (e.g. comparison, adverbs of “liaison”). Finally, in

⁷⁸ Of course, some grammarians will group these different ‘types’ of adverbs together into broader categories. For instance, Grevisse (1993, §919) suggests that adverbs can be semantically classified into three “espèces principales,” namely: i) adverbs of manner (which may include aspectual adverbs) and degree (which includes adverbs of negation); ii) adverbs of time and place; and iii) adverbs which indicate “une relation logique” (e.g. *donc, pourtant*). For Larousse (1988), adverbs of manner, time, place, and cause fall into a general category labelled *circonstanciels*. Similarly, Cayrou et al. (1949) posit a broad category of *adverbes circonstanciels* (in which are grouped adverbs of manner, time, place and quantity), as well as a category for adverbs of *opinion* (which includes adverbs of assertion, negation and interrogation). For their part Wagner and Pinchon (1965:385) identify three main classes of adverbs, grouping together adverbs of negation, quantity, intensity and manner in the first class, adverbs of time, place, cause, and opinion in the second class, and adverbs of “liaison” and of comparison in the third class.

⁷⁹ Grevisse (1993, §919) notes that “les adverbes d’aspect sont proche à la fois des adverbes de manière et des adverbes de temps.” Other grammarians (Michaut & Schrike 1934; Wagner & Pinchon 1965) tend to group elsewhere-identified aspectual adverbs within the class of temporal adverbs.

⁸⁰ Grevisse’s (1993) adverbs of degree seem to coincide with other grammarians’ category for adverbs of quantity. He further breaks down this category into adverbs expressing “le degré relatif,” which includes comparative and superlative adverbs, and those expressing “le degré absolu,” which includes items like *beaucoup, trop, peu, complètement, quasiment* etc.

⁸¹ For Grevisse (1990), adverbs of intensity fall within the larger category of quantity adverbs.

⁸² Grevisse (1993, §919, R1) prefers to keep “adverbes de phrase ou de modalité,” like *peut-être* and *sans doute*, separate from his three main adverb groups, because when used, “ils ne peuvent être considérés comme en relation avec un terme particulier; ce sont des éléments libres.”

addition to the various meaning-derived adverb types, some grammarians strive to develop classification systems which do not rely on such semantic criteria (e.g. Martinet 1979; Arrivé et al. 1986; Riegel et al. 1998), though rarely do these attempts eliminate inherent meaning completely.⁸³ Ultimately, indeterminacy among grammarians in the number of adverb types posited and the labels associated with them, as well differences in the criteria used for establishing the different types, make it difficult to clearly understand the role that adverb type might have on adverb placement. Nonetheless, since adverb type reportedly plays such an important role in adverb distribution, it will be necessary to find a means to operationalize and test this factor in the present study (see Chapter 4, §4.4.1.1 and Appendix B).

⁸³ For instance, Riegel et al. (1998:376) develop a system based on adverbs' "propriétés de construction," more specifically, "le(s) type(s) de construction(s) où [l'adverbe] figure et...les spécificités interprétatives liées à ces positions." However, they still refer to meaning-based notions when describing what goes into these categories, for example, grouping together adverbs which "modalisent temporellement ou aspectuellement" (Riegel et al. 1998:378). Likewise, Galichet's (1967:48-9) classification system is based on the way adverbs "présentent le procès," and Wagner and Pinchon (1965:385) use "le genre de détermination que l'adverbe apporte," though both of their systems nonetheless refer to the semantic notions of manner, time, place, quantity/intensity etc. in enumerating the items found in each class. Take for instance Galichet's (1967) three-way distinction between "les adverbs qualificatifs," "les adverbs déterminatifs" and "les adverbs modulateurs" (Galichet 1967:48-49). The first group contains adverbs which "caractérisent le procès, un peu comme l'adjectif qualificatif caractérise l'être", and includes adverbs of manner. The second group consists of adverbs which "situent le procès par rapport à la réalité qui l'entoure, par rapport à certaines coordonnées" and includes adverbs of time, place and cause. Finally "les adverbs modulateurs...modulent en quelque sorte le procès" and include adverbs of assertion, doubt, negation, restriction and quantity/intensity.

On the other hand, some grammarians have had more success at developing adverbial classification systems which do not exploit inherent semantics. For instance, Arrivé et al. (1986) suggest that adverbs should be categorized according to their syntactic properties, which the authors describe in terms of their level of dependency on the verb and where they can occur in a sentence. Similarly, Martinet (1979) proposes a six-category classification system based on the behavioural tendencies of the adverbs, using as criteria the types of elements they can modify and whether they can themselves be modified by adverbs, among others. So, for example, while both Martinet's Type I and Type II adverbs can modify verbs, adjectives, and adverbs, they are distinguished by the fact that the former can also directly modify nouns and pronouns (e.g. *aussi, plutôt, seulement*), while the latter can only modify nouns "par l'intermédiaire de *de*" (e.g. *dehors, partout, aujourd'hui, toujours*) (Martinet 1979:135). Note, however, that Martinet does not avoid all references to inherent meaning in his discussion of adverbs, as elsewhere he specifically mentions quantitative adverbs and refers to adverbs which "indiquent la manière" or which have "une valeur spatiale...[ou] temporelle" (Martinet 1979:136). For his part, Galichet (1967:48-9) suggests that adverbs may also be grouped according to "leur pouvoir de caractérisation, de détermination ou de modulation du procès." Though the criteria used to determine category membership is somewhat ambiguous, Galichet (1967:49-50) distinguishes between "les adverbs forts" which includes "adverbs ayant en permanence cette valeur;" "les adverbs fonctionnels ou occasionnels" which "tirent (leur) valeur adverbiale de leur fonction passagère;" and "les formes adverbiales atténuées" which are at "la limite extrême où l'on touche une autre espèce."

3.5.2 Linguistic literature

Classifying adverbs into distinct categories, or discussing adverb behaviour in terms of adverb type, is also a common practice in linguistic discussions of adverbs, though, as Austin et. al (2004:17) explain, “there is neither consensus about the extent to which the syntactic and semantic classes coincide, nor about the number and kinds of classes to be distinguished.” Rather, various systems for the categorization of adverbs have been posited, these being dependent on the linguistic field in which the analysis is couched, the specific analysis being advanced, and/or the particular combination of criteria which is being exploited (e.g. functional, syntactic, semantic, distributional, and/or prosodic).

Generally speaking, most linguistic approaches make an initial binary distinction between S(entence)-adverbs and V(erb)P(hrase)-adverbs (e.g. Jackendoff 1972; Alexiadou 1997; Cinque 1999; Molinier & Levrier 2000). According to Alexiadou (1997:6) this bipartite scheme reflects the observation that adverbs have either “a modifying function over sentences ...or [over] verb phrases.” Laenzlinger (1998:43) explains this distinction in terms of distribution, in that, typically, “sentence adverbs occupy high positions within the clause, whereas VP-adverbs are essentially satellites of the verb phrase.” Along these lines, Cinque (1999) distinguishes between ‘Higher’ and ‘Lower’ adverbs based on their positions in the clause with respect to the past participle (in Italian, at least). On the other hand, Molinier and Levrier (2000) use the possibility of occurring in a detached position at the beginning of a negative polarity sentence, and the impossibility of occurring in a cleft construction, to distinguish between their two main adverb categories, *adverbes de phrases* and *adverbes intégrés à la proposition*. Thus, even attempts to impose a simple, binary division of adverb

types are characterised by differences across authors in the criteria used to make these distinctions.

Furthermore, this binary approach to classifying adverbs is not the only one adopted. For instance, though Laenzlinger's (1998) analysis does distinguish between S-adverbs and VP-adverbs, he also identifies two other groups of adverbs, namely phrasal adverbs (which he indicates includes restrictive and focusing adverbs, like *seulement* and *au moins*) and adjective adverbs (like *très* and *extrêmement*, which he also refers to as degree adverbs).⁸⁴ Likewise, Cinque (1999:28) adds a class of 'circumstantial' adverbs which "follow the verb's complements within the VP," and both McConnell-Ginet (1982) and Abeillé and Godard (2000) distinguish between adverbs which are Verb-modifying/adjoining and those which are only Verb-Phrase modifying/adjoining. For their part, Quirk et al. (1985) use function and position to divide adverbs into four main classes (adjuncts, subjuncts, disjuncts, and conjuncts), while Ernst (2002) draws on the way in which adverbs combine semantically with different types of semantic objects (e.g. processes, events, propositions) to identify his four main types of adverbs (predicational, functional, participant, and domain).

Additionally, regardless of which main divisions are made, or how, these broad categories are almost always further subdivided, often several times. For instance, Laenzlinger (1998) posits the adverb classes shown in (3.30),⁸⁵ presumably using both adverb function and interpretation as criteria (examples taken from the original).

⁸⁴ These fall outside his area of research since "the condition licensing their occurrence certainly differs from the conditions licensing the distribution of VP/S-adverbs" (Laenzlinger 1998:41).

⁸⁵ Laenzlinger (1998) explains that he draws on the terminology used by Jackendoff (1972), Bellert (1977) and Ernst (1984) for the categories in (3.30).

(3.30) i) Sentence-Modifying Adverbs

- a. Pragmatic adverbs
 - Evaluative : *heureusement/fortunately*
 - Conjunctive : *cependant/however*
 - Formal : *précisément/precisely*
 - Speaker-hearer oriented : *franchement/frankly*
- b. Domain adverbs : *logiquement/logically*
- c. Modal adverbs : *probablement/probably*
- d. Subject-oriented adverbs
 - Passive-sensitive : *intentionnellement/deliberately*
 - Agent-oriented : *violemment/violently, impoliment/impolitely*
- e. Event adverbs :
 - Time : *hier/yesterday*
 - Location : *ici/here*
- f. Aspectual adverbs
 - Frequency : *fréquemment/frequently*
 - Motion : *lentement/slowly*

ii) VP-Modifying Adverbs :

- a. Aspectual adverbs
 - Positive/assertive : *toujours/always, vraiment/truly*
 - Quantificational : *beaucoup/much, assez/enough*
 - Degree : *presque/almost, à peine/hardly*
- b. Circumstantial (manner/instrument/result...) adverbs
 - Verb-oriented : *péniblement/painstakingly, correctement/correctly*
 - Object-oriented : *entièrement/entirely, lourdement/heavily*

Complicating the system even more is the fact that two schemata which are largely the same may diverge on some minor points. For instance, while Alexiadou (1997) and Laenzlinger (1998) both adopt the same fundamental binary distinction between sentence-modifying adverbs and verb-modifying ones, they differ in terms of where adverbs of time, location, and frequency are grouped; Laenzlinger considers them to be sentence-modifying adverbs, while Alexiadou argues that they should be analysed with verb-modifying adverbs.

Similarly, while both agree that aspectual/quantificational adverbs are verb-modifying, Alexiadou argues that, syntactically, they behave like sentence-modifying adverbs and so should be analyzed with sentence-modifying adverbs.

In their lengthy monograph on French *-ment* adverbs, Molinier and Levrier (2000) use meaning to establish their subclasses, while Mertens (2013) draws on distributional, syntactic and prosodic criteria to generate his typology for French adverbs; these two classification systems are compared in Table 3.1, reproduced in part from Mertens (2013:21). Note how in some cases, one of Molinier and Levrier's classes correspond to two of Mertens' (e.g. conjonctifs vs. relational & ordinal), and in other cases, several of Molinier and Levrier's classes correspond to just one of Mertens' (e.g. date, durée & fréquence vs. temporal).

Table 3.1 Comparison of classifications systems proposed for adverbs by Molinier and Levrier (2000) and by Mertens (2013)						
Molinier & Levrier (2000)			Mertens (2013)	Example		
adverbes de phrases	conjonctifs		relational	<i>cependant</i>		
			ordinal	<i>premièrement</i>		
	disjonctifs	de style		enunciative	<i>honnêtement</i>	
		d'attitude	d'habitude		<i>habituellement</i>	
			évaluatifs		<i>curieusement</i>	
			modaux		<i>certainement</i>	
orientés vers le sujet			<i>sottement</i>			
adverbes intégrés à la proposition	manière orientés vers le sujet		manner	<i>anxieusement</i>		
	manière verbaux			<i>hermétiquement</i>		
	manière quantifieurs	intensifs		<i>considérablement</i>		
		complétude		<i>entièrement</i>		
		d'extension qualitative		<i>essentiellement</i>		
	point de vue		negation	<i>nullement</i>		
	temps	date		temporal	<i>légalement</i>	
		durée			<i>dernièrement</i>	
		fréquence			<i>momentanément</i>	
	focalisateurs			<i>rarement</i>		
?			?	<i>principalement</i>		
?			ethical	<i>bien, mal, mieux</i>		
?			locative	<i>ici, là, partout</i>		
(quantité)*			degree	<i>très, fort, presque</i>		
?			pseudo-adverb	<i>haut, bas, faux</i>		
Examples are taken from Molinier and Levrier (2000: <i>passim</i>) except where there is no category equivalent to one postulated by Mertens (2013), in which case the example comes from the latter publication.						
*These adverbs were not actually part of Molinier and Levrier (2000)'s inventory and classification system, which pertained only to <i>-ment</i> adverbs. However, in their chapter on <i>adverbes de manière quantifieurs</i> , they indicate that their so-called quantificational manner adverbs are “syntaxiquement et sémantiquement proches des adverbes de quantités [qui regroupent] des formes telles que <i>beaucoup/très, peu, assez, trop</i> , etc.” (Molinier & Levrier 2000:190).						

Furthermore, even lists which claim to consolidate numerous classifications systems are not necessarily consistent, as is clear in comparing two such endeavours outlined in Table 3.2. In particular, Austin et al. (2004:18) enumerate typical classes by “picking randomly from different classifications.” For their part, Abeillé and Godard (2004:40) draw on several sources (French: Schlyter (1977); Molinier & Levrier (2000); English: Greenbaum (1969);

Jackendoff (1972); and German: Bartsch (1976)) to generate their list of “the accepted semantic classes.” While Table 3.2 certainly shows much overlap between the two schemata, it also reveals that they do not completely coincide, as indicated by shaded cells.

Table 3.2 Comparison of adverb classes as summarized by Austin et al. (2004) and Abeillé and Godard (2004)		
Austin et al. (2004:18)	Abeillé and Godard (2004)	Examples
speaker-oriented speech act	speech-act	<i>frankly/franchement</i>
speaker-oriented evaluative	evaluatives	<i>fortunately/malheureusement</i>
evidential	?	<i>evidently</i>
epistemic	modals	<i>probably/probablement</i>
domain	frames	<i>linguistically/légalement</i>
subject-oriented/agent-oriented	agentives	<i>deliberately/intelligemment</i>
?	volitional	<i>volontairement</i>
temporal	time	<i>now/bientôt</i>
locative	n/a*	<i>here</i>
quantificational	frequency	<i>frequently/fréquemment, souvent</i>
?	duration	<i>longtemps</i>
manner	manner	<i>slowly/calmelement</i>
degree	degree	<i>very/beaucoup, complètement</i>
?	connectives	<i>donc, premierement</i>

English examples are drawn from Austin et al. (2004:18) and French examples are taken from Abeillé and Godard (2004:40).

Cells containing a question mark ‘?’ indicate that there is no such category posited by the authors in their classification system, nor do these ‘missing’ categories appear to be subsumed among those categories which are posited (i.e. none of Abeillé and Godard’s (2004) classes appear to include adverbs like *evidently/évidemment*, and Austin et al.’s (2004) categories do not seem to account for adverbs like *voluntarily/volontairement*).

*Abeillé and Godard (2004:15) do not consider locatives like *ici* to be adverbs, but rather argue that they (as well as temporal adverbs like *hier*) are “better analysed as PP [prepositional phrases] and NP [noun phrases].”

Finally, the situation becomes even more complicated, and as a result confusing, when the classification of specific adverbs within different typologies is considered; such is the case for the classification of the adverbs *intentionnellement* and *délibérément* by Molinier and Levrier (2000) on the one hand, and by Laenzlinger (1998) on the other. In particular,

according to the classification schema posited by Molinier and Levrier (2000), these two adverbs are considered to be among the group of adverbs *intégrés à la proposition*, and specifically, they are *adverbes de manière verbaux*.⁸⁶ While other adverbs grouped in Molinier and Levrier’s *adverbes de manière verbaux* (e.g. *correctement*, *péniblement*) are classified by Laenzlinger (1998) as VP adverbs, and specifically, verb-oriented adverbs, Laenzlinger groups *intentionnellement* and *délibérément* with his subject-oriented **sentence** adverbs. Molinier and Levrier’s (2000) counterpart to Laenzlinger’s subject-oriented sentence adverbs is definitely not their *adverbes de manière verbaux*, but rather *disjonctifs d’attitude orientés vers le sujet* (among *adverbes de phrases*) and/or *adverbes de manière orientés vers le sujet* (among *adverbes intégrés à la proposition*). This means that *intentionnellement* and *délibérément* are most certainly classified quite differently in the two approaches;⁸⁷ these differences are schematized in Table 3.3. Such inconsistencies across classification systems clearly constitute hindrances to any attempt at consolidating distinct typologies.

	<i>violemment</i>		<i>intentionnellement</i>	<i>correctement</i>
Laenzlinger (1998)	Sentence adverb subject-oriented			VP adverb verb-oriented
	agent-oriented	passive-sensitive		
Molinier & Levrier (2000)	‘adverbes intégrés à la proposition’			‘adverbes intégrés à la proposition’
	adverbes d’attitude orientés vers le sujet			adverbes de manière verbaux

⁸⁶ While they claim that most adverbs in this category only occur after the participle, they do allow these two adverbs (and a few others) to be mobile (i.e. variable).

⁸⁷ While Molinier and Levrier (2000) do allow some adverbs to be classified into both *adverbes de manière verbaux* and *adverbes de manière orientés vers le sujet* (like *chaudemment* and *doucement*), neither *intentionnellement* nor *délibérément* are granted such a privilege.

Overall then, the situation within the linguistic literature is no more conclusive than it was in the prescriptive literature in terms of adverb typology. Rather, linguistic approaches have posited various and differing numbers of adverb types, they have assigned various and differing labels to these classes, and they have used various criteria for delineating the posited classes. Again then, such indeterminacy presents an obstacle to any attempt at understanding how adverb type might condition adverb placement, even though it will be essential to test the role of this factor in the phenomenon investigated here.

3.5.3 Corpus-based research

Finally, in the corpus-based research reviewed here, inherent meaning again plays a predominant role in the establishment of adverb categories. For instance, both Granath (2002) and Hsieh and Wagner (2006) limit their studies to examining temporal and modal adverbs. While Oates (1969) aims to develop a classification system for French adverbs based on the interaction of their function, distribution and form, he nonetheless starts by identifying five (seemingly) meaning-inspired classes, namely, temporal, locational, manner, degree, and frequency.⁸⁸ For her part, Brill (1987) refers to eight different types of adverbs (manner, affirmation, doubt, temporal, frequency, quantity, intensity and location) whose labels indicate that inherent meaning is again implicated, though she does not provide any indication as to how these types and this number of categories were settled on. Only Waters (2011, 2013) adopts a classification system not inherently based on meaning; she follows the (formal) semantic approach developed by Ernst (2002) and distinguishes between functional

⁸⁸ Actually, Oates (1969:71) refers to these as “ ‘meaning’ **or** function classes” (my emphasis). He then subdivides these classes into first thirty-three, then thirteen, and ultimately seven different classes based on the positions in which their members were found to occur in his corpus.

adverbs (including adverbs of frequency (e.g. *often*) and duration (e.g. *still*)) and predicational adverbs (which includes items like *actually*, *maybe*, *obviously*).

3.5.4 Summary

Overall, the main finding which emerges from a review of the adverb classification systems adopted by the literature consulted here is that a wide variety of systems have been postulated. There is consensus neither in terms of the total number nor types of classes to be distinguished, nor the labels to be associated with these various classes. In some cases, classes identified by some writers are not identified by others (e.g. Abeillé & Godard (2004): duration; Laenzlinger (1998): motion), or two classes postulated by one author are elsewhere subsumed as one (Laenzlinger (1998): quantificational, degree = Grevisse (1993): degree). Also, apparently identical semantic and/or functional types may be labelled differently in different systems (e.g. Austin et al. (2004): epistemic = Abeillé & Godard (2003), Laenzlinger (1998): modal; Grevisse (1993): degree = Wagner & Pinchon (1965): intensity), making it difficult to determine at first glance if the classes, and systems, are congruent. Moreover, these differences are found not only between the prescriptive and linguistic literature, which might be expected, but also within each of these approaches. Further complicating the situation is the fact that varying combinations of criteria are utilized for establishing the classes, including intuitive meaning, syntactic observations, functional considerations, distributional tendencies, and/or prosody. Clearly then, the categorization of the adverbs into distinct classes is to some extent subject to the whims, opinions, and/or research objectives of the linguist or grammarian. As a result, it is difficult to recognize how adverb type can be gainfully exploited in investigating variable adverb placement, even

though this factor is repeatedly reported to be implicated in this phenomenon, as revealed by a review of the relevant literature in §3.2-3.4.

Nonetheless, if some of the finer details and labelling differences posited by the different approaches are ignored, and examples of what belongs in each author's categories are consulted, it is possible to identify some shared tendencies which can be usefully applied to the present study. First, it seems practically unavoidable that some (intuitive) semantic criteria be exploited in identifying at least some adverb classes, even when functional or other criteria are used. This allows the identification of categories which seem to be common across the majority of approaches, such as adverbs of time, place, manner and quantity (or some construal of this). Such adverbs are widely considered to be event-internal, though they may be argued to differ in terms of whether they modify the subject, the process expressed by the verb, or the entire event. Second, most approaches identify one or several categories of adverbs which are somehow opinion- or attitude-related and associated with the speaker, providing some type of event-external modification of the proposition. These include types which have been referred to as evaluative, speaker-hearer-oriented, speech-act, etc. Likewise, categories which touch on the truth-values of the proposition are also commonly posited, these being variously labelled modals, epistemics, adverbs of doubt etc. Additionally, though perhaps less common, classes include those which perform some type of conjunctive or logical relation function, as well as those which serve to focus, restrict, or intensify. Finally, many approaches identify a group of adverbs which situate the proposition within a specific context, typically referred to as frame or domain adverbs. Since discussions about adverbs nearly always refer to adverb type as an implicated, if not determining, factor in adverb positioning, and since most of these types are posited in many (if not most) of the typologies

reviewed, along with predictions concerning their influence on adverb distribution, here they will serve as the basis for the classification system that will be used to assess the role of adverb type in variable adverb placement in speech, with further details provided in Appendix B.

3.6 Chapter Summary

This chapter aimed to present a review of various topics relevant to the study of adverbs and adverb placement, especially as concerns French. It began by providing an overview of the various definitions that have been advanced for the adverb, finding that they are typically considered optional, intransitive, single-word lexical items which modify all or some elements of a sentence, and which are distinct from the broader group of *adverbials*. Section 3.1 also explored a number of empirically challenging characteristics associated with the adverb category, which, while not the focus of the present investigation, must necessarily be acknowledged and addressed in any investigation of adverb placement. These challenges include morphological diversity, polysemy, functional diversity, and interactions between position, interpretation and comma use/parentheticality, as well as the ascription of distinct functions to different adverb positions by some authors. These issues become relevant in the next chapter, as part of the circumscription of the variable context, i.e. the decision as to which items and contexts can be included together in a study of variable adverb placement, and so they are necessarily implicated in the design of the methodology adopted here.

The subsequent three sections turned their attention to the specific subject of interest in this study, namely adverb distribution. Section 3.2 reviewed the matter in the prescriptive literature, wherein it was found that distributional variation is acknowledged and, moreover,

associated with some linguistic factors. These factors include first and foremost adverb type, but also adverb length, specificity, frequency (or ‘commonness’), lexical identity, and adjectival status, as well as the “weight” of verbal complements. The linguistic analyses of adverb syntax consulted in §3.3 also suggested that adverb type is the main predictor of adverb placement, though considerations of adverb weight/complexity/modification and lexical identity may also be implicated. These approaches also tend to associate sentence-initial use of adverbs with topicalisation and focalization, as outlined in §3.1. Thus, both the prescriptive and syntactic approaches attempt to impose some uniformity on variable adverb placement, either by ascribing distinct functions to specific variants, or by associating adverb of certain types or other characteristics with certain positions. However, neither of these traditions are eager to acknowledge, or can adequately explain, positional variability *within* a single adverb type, let alone variable placement of the same adverb, even though inspection of spontaneous speech shows that the same adverb appears in different sentence positions with no apparent difference in meaning or pragmatic import, as was illustrated in example (1.1) in Chapter 1. The objective of the present study is to account for such heretofore (largely) neglected variability. It will also consider the potential role of external factors in influencing adverb placement, an aspect which has been almost entirely overlooked.

Section §3.4 then provided a review of corpus-based analyses of adverb use in English and French, identifying some important distributional observations emerging from the latter especially. However, the English studies have focused primarily on genre/style and dialectal differences, and the variants considered differ from those which will be considered here.⁸⁹ In terms of the French corpus-based studies, the nature of their data (written sources), combined

⁸⁹ Sentence-initial and sentence-final adverbs are not included in English studies, and their variant of interest, pre-auxiliary placement, is widely accepted as rare in French and indeed never occurred in the data extracted here.

with some methodological issues means that the reliability of their results in terms of adverb distribution needs to be assessed, especially as concerns adverb use in vernacular spoken language.

Finally, given that adverb type is repeatedly cited as a key determinant of adverb placement, §3.5 delved into the complex matter of adverb classification systems, where it was found that there is considerable variety in the number, types, and labels of categories posited. Nonetheless, it was argued that some methodologically useful consistencies could be identified amid the variety. These will be exploited in the present study to develop a typology enabling us to evaluate the claims regarding the influence of adverb type on adverb placement.

Overall then, despite the vast body of research on adverbials, a review of the topic of variable adverb placement in the existing literature reveals an important lacuna on the subject. There has not yet been undertaken any quantitative analyses of this phenomenon as it occurs in French in actual speech, and thus no confirmation that the descriptions and theories advanced to account for adverb distribution actually apply in practice. It is thus this lacuna which the present study specifically seeks to address.

CHAPTER 4

Data and Methodology

Overview

This chapter outlines the data and methodology used in this study. First, §4.1 provides details on the speaker sample and a description of the corpus from which the sample is drawn. Section 4.2 describes the variants and the variable context, including excluded cases. This section also revisits the methodological challenges which were encountered in attempting to circumscribe the variable context, as touched on in Chapter 3 (§3.1), and explains how these challenges are met in the present study. Section 4.3 explains how the data were extracted and also how the data are later analyzed (in Chapters 5 and 6) using variationist methods of analysis. In §4.4, the linguistic and social factors considered in this study are presented, along with the specific hypotheses associated with them as gleaned from the literature. Finally, §4.5 provides a general summary of this chapter.

4.1 Data

4.1.1 Corpus

The French data on which this study is based were extracted from the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989), housed at the Sociolinguistics Laboratory at the University of Ottawa. This corpus (hereafter referred to as the OH corpus) contains the recorded speech of 120 adult native speakers of French who live in the Canadian National Capital region of Ottawa-Hull, where French retains majority language status on one side of the provincial border, but minority language status on the other. The corpus contains approximately 3.5 million words of informal speech data collected in 1982 by local

Francophone community members who conducted Labovian sociolinguistic interviews (Labov 1984) with the informants. The OH corpus is stratified according to age, sex, and neighbourhood, and was constructed with the aim of studying language change and language contact phenomena. For further details on corpus design, collection, and characteristics, the reader is referred to Poplack (1989).

4.1.2 Speaker sample

To minimize any eventual effects of contact with English, a subsample of speakers was selected from the Quebec side of the border, all of whom had low proficiency in that language.¹ In order to assess the possibility of differential behaviour across the community, the subsample was stratified according to speaker age, speaker sex, and neighbourhood, as shown in Table 4.1A.

	Vieux-Hull		Mont Bleu		TOTAL
	Women	Men	Women	Men	
Younger (18-29 yrs.)	2	2	2	2	8
Middle-aged (35-47 yrs.)	2	2	2	2	8
Older (> 59 yrs.)	2	2	2	2	8
TOTAL	6	6	6	6	24

¹ All of the OH informants were assigned an English proficiency score (of 1, 2, 3 or 4) by the original investigator (Poplack 1989), with a score of 1 representing no/low proficiency in English and a score of 4 representing high proficiency in English. This English proficiency score was based on each informant's cumulative score on a Cumulative English Index, determined by the informant's responses with respect to four measures gauging their language use and their knowledge of English. Please consult Poplack (1997:307, fn 1) for more information regarding the Cumulative English Index. All of the subsample speakers included in this study had been assigned English proficiency scores of 1 or 2 by the original investigator.

Since Brill (1987:363) concludes that “adverb syntax is becoming more flexible,”² which seems to imply that this variable may be involved in language change, this study uses the apparent time construct (Labov 1963; 1966; 1994) in order to detect whether any change may have occurred across generations in the community sampled here. In particular, the speech of individuals from three different age groups is compared: eight older speakers (59+ years old), eight middle-aged speakers (35-47 years old) and eight younger speakers (18-29 years old). The subsample was also stratified according to neighbourhood and speaker sex in order to shed light on the possible social embedding of the variable in the community. In particular, the two neighbourhoods represented in the subsample, Mont Bleu and Vieux-Hull, are situated on opposite ends of a socio-economic class (SEC) continuum, with the former situated on the higher end and the latter on the working-class end. Since both speaker sex and SEC are widely acknowledged to be indicative of the social evaluation of linguistic variants (e.g. Labov 1972, 2001; Trudgill 1974 etc.), and since Brill’s (1987) results implicate some social conditioning for this variable (specifically, male writers³ favoured the MID-VP variant), whether, and the way in which, these factors condition adverb placement will be indicative of this variable’s sociolinguistic role in the sampled community. Finally, given Brill’s (1987) findings that less educated writers favoured the MID-VP variant, and the fact that the role of this factor may provide an additional indication of the sociolinguistic status of variable adverb placement in the community, speaker level of education is also considered. Table

² She also notes that speakers from North Africa and Paris, who favoured adverb placement between the auxiliary and the participle, are “historically a frequent leader in linguistic change in French,” and furthermore that a “re-analysis seems to be in progress.” (Brill 1987:363)

³ Based on the details provided in her appendix, Brill’s (1987) corpus consisted of thirteen male writers, among which seven had obtained at least some university, and the other six had completed a BAC or less. Of the twenty-five female writers, six had completed some university and the other nineteen had obtained a BAC or less.

4.1B shows the distribution of the subsample speakers according to their level of educational attainment.

Table 4.1B Distribution of OH speaker subsample according to speaker sex, age, and level of education							
Age	Level of education						TOTAL
	Primary		Secondary		Post-secondary		
	♀	♂	♀	♂	♀	♂	
Younger (18-29 yrs.)	-	-	4	2	-	2	8
Middle-aged (35-47 yrs.)	2	3	2	1	-	-	8
Older (> 59 yrs.)	2	3	2	1	-	-	8
TOTAL	4	6	8	4	0	2⁴	24

4.2 Variable context and variants

This section outlines the specific methodology which was adopted in this study, beginning with a description of the underlying variable context and the variants which are considered here. Then, each of the six challenges presented in Chapter 3 (morphological and functional diversity, polysemy, interaction between position/meaning, comma intonation and parentheticality, ascription of specific functions to specific variants) are revisited, to detail how they were each addressed in this study. Following this, all of the variable context exclusions are enumerated, which includes those emerging from the six challenges, as well some additional exclusions not yet discussed.

4.2.1 Underlying variable context and variants

As outlined in Chapter 2, §2.3, any variationist study must begin by circumscribing the variable context, which is typically defined as the contexts in which the variants may

⁴ The dearth of post-secondary education in the subsample reflects its distribution in the larger sample, where only eleven of the 120 OH speakers had obtained some post-secondary education.

alternate without a change in referential meaning. Often, this first involves identifying two or more forms (the variants) which seem to be used interchangeably in the same context(s) (Tagliamonte 2006). In the present study, however, there are no alternating “forms” in the obvious sense of the word, since there is clearly a difference in meaning when different adverbs are used, as in for example *Je chante souvent* and *Je chante toujours*.⁵ Thus, it is not the adverbs themselves which equate to the alternating forms; rather it is the possibility that (in certain functions and/or constructions) they may appear in different positions. As such, it is the positions which constitute the variants, and this regardless of the lexical identity of the adverb used. Thus, in order to circumscribe the variable context, it is necessary to identify the constructions and/or functions in which adverb placement is potentially variable (i.e. adverbs can occur in different positions) with no concomitant changes in referential meaning.

A review of the literature first reveals that there are many contexts in which adverb placement is said to be *invariable*, depending on what the adverb is modifying and/or which type of function it is fulfilling; such cases would therefore need to be excluded from the variable context. In particular, adverb placement is reported to be invariable for adverbs modifying nouns, adjectives, or other adverbs, as well as for adverbs used in certain adverbial functions, like intensification, negation, and interrogation. On the other hand, the prescriptive and theoretical literature both acknowledge that there are some contexts in which adverb position may indeed be variable. One such context is adverbial modification of a verb phrase which is composed of an auxiliary and a past participle, referred to here as a compound tense construction (e.g. *le passé composé*, *le plus-que-parfait*, *le conditionnel*

⁵ Of course, while not the objective here, a study comparing the use of (essentially) synonymous adverbs like *souvent* and *fréquemment*, or *toujours* and *tout le temps* would be possible, as Waters (2011:10) does with “adverbs indicating realness,” like *actually*, *really*, *as a matter of fact*, *in fact* and *indeed*.

passé etc.).⁶ In such constructions, it is generally agreed that (most) adverbs may variably occur, without a change in meaning, between the auxiliary and the participle, a position referred to here as the MID-VP variant and shown in (4.1), or after the participle, a position referred to here as the POST-V variant and exemplified in (4.2).

(4.1) MID-VP

J'ai toujours resté dans Hull. (98:8)

“I always lived in Hull.”

(4.2) POST-V⁷

Peut-être parce j'ai vécu **toujours** dans Hull ou quelque chose. (94:1451)

“Maybe because I always lived in Hull or something.”

On the other hand, Cinque (1999) contends that there are differences in function between MID-VP and POST-V uses for some instances of some adverbs⁸ (i.e. repetitive, frequentative, completive and celerative adverbs), a claim which would preclude MID-VP and POST-V occurrences of these instances of these adverbs from being considered in the same variable context; note, however, that others (i.e. Laenzlinger 1998, the prescriptive literature) make no such claim, or even the opposite claim. Also, Cinque (1999:20) admits that these adverbs

⁶ An additional verbal context in which adverb placement may be variable includes those composed of an infinitive preceded by a tensed verb functioning as an auxiliary, as in periphrastic *aller* + infinitive, as well as with infinitives in general. In terms of simple tenses, as explained in Chapter 1, the prescriptive literature claims that adverb placement is essentially invariable, with adverbs being placed after the verb. While there are some exceptions to this, these exceptions are claimed to be stylistically constrained (e.g. Chevalier et al. 1971; Grevisse 1993; Le Goffic 1994).

⁷ There is also the possibility of POST-V adverbs scrambling with verbal complements, as in *Paul a chanté (souvent) la chanson (souvent)*, thus potentially creating two variants instead of this one in at least some cases (i.e. where verbal complements are present, there may be a post-participle/pre-complements variant and a post-complements/VP-final variant). Such a distinction was not made in this study; adverbs occurring somewhere after the participle, whether before or after any present complements, were all coded as occurring in the POST-V position.

⁸ More specifically, Cinque's (1999) theory holds that MID-VP uses may be associated with either event- or process-modifying functions, but POST-V uses only with a process-modifying function. So a MID-VP adverb may have a different function than the same adverb in a POST-V position, or even different from other occurrences of this adverb in the MID-VP position.

may “deceptively [have] exactly the same interpretation in the two positions,” and, drawing on observations by Travis (1988:292ff) and Rochette (1990:63ff), among others, he maintains that this arises “in certain (perhaps, most) contexts” (Cinque 1999:20).^{9,10} Indeed, the examples in (4.3) suggest that the frequency adverb *souvent* may occur in each of these two positions with no apparent change in referential meaning, illustrating that any difference in meaning ostensibly conveyed by these positions has been neutralized here. As Sankoff (1988:153) puts it, “distinctions in referential value or grammatical function among different surface forms can be neutralized in discourse.”

(4.3) a. J’ai déménagé **souvent**. (004:97)

“I moved often.”

b. Ils ont **souvent** déménagé. (045:1621)

“They often moved”

So, while in theory, and/or in some contexts, the different positions may be associated with different meanings or functions for a small cohort of adverbs according to some authors, in other contexts, for other authors, and/or in practice, these distinctions may simply not emerge, and the variants can be used interchangeably with no apparent differences in

⁹ Cinque (1999:20) provides the following examples, adapted from Thomason and Stalnaker (1973:200) as instances where the distinct functions (event vs. process modifying) of the two uses of the celerative adverb *slowly* emerge:

- a) He has been slowly testing some bulbs. (= the entire event was slow, but each test could be fast)
- b) He has been testing some bulbs slowly. (= each test was slow)

Ultimately, the only celerative adverb extracted in the data was *vite*, which Cinque (1999) does not expect to be subject to this position/interpretation interaction.

¹⁰ Specifically, he aims to adhere to “a restrictive theory [which] should force a one-to-one relation between position and interpretation” (Cinque 1999:20). To account for cases where an adverb “seems to have exactly the same interpretation in two apparently distinct positions” (Cinque 1999:20) he offers three possible explanations: the adverb remains in a single position and something moves around (his preferred explanation); the adverb itself moves and retains “the interpretation associated with the position of the trace” (which he rejects); or the adverb has the same interpretation in both positions (which he also rejects on the basis that in some cases the “different interpretations associated with the different positions reemerge.”) Ultimately, his preferred explanation does indeed predict inherent variability.

meaning, as suggested in (4.3). Ultimately, since it is not clear in which contexts Cinque (1999) expects these distinctions to arise, as he provides no criteria to this effect, the study will begin with the assumption that discourse neutralization like that illustrated in (4.3) is implicated, though MID-VP instances of these adverbs were reviewed to determine whether any evidence of functional distinctions could be identified (a point returned in Chapter 5).

In addition to MID-VP and POST-V adverb placement, both prescriptive and theoretical approaches also (at least occasionally) acknowledge that adverbs may occur sentence-initially, a position referred to here as the PRE-SUBJ variant, as in (4.4).

(4.4) PRE-SUBJ¹¹

a. **Souvent** je l'ai vu à l'hiver. (117:1553)

“Often I saw him in the winter.”

On the other hand, adverbs are often claimed to fulfill distinct functions when occurring in the PRE-SUBJ position; as discussed in Chapter 3 (§3.1). In particular, the theoretical linguistic literature often considers adverbs in the sentence-initial position to be focused or topicalized (e.g. Alexiadou 1997; Ernst 2002)). Thus, if the PRE-SUBJ variant is associated with functions distinct from the MID-VP and POST-V variants, this would mean that adverb occurrences in this PRE-SUBJ position should be excluded from the variable context. Of course, it is possible that at least some PRE-SUBJ cases are subject to discourse neutralization; it may be that claimed functional distinctions simply do not hold in practice. This issue is left

¹¹ Bonami et al. (2004) claim that PRE-SUBJ uses of adverbs always occur with commas (or comma intonation in speech), though this variant did occur in the data analysed here without comma intonation. The OH corpus was transcribed using punctuation which “follow standardized conventions” (Poplack 1989:434). As such, comma intonation is taken to be indicated by the presence of commas in the transcription, and the lack of commas in the transcription is taken to mean the absence of comma intonation, as in the example in (4.4). Ultimately, accuracy regarding presence/absence of comma intonation in the transcriptions was confirmed by consulting the audio files for all PRE-SUBJ adverbs.

aside for the moment, being addressed below in §4.3.2.6, and so the PRE-SUBJ variant is retained.

A fourth variant, placement between the subject and the auxiliary as in *Paul, souvent, a déménagé* is also theoretically possible, albeit subject to variable context concerns similar to those associated with the PRE-SUBJ variant (i.e. in this position the adverb is considered to be parenthetical, and so functionally distinct from its occurrence in the other variant positions). However, since this variant never occurred in the data extracted here, no further discussion of it will be presented. Likewise, in cases where verbal complements are present, some authors distinguish between post-participle/pre-complements placement and post-complements/VP-final placement (e.g. Oates 1969), though here, these two contexts are considered together as the POST-V variant.

Finally, in addition to variable positioning among adverbs which are modifying a verb phrase, the literature also seems to accept variable adverb placement in compound tenses when the adverb is providing some type of modal or event-external modification. In such cases, adverb placement may occur in each of the PRE-SUBJ, MID-VP and POST-V positions without a change in meaning, as in (3.5) and (3.6), though some of these cases are associated with parentheticality, an issue also introduced in Chapter 2 and returned to below in §4.2.2.5.

- (4.5) a. **Franchement** j'avais assez aimé ça. (90:879)
b. J'ai, **franchement**, aimé l'école. (my example)
c. Ça m'a faite un coup **franchement** quand- (90:364)

- (4.6) a. **Peut-être** que j'aurais fait des efforts. (101:1699)¹²
b. J'aurais **peut-être** été mis dehors. (114:369)
c. Ils ont été avertis **peut-être**. (88:1167)

Thus, if the variable context is taken to be the locus of neutralization of meanings in discourse, then the underlying variable context adopted here includes event-external or event-internal adverbs used in compound verb tenses, with the possible variants being adverb placement in the PRE-SUBJ, MID-VP and POST-V positions.

4.2.2 The six challenges

With an underlying variable context now outlined, it is possible to revisit the six challenges that were identified in Chapter 3 (§3.1) as needing to be addressed in any study of variable adverb placement, and describe how they were tackled in the present analysis.

4.2.2.1 Morphological diversity

The first challenge identified in §3.1 as inherent to the study of adverbs was the issue of morphological diversity. More specifically, since the underlying variable context is **adverb** use in compound tenses, it is first necessary to identify the items which will be considered here as ‘adverbs’ amidst the morphologically diverse set of adverbials. In the relevant literature, delimiting the research domain thus has been accomplished in at least three distinct ways. First, some investigators study just a set of lexically-identified adverbial items (e.g. Aune 2004; Granath 2002; Hsieh & Wagner 2006; Waters 2011); obviously though, the

¹² The exact status of modal adverbs like *peut-être* as event-external or event-internal is not entirely clear. While Laenzlinger (1998) indicates that they are “integrated into the clause in such a way that their interpretation is derived from the linguistic content of the sentence,” which suggests they are event-internal, Ernst (2002) groups them with speaker-oriented adverbs like *frankly*, *luckily* and *obviously*, which for him are distinct from event-internal adverbs.

broader implications of such analyses are limited. Other researchers restrict their investigations to single-word lexical items in general, whether these are non-derived (like *souvent*, *bien*) or derived (e.g. *lentement*) (e.g. Alexiadou 1997; Laenzlinger 1998; Cinque 1999; Waters 2011; 2013). In other words, these investigators focus more generally on *adverbs* as defined in the strictest sense of the word, leaving aside the broader group of *adverbials*. Though this may be a feasible approach to the problem, this procedure precludes the possibility of identifying, and thus considering the behavior of, multi-word strings that are essentially functioning like single-word adverbs. While an obvious way around this limitation would be to relax the definition of *adverb* to include adverbial locutions, the potential difficulties associated with distinguishing fixed locutions from more or less fixed strings of words, as discussed in Chapter 3, clearly introduces additional challenges, which in many cases could only be resolved by resorting to the researcher's (non-objective) intuitions and interpretations. An alternative solution for restricting the domain of study would be to follow Brill's (1987) tactic of only including adverbs which can (potentially) occur in the MID-VP position. That occurrence in this position should constitute the crucial criterion for item inclusion presumably stems from the common assumption that (essentially) all adverbs which appear in this position are licensed in (at least one of the) peripheral positions, but not vice versa. However, this approach also introduces various problems, most crucially, how one might determine *a priori* which adverbs can occur in the MID-VP position, since the literature is far from clear on this detail. The pragmatic solution to this specific dilemma would be to consult the data directly and identify exactly which items are found to occur in the MID-VP position. Once identified, however, the question then becomes whether to include only the specific lexical items that occur there, or to also include items from the broader 'class' of which those items are a member. In the former case, there is the potential of

missing countless lexical adverbs which simply do not occur in the MID-VP position in the particular data set; in the latter case, there is still the potential of missing entire classes of adverbs, since some, such as locational adverbs, are widely claimed to never occur in the MID-VP position, not to mention challenges associated with deciding which class an adverb belongs to, and which other adverbs also belong to that class, as outlined in Chapter 3.

Since none of the above-detailed approaches seemed ideal on its own, the present investigation adopted a hybrid method for determining which items would be included in this study. So, all items which appear as a single word orthographically in *Le Nouveau Petit Robert* (Robert 1996), and are identified by this dictionary as an adverb, were included when they occurred in the variable context as defined above (see §4.3 for details on the extraction procedure) and this regardless of the positions in which they occurred. Also, all multi-word adverbials that occurred in the MID-VP position, whether attested adverbial locutions or not, were also included. The reasoning for this decision stems from claims that while essentially all adverbs, including adverbial locutions and productive adverbials, can occur in peripheral positions (i.e. PRE-SUBJ and POST-V), only true adverbs can occur in the MID-VP position (e.g. Cinque 1999; Dauzat 1958; Chevalier et al. 1971). Thus, any adverbial items (whether composed of one word or of more than one word) which occur in the MID-VP position should be allowed in the other variant positions, but not vice versa. This allows us to consider adverb placement among all adverbial items which can potentially occur in each of the three variant positions identified above (i.e. before the subject (PRE-SUBJ), between the auxiliary and past participle (MID-VP), and after the past participle (POST-V)). This last criterion, occurrence in the MID-VP position, was not invoked as the sole criterion for inclusion in the study since it could lead to the exclusion of single-word lexical adverbs which might have

just one or two occurrences, if these occurrences happened to not be with the MID-VP variant; this could be viewed as resulting in a violation of the Principle of Accountability (Labov 1972). Such non- MID-VP occurrences contribute crucial information to understanding the factors which condition adverb placement, and so excluding them would necessarily eliminate some of this information.¹³ Likewise, the simple fact of variability (cf. Poplack 1992; Poplack et al. 2013) among the variant positions was not invoked as the criterion for inclusion of adverbials in this study for these same reasons; the possible exclusion of lexical adverbs which occur but once or twice in the data means that the conditioning information embodied in these occurrences would be lost. While, admittedly, this hybrid approach is not entirely free from its own challenges and shortcomings (e.g. it would be interesting to know how *all* adverbial locutions behave), it arguably gains on previous attempts by maximizing the possibility of considering a wide variety of adverbs, and adverbially-functioning items, while minimizing the amount of subjective interference introduced by the researcher.

Finally, some additional ‘inclusion’ decisions need to be mentioned. First, since adjectives functioning as adverbs are typically considered as such in those contexts, these items are included here, as are items whose status as adverbs is generally accepted even if occasionally challenged (like *ici*, *hier*; Abeillé and Godard 2003). Even though items like *hier* and *ici* are said to be excluded from the MID-VP position, an *a priori* decision to not extract them effectively prevents this claim from being assessed, since it would be impossible to determine whether they are in indeed precluded from MID-VP position in speech, or whether they simply did not occur in the variable context in the data. Second,

¹³ On the other hand, multi-word adverbials are expected to occur the in POST-V position, but since it is difficult (if not impossible) to objectively distinguish productive adverbials from more or less frozen ones, only those which occurred in the MID-VP position were taken to be frozen, since (at least) productive multi-word adverbials are expected to be absent from the MID-VP position.

since Grevisse (1993 §927) considers hyphenated items like *là-bas* and *par-dessus* to be adverbs (or *adverbes composés*) on par with historically derived, but currently single-word items like *aussitôt*, *auparavant* and *partout* etc., all orthographically hyphenated adverbials are also included, using *Le Nouveau Petit Robert* (Robert 1996) to confirm hyphenation.¹⁴ Third, as outlined in §3.1, a number of hyphenated adverbs composed of *au/par* + locative adverb have compositionally similar, yet unhyphenated, counterparts containing the preposition *en*. Since Grevisse (2011, §109c 4°) himself acknowledges the arbitrariness of hyphenation conventions regarding these items, it could be argued that these should be considered equivalent to their compositionally similar unhyphenated counterparts (the latter of which are considered by Grevisse to be in the same class as unhyphenated historically derived adverbs like *aussitôt* etc.). As such, all unhyphenated constructions made up of *en* + locative adverb (*en dehors*, *en dessus* etc.) were also included (thus at least permitting a comparison to be undertaken between them and the hyphenated *au/par* items if they are found to vary in their placement patterns).

4.2.2.2 Functional diversity

A second challenge associated with adverbs concerned their functional diversity, which affected the task of circumscribing the variable context in three ways. First, as outlined in Chapter 2 and above in §4.2.1, the variationist variable context is limited to only including variants which perform the same function. So, in a study of variable adverb placement, this means that adverbs occurring in the different variant positions must be fulfilling the same function in each of those positions to allow them to be studied together. However, as noted

¹⁴ Even though *Le Nouveau Petit Robert* (Robert 1996) considers these hyphenated items to be adverbial locutions.

above in §4.2.1 and in Chapter 3, there are potentially some cases where different positions are associated with different functions, as in use of the PRE-SUBJ variant and with variable placement of some *-ment* adverbs; these issues are addressed in §4.3.2.4 and §4.3.2.6 below.

A second issue with respect to functional diversity, as noted above, is the observation that some adverbial functions do not allow variable positioning of the adverbs used to fulfill them. For instance, negative and interrogative adverbs are generally immobile (minus a few exceptions)(Grevisse 2011, §975c, §1020), as are adverbs occurring in intensifying, focusing or restrictive functions (Laenzlinger 1998; Grevisse 2011, §972a). Likewise, the “adverbes pronominaux ou pronoms adverbiaux” (Grevisse 2011, §682) *en* and *y* are also invariant in terms of position. Thus, adverbs used in at least some adverbial functions must be excluded from the study, since they are simply not subject to variable placement (see §4.2.3 (1) below for a list of these).

A third issue which was introduced in Chapter 3 concerns the inclusion of adverbs which, while they may occur in different positions without a change in function, nonetheless perform different functions than other adverbs which may also show variable placement. More specifically, Chapter 3 questioned whether the variable context could legitimately include adverbs like *souvent*, which are typically said to perform event-internal functions, with adverbs which are said to perform event-external functions like *franchement* (speaker-oriented) and *linguistiquement* (domain).¹⁵ As noted above, it was decided that as long as adverbs in a given function could potentially occur in each of the variant positions without a

¹⁵ Of course, both *franchement* and *linguistiquement* might also occur in event-internal verb modifying functions.

change in their respective function, then it would be acceptable to retain adverbs which may perform different types of adverbial functions in general.

4.2.2.3 Polysemy

A third challenge identified in Chapter 3 was the observation that some lexical items which are considered adverbs can also occur as other parts of speech in non-adverbial functions. For instance, while the lexical item *beaucoup* (and other so-called ‘quantity’ adverbs like *assez*, *trop*, *tant* etc.) are certainly functioning as adverbs in some cases, as in (4.7), in other cases, they can function as indefinite pronouns (4.8) or as indefinite determiners (4.9). Likewise, the lexical item *bien* occurs frequently in spoken French as a discourse marker, as in (4.10). Similarly, while *avant* and *après* can both function as adverbs (4.11), they may also function as prepositions (4.12) or as conjunctions (4.13).

(4.7) a. Le service social lui a **beaucoup** aidé. (95:832)

b. Ça la radio on l'a **assez** écoutée. (117:1382)

(4.8) a. J'en ai appris **beaucoup** juste avec ces gars là. (100:1318)

b. J'en ai **assez** faite pour eux-autres. (89:1886)

(4.9) a. Il y a eu **beaucoup de critiques**, fait que je me dérange même pas maintenant.

(117:1510)

b. Je pense c'est pour ça j'ai faite **assez de sports**. (114:1505)

(4.10) a. Fait que là **bien** on s'est en venus rester icitte. (89:68)

b. **Bien** oui, **bien** il y en a eu, je veux dire, là je pourrais pas, **bien** je sais que...

(117:1196)

- (4.11) a. Je lui avais dit « Si tu m'avais dit ça **avant**, j'aurais pu te charger un petit peu cher. » (94:173)
- b. Elle a resté là rien que six ans elle. Elle s'est en venue dans Hull **après**. (105:3116)
- (4.12) a. Il y avait- il y a eu plusieurs pièces **avant Séraphin**. (120:1036)
- b. J'ai commencé à l'école Carrière, puis **après ça** j'ai fini à- à l'école Gauvin ici. (79:130)
- (4.13) a. Il a eu sa position a-- **avant qu'il ait fini ses cours**. (104:1629)
- b. Je l'ai assez faite **après Ø** j'ai été mariée. (114:1503)

Since this study is limited to investigating adverbial uses of such polysemous items, each of their occurrences had to be carefully assessed to ascertain the function that was being fulfilled in those occurrences. In most cases, components of the contexts in which the polysemous words occurred were indicative of their function. For example, when *avant* or *après* was followed by *que* or by a noun phrase or pronoun (i.e. *ça*), then these instances were considered as conjunctions and prepositions, respectively. Likewise, where a quantity adverb occurred after a verb which required a direct object, in the absence of another direct object and/or in the presence of *en*,¹⁶ such occurrences were taken to be pronominal. And of course, any cases which proved to be ambiguous were ultimately excluded.

4.2.2.4 Interactions between adverb position and adverb interpretation

A fourth issue to be addressed in circumscribing the variable context concerns the effect of variable position on the interpretation of certain, but not necessarily all, *-ment* adverbs which are typically referred to as adverbs of manner. To illustrate this issue, compare the

¹⁶ Grevisse (2011, §736b 4°) indicates that “comme compléments d’objet directs ou comme sujets logiques (ou réels), ces mots doivent être accompagnés du pronom *en* placé devant le verbe.”

examples in (4.14)-(4.19). First of all, the interpretation of adverbs like those in (4.14)¹⁷ are not claimed to vary as result of their position, and so these would not be problematic for a variationist study like the present one. On the other hand, in (4.15), the adverbs in the PRE-SUBJ position are taken to be process-external, and are said to describe the speaker's assessment of or attitude towards the content of the proposition (4.15a), the speaker's self-described manner of speaking (4.15b), and the nature of the event in general (which may include attributing a quality to the subject) (4.15c). In the POST-V position in (4.16), these same adverbs are claimed to be process-internal, specifically modifying the way in which the action denoted by the verb is carried out. In the MID-VP position in (4.17), the interpretation of these adverbs is said to be ambiguous between the interpretations obtained in (4.15) and (4.16) (e.g. Laenzlinger 1998; Molinier & Levrier 2000). Additionally, in the POST-V position, different occurrences of the same *-ment* adverb may be associated with distinct interpretations, supposedly marked by the presence or absence of comma intonation and/or semantic compatibility with the verb (Molinier & Levrier 2000). Thus, the interpretations of the adverbs in (4.18a) and (4.15) are said to be equivalent, and the interpretations of the adverbs in (4.18b) and (4.16) are considered to be the same. Finally, note that the adverbs in (4.15) are expected to retain their process-external interpretation whenever they are accompanied by comma intonation, regardless of their position in the sentence, as in (4.19).

- (4.14) a. √(**Probablement,**) Max a √(**probablement**) fermé √(**probablement**) le bocal.
 b. √(**Soigneusement,**) Max a √(**soigneusement**) fermé √(**soigneusement**) le bocal.
 c. *(**Hermétiquement,**) Max a √(**hermétiquement**) fermé √(**hermétiquement**) le bocal.¹⁸

¹⁷ The examples in (4.14) are adapted from Molinier and Levrier (2000:148, ex. 2).

¹⁸ While, Molinier & Levrier (2000:157) explain that 85% of verb-oriented manner adverbs are claimed to be excluded from the PRE-SUBJ position as in (4.14c) (vs. subject-oriented manner adverbs as in (4.14b)), Bonami et al. (2004) note that such an adverb actually may occur there under very specific conditions, namely, when the

- (4.15) a. **Naturellement/Heureusement**, le président a parlé aux médias sans délai.
b. **Franchement**, le président a parlé aux médias trop tard.
c. **Courageusement**, le président a parlé aux médias/le soldat a lutté contre l'agresseur.
- (4.16) a. Le président a parlé **naturellement/franchement/heureusement** aux médias.
b. Le soldat a lutté **courageusement** contre l'agresseur.
- (4.17) a. Le président a **naturellement** parlé aux médias.
b. Le soldat a **courageusement** lutté contre l'agresseur.
- (4.18) a. Le président a parlé aux médias, **naturellement**; il n'avait pas de choix.
b. Le président a parlé aux médias **naturellement**; il semblait tout à fait à l'aise.
- (4.19) a. **Courageusement/naturellement**, le président a parlé aux médias.
b. Le président, **courageusement/naturellement**, a parlé aux médias.
c. Le président a, **courageusement/naturellement**, parlé aux médias.
d. Le président a parlé, **courageusement/naturellement**, aux médias.
e. Le président a parlé aux médias, **courageusement/naturellement**.

Thus, while adverbs like those in (4.14) do not represent a problem for this study, since they have the same meaning in each variant position where they are claimed to be possible, those in (4.15)-(4.19) do threaten to methodologically undermine a variationist study like the present one. More specifically, given that the standard definition of a sociolinguistic variable is “alternative ways of saying the same thing” (Labov 2008:2), it would be difficult to argue that cases like those in (4.15) and (4.16) can be considered part of the same variable context,

quality it expresses is somehow unexpected. In these instances, they claim that the adverb is used with a “very specific prosodic pattern” wherein main stress falls on the first syllable (as opposed to finally, which is normal in French) (Bonami et al. 2004:150) and, furthermore, that these are cases of adverb extraction. As there were no PRE-SUBJ occurrences of such manner adverbs in the data, this possibility is not addressed here.

since they do not express ‘the same thing;’ in (4.15) the adverbs say something about the speaker’s attitude towards the event (4.15a), their self-described manner of speaking (4.15b) or about the event in general, including attributing a quality to the subject (4.15c); in (4.16) the same adverbs provide descriptive information about the talking/fighting process. Furthermore, if the interpretation of *courageusement* and *naturellement* in (4.17) is ambiguous between the interpretations attributed to these adverbs in (4.15) and (4.16), then it is unclear in which variable context cases like (4.17) should be considered, if at all.

On the other hand, the adverbs in (4.15) could be retained in the variable context given their distributional possibilities shown in (4.19), since it is claimed that the adverb preserves its event-external interpretation in each of these positions.¹⁹ Still, POST-V cases like (4.16) should be excluded from the variable context, since in the PRE-SUBJ position these adverbs are claimed to have a different meaning (i.e. (4.15)), and in the MID-VP position (4.17) their interpretation is claimed to be ambiguous; these claims together make such adverbs essentially invariable in terms of placement. It should follow then that MID-VP uses like (4.17) also be excluded given their ambiguity. However, Moliner and Levrier (2000) point out that some of these occurrences may be unambiguous when the verb (or context) semantically prevents a manner reading to occur, which would lead to an interpretation consistent with (4.15) and (4.19); they provide the example shown in (4.20) to illustrate this. As such, MID-VP cases need not be excluded *a priori*, but might be admissible in some cases where the context or verb disambiguates the meaning of the adverb; further details about this are provided below.

¹⁹ While (4.19b) presents a possible additional variant, no such occurrences occurred in the data. Also, while some authors distinguish (4.19d) from (4.19e), here they are considered together as POST-V variant use.

(4.20) Paul est arrivé **naturellement** en retard au bureau. (Molinier & Levrier 2000:99)

Given these various claims and observations concerning the adverbs in (4.15)-(4.19), it was necessary to carefully review every single occurrence of a *-ment* adverb in the data to consider whether its meaning might be subject to change as a result of variant positioning, and if so, what interpretation might be associated with it in each of its occurrences, in order to determine whether or not it could be retained in the analyses. However, this presents the problem of determining which adverbs' interpretations might be sensitive to position, since most discussions of this in the literature provide but one or two examples of such adverbs. On the other hand, Molinier and Levrier (2000) provide a detailed (and seemingly exhaustive) inventory of *-ment* adverbs in French, including meticulous details on the various interpretations possible for these adverbs (along with examples) and the positions in which these adverbs occur with their various interpretations. Thus, all of the *-ment* adverbs which occurred in the subsample data in the variable context were initially extracted, and then the inventory compiled by Molinier and Levrier (2000)²⁰ served as a starting point for determining whether these adverbs might be sensitive to the position/interpretation interaction at issue.

Table 4.2 lists all of the *-ment* adverbs (manner or otherwise) that occurred in the data. A first important observation is that *-ment* adverbs are overall rare. Though Molinier and Levrier (2000) identify 2780 lexical *-ment* adverbs (among which 3171(!) supposedly

²⁰ In compiling their inventory, Molinier and Levrier (2000) drew first on dictionary attestation in at least one of *le Trésor de la langue française*, *le grand Robert de la langue française*, and *le grand Larousse de la langue française*. They then added to their list 450 additional adverbs which were “ignorés de ces trois dictionnaires, mais dont la légitimité nous a paru indiscutable” (Molinier & Levrier 2000:29), including the adverb *sociolinguistiquement*, as in “Il étudie **sociolinguistiquement** la variation linguistique” (Molinier & Levrier 2000:509).

distinct interpretational possibilities), only 4% (N=94/2780) of these occurred in the subsample corpus in any context (see Appendix D), and less than 1% (N=26/2780) occurred in the data that were extracted using the variable context adopted here (Table 4.2). Thus, a potentially enormous task was exceedingly simplified by the frequency (or rather, lack thereof) of *-ment* adverbs in general. The rarity of *-ment* adverbs in speech is quite remarkable, given that these adverbs, and accounting for those which have varying and position-sensitive interpretations, have garnered so much attention in the literature.

Table 4.2 *-ment* adverbs extracted from the subsample data

anciennement	directement	récemment
apparemment	économiquement	réellement
bonnement	énormément	sévèrement
certainement	franchement	simplement
complètement	graduellement	strictement
couramment	malheureusement	subitement
craintivement	naturellement	tellement
dernièrement	probablement	vraiment
différemment	quasiment	
Shaded cells indicate that the adverb is identified by Molinier and Levrier (2000) as having more than one interpretation, with the interpretation being sensitive to the adverb's sentential position and/or the context in which it occurs; such cases are discussed below.		

Their rarity aside, among the twenty-six attested lexical *-ment* adverbs that were extracted from the data, most of them (N=19) were identified by Molinier and Levrier as adverbs which have but one single interpretation, and this regardless of their sentential placement, and so retaining these in the analyses as part of the same variable context was justified. These include (using Molinier & Levrier's categories and translated terminology) four adverbs of quantity (*complètement*, *énormément*, *quasiment*, *tellement*),²¹ three temporal

²¹ While Molinier and Levrier (2000) consider *complètement* to be an adverb of quantity (and it was analysed as such in the present study), some authors (e.g. Laenzlinger 1998) group it with the class of manner adverbs, like those in (4.14c). Since the interpretations of such manner adverbs in (4.14c) are not predicted to vary according

adverbs (*anciennement, dernièrement, récemment*), three modal adverbs (*apparemment, certainement, probablement*), six (process-internal) verb-oriented manner adverbs (like the adverb in (4.14c); *bonnement, couramment, différemment, directement, graduellement, subitement*) and two (process-internal) subject-oriented manner²² adverbs (*crainivement, sévèrement*). One additional adverb (*strictement*) was identified by Molinier and Levrier as associated with two different interpretations (either quantitative or verb-oriented manner), but not interpretations dependent on the adverb's position, since both interpretations could occur in the very same variant position, depending on context. Since this adverb involved an issue of classification, and not one of position-sensitive meaning changes, it was retained, as Molinier and Levrier would expect that each of its potential interpretations could be retained in the variant positions.

The remaining seven *-ment* adverbs (shaded in Table 4.2) are all identified by Molinier and Levrier as adverbs which could have more than one interpretation, and this being sensitive to their sentential position and/or the context in which they occur. Note that none of them occurred in the MID-VP position in the subsample data, so the possibility of meaning ambiguity with this variant (as in example (4.17) above) ultimately did not need to be addressed at all.

to their position, the category with which *complètement* was grouped here is ultimately irrelevant to the current discussion.

²² Note that Molinier and Levrier's (2000) class of subject-oriented **manner** adverbs are process-internal, and differ from their class of subject-oriented **attitude** adverbs, which they claim to be sentence modifying; all adverbs of the latter class are also members of the former, but not vice versa. Thus, it is among the group of adverbs which belong to both classes that the interaction between position and interpretation becomes an issue. However, careful comparison of the members of these two classes against comparable classes posited by Laenzlinger (1998) reveal potential problems with Molinier and Levrier's (2000) classification of some these adverbs (though not for those being discussed here), as was noted in Chapter 3 (§3.5; also see Appendix B.)

Occurrences of each of these seven adverbs were reviewed to try to identify objective criteria (other than their position) which could be exploited to determine their interpretations.²³ In many cases, the context suggested a specific interpretation, but it was difficult to pinpoint exactly what it was about the context which led to this interpretation. Consider for instance the examples in (4.21); each of these suggests an event-external interpretation (i.e. not manner), but the specific criteria which point to this interpretation are not clear, other than perhaps that a manner interpretation might be semantically incompatible, or at least difficult, with the verbs *se renseigner*, *se casser*, and *être*.

- (4.21) a. Bien **naturellement** elle s'est renseignée, disons elle a pas été de- le mettre n'importe où son enfant. (117:703)
- b. Bien, **malheureusement** je m'ai cassé un genou. (100:340)
- c. **Franchement** là, là pire ça a été sur la rue Garneau. (90:18)

Since it was impossible to locate some objective criteria for establishing adverb meaning that could be applied to each individual token, occurrences of these seven adverbs were impressionistically coded for meaning and then two native speakers of Canadian French were consulted for their subjective interpretation of these tokens. Where there was agreement on the received interpretation the occurrences were retained, and where there were disagreements or uncertainties, the occurrences were considered ambiguous and therefore excluded. Ultimately, the tokens with *franchement*, *naturellement*, *malheureusement* and *économiquement* were all retained. On the other hand, due to disagreement/ambiguity, the

²³ While lacking, criteria that might otherwise have allowed the interpretation of these *-ment* adverbs to be objectively determined would include the co-occurrence of contrastive adverbs or phrases (e.g. *Il vit malheureusement, mais je vit heureusement/avec bonheur*), the presence of clarification-type clauses or further details (e.g. *Il parle l'anglais naturellement, sans aucun accent ou problème*), and/or priming by the interviewer, where the informant is specifically asked *how* an event occurred (e.g. *Comment a-t-il répondu au professeur?*).

few occurrences of *réellement* and *simplement* were excluded, as were all but one of the occurrences of *vraiment*.

4.2.2.5 Comma intonation and parentheticality

In terms of parentheticality, the fundamental issue is whether such cases should be included or excluded from the analyses, given the standard definition of the sociolinguistic variable. As outlined in §3.1, the syntactic and prescriptive literature generally consider parenthetical use of adverbs to be “special” and/or “different” in some way. For instance, syntactic approaches typically argue that parentheticals are extra-syntactic, pragmatically- or prosodically-motivated, and/or functioning as afterthoughts, all of which constitutes justification for dismissing them from such analyses (e.g. Laenzlinger 1998; Cinque 1999 etc.). In the prescriptive literature, parentheticals also tend to be associated with specific prosodic properties and/or pragmatic functions; for instance, Grevisse (1993 §935b) explains that an adverb can detach from the verb phrase, occurring after a pause, for “des raisons de rythme, d’insistance.”²⁴ Thus, while each of these frameworks approaches the issue from a different perspective, both nonetheless suggest that parenthetical adverbs are somehow distinct from non-parenthetical adverbs, and if this is so, then it could be argued that they should not be analyzed together in the same variable context.

On the other hand, Bonami et al. (2004:144) argue that the idea of ‘parentheticality’ actually blurs “a distinction between a prosodic property...and a semantico-pragmatic one;” only the latter truly constitutes *parentheticality*, while the former is a quality they refer to as *incidental*ity. Crucially, they maintain, that for parenthetical adverbs “the semantic

²⁴ It is ironic, then, that while the prescriptive literature ascribes an emphasis function to parentheticals, the theoretical literature typically regards them as afterthoughts, and/or as de-accented (Cinque 1999).

contribution of the adverb is not integrated into the proposition the sentence asserts; rather, it has the status of a ‘comment’ on that assertion” (Bonami et al. 2004:146); conversely, non-parentheticals “are inserted in the semantic content of the clause” (Bonami et al. 2004:174). For their part, incidentals merely “have a particular prosody which sets them apart from the other constituents of the sentence” (Bonami et al. 2004:146). The authors further explain, drawing on Espinal (1991), that parentheticality is a property of adverbs²⁵ while incidentality is a property of occurrences. So, they argue that an adverb like *malheureusement* always receives a parenthetical interpretation,²⁶ functioning as a comment on the assertion, though it may or may not occur as an incidental; an adverb like *probablement* will always contribute to the semantic content of the proposition, meaning it is always non-parenthetical, and this is the case regardless of its incidentality. This is shown in (4.22) (from Bonami et al. 2004:147 ex. 1-2).

- (4.22) a. Mon frère(,) malheureusement(,) a raté son avion.
b. Marie(,) probablement(,) viendra à Paris.

Crucially then, the practice of excluding traditionally-labeled “parentheticals” from analyses means that adverbs which do contribute to the semantic content of the sentence may be (unjustifiably) omitted, namely, the non-parenthetical incidentals of Bonami et al. Given that the present study’s data consists of spontaneous vernacular discourse, where various non-linguistic factors (e.g. momentary distractions, constraints on processing etc., e.g. Labov 1972) could lead to incidental prosody, even in cases where the semantic contribution of the

²⁵ Specifically, the following adverb types are considered by Bonami et al. (2004:170) to be parentheticals: speech-act adverbs (*franchement*), connectives (*donc, premièrement, pourtant*), evaluatives (*malheureusement, bizarrement*) and agentives (*intelligemment, généreusement*).

²⁶ On the other hand, Molinier and Levrier (2000:482) indicate that this adverb can have a non-parenthetical interpretation (to use Bonami et al.’s (2004) terminology), as in *Il vit malheureusement*.

adverb is otherwise integrated into the assertion, the distinctions proposed by Bonami et al. (2004) seem particularly relevant. Thus, the present study rejects the common stance espoused in the syntactic literature that incidental adverbs should be excluded from analyses and instead aligns with Bonami et al.'s (2004) interpretation of parentheticality and incidentality as two distinct phenomena. As such, incidental adverbs,²⁷ whether parenthetical or not, were extracted and included in the data considered here, though they were coded for this factor so that any idiosyncratic behaviour associated with them would be recoverable during the analysis stage.

4.2.2.6 Topicalization and focalization

The final problematic issue which must be addressed in a study of variable adverb placement concerns whether the PRE-SUBJ variant can be considered a legal variant. More specifically, syntactic approaches (e.g. Laenzlinger 1999, Ernst 2002) generally hold that in a sentence-initial position, the adverb occurs in a topic or focus projection (TopP or FocP), which would make their use in the PRE-SUBJ position topicalized or focused. Drawing on these claims, Waters (2011; 2013) excludes such sentence-initial occurrences from her variationist study of this variable in English.²⁸ Similarly, the prescriptive literature seems to

²⁷ In speech, incidentality is commonly associated with an intonational break, and in writing this intonational break is usually indicated with commas. Since, as outlined above, the OH corpus was transcribed using punctuation which “follow standardized conventions” (Poplack 1989:434), incidentality is taken to be indicated by the presence of commas in the transcription, and the lack of commas in the transcription is taken to reflect non-incidentality.

²⁸ Waters (2011; 2013) also excludes “adverbs that occur at the end of a clause after comma intonation,” explaining that such cases “are not part of the auxiliary phrase (Ernst 2002:15),” the latter of which constitutes her underlying variable context (i.e. pre- vs. post-auxiliary adverb placement); it is not clear whether she considered including in her study clause-final adverbs which occurred *without* comma intonation, or whether such cases even occurred in her data. Here, clause-final adverbs were not excluded since: a) the variable in English is somewhat different than in French, where the POST-V position is taken to be a main variant position for (at least some) adverb types, and for adverbials in general, and b) this study adopts the distinction advanced by Bonami et al. (2004) between parentheticality and incidentality, which means adverbs accompanied by comma intonation may contribute semantically to the proposition, and so are not excluded *a priori*.

associate sentence-initial adverbs with focusing functions; Grevisse (1993, 935) explains that adverbs may occur in this position “pour des raisons...d’insistance.” Crucially, if the PRE-SUBJ variant is associated with the function of topicalization and/or focalization, then this makes its role different from the role associated with the MID-VP and POST-V variants. The issue then is whether an adverb occurring in the PRE-SUBJ position, and one occurring in the MID-VP and POST-V positions are truly “alternate ways of saying the same thing” (Labov 2008:2), which is necessary for them to be considered variants of the same variable.²⁹ In order to resolve this issue, it is necessary to consider what it means to occur in a topic or focus projection, issues concerning the rationale for ascribing a topic or focus function to the PRE-SUBJ, and how the manifestation of these functions might be objectively identified in speech.

First of all, in their review of different approaches to information structure, Gundel and Fretheim (2004:2) point out that “topic, focus and related terms have been used in a dual sense...to refer to syntactic (and phonological) categories as well as their semantic/pragmatic interpretation.” They argue that a distinction can be made between “topic as a syntactic category and topic as a semantic/pragmatic category” (Gundel & Freitheim 2004:12), meaning that the two need not coincide. Their argument relies on the occurrence of non-referential indefinite phrases in left-dislocated positions, as in (4.23). More specifically, they explain that left-dislocated positions are typically used to mark topics and “it is generally agreed that topics must be at least referential” (Gundel & Fretheim 2004:12), and possibly

²⁹ Of course, if the PRE-SUBJ variant is indeed topicalized or focused, then it would be more appropriate to consider it as a variant in a study which investigates different strategies used for topicalizing or focusing adverbs, such as clefting (*C’est souvent que j’ai chanté*) or, as suggested by Brill (1987; drawing on Shyldkrot 1984), where the adverb occurs in the subject position, as in *Le mois d’octobre verra s’achever le nouveau tronçon d’autoroute*. These structures were not considered in the present study, though instances of the clefting were noticed to occur at least occasionally in the sampled data.

also familiar; the occurrence of the indefinite NP in (4.23) thus seems to be a counterexample to the first claim, since indefinites are considered non-referential and are “generally not used to refer to familiar entities” (Gundel & Fretheim 2004:5).³⁰ However, Gundel & Fretheim (2004:12) argue that (4.23) may be rephrased as in (4.23’), which allows the quantifier to be analyzed “as part of the syntactic topic phrase, but...not part of the semantic/pragmatic topic.” This permits the topic in (4.23) of middle class Americans to be both referential and familiar, two criteria commonly invoked as necessary to be considered a topic (e.g. Reinhart 1981; Gundel 1985; 1988).

(4.23) Most middle-class Americans, when they look at the costs plus the benefits, they’re going to be much better off. (Prodigy 1993, cited in Prince 1998 cited in Gundel & Fretheim 2004)

(4.23’) (As for) Middle-class Americans, when most of them look at the costs plus the benefits, they’re going to be much better off. (Gundel & Fretheim 2004:12)

Applying this analysis to the issue here, this means that an adverb may occur in a topic projection without necessarily carrying the pragmatic function of topic, meaning that the function of an adverb in PRE-SUBJ position may not necessarily be different than the function of an adverb occurring in the MID-VP or POST-V positions.

Additionally, Gundel and Fretheim (2004:10) explain that topic and focus are “especially [associated with structures] where a constituent has been ‘displaced’ from its canonical position in a clause to occupy a syntactically more prominent position.” Thus, an adverb in the PRE-SUBJ position may be more arguably considered topicalized or focused if this is **not** its *canonical* position. Of course, it is not always clear in the literature what the canonical

³⁰ But cf Prince (1981) for arguments that indefinites can be used to refer to familiar entities.

position is for adverbs, as this may vary according to adverb type (at the very least). For instance, most examples involving speaker-oriented and evaluative adverbs place them at the beginning of the sentence, as in (4.24) (from Laenzlinger 1998:43 ex. 8a, d), suggesting that this may be the most natural place for such adverbs, though whether this also makes their function topicalized or focused is not clear. Furthermore, Cinque (1999:13) explains that “speech-time” temporal adverbs (e.g. *now*, *then*) can occur at the beginning of the sentence in a “‘Topic’ position hosting ‘adverbs of setting’,” suggesting that there may be topic projection which does not necessarily encode topicalization.³¹ Thus, even if an adverb occurs in the PRE-SUBJ position in a topic projection, this may not necessarily mean that the adverb is topicalized or focused, and so its function in this position may not differ from its function when it is used in the other variant positions.

- (4.24) a. **Heureusement**, il est arrivé à l’heure.
b. **Franchement**, je ne te crois pas.

Finally, beyond issues concerning topic and focus projections, there are also the aforementioned attempts in the prescriptive and linguistic tradition to ascribe unique functions to different variants, in the pursuit of form/function symmetry. More specifically, by attributing a distinct topic/focus function to the PRE-SUBJ variant, while also imposing restrictions on the distribution of adverbs in the other variants positions (i.e. adverb type, adverb length, etc.; these restrictions are operationalized into factor groups in the present study) it is possible to effectively eliminate the variation. However, research has shown that simply ascribing a specific function to a specific variant in theory does not guarantee that this association will emerge in practice. For example, in their investigations on the French

³¹ Otherwise, these speech-time adverbs occur in the POST-V position (after verbal complements and circumstantial adverbs, the latter of which apparently includes other temporal adverbs).

subjunctive, Poplack and colleagues (Poplack 1992; Poplack & St. Amand 2002; Poplack et al. 2013) find no evidence that subjunctive morphology expresses the multitude of ‘meanings’ imputed to it by grammarians and linguists alike. Similarly, Poplack and Dion (2009) report that variants of future temporal reference in French have not only been associated with identical functions in the literature, but in practice, they may be found in contexts which are the purported functional domain of the other variants. Crucially then, the assumption that a specific variant (PRE-SUBJ) performs a specific function (topicalization/focalisation), and exclusively so, is one which must be assessed.

Fortunately, the data used in the present study may be well-suited for locating topic and focus, as they were obtained via the Labovian sociolinguistic interview which utilizes a question-answer format at least some of the time; Gundel and Fretheim (2004) note that question-answer pairs are an ideal context for determining topic-focus structure. More specifically, topic is, among other things, typically taken to be old, given and/or familiar information (e.g. Prince 1992; Gundel & Fretheim 2004), so if the adverb in an answer also occurs in the question (or even in the preceding discourse), then it could be a candidate for being topicalized. For its part, focus is generally taken to be new information about the topic, or information to which the speaker “calls to the addressee’s attention” (Gundel & Fretheim 2004:6); so an adverb may be considered focused in cases where it provides a clarification or correction to something in the question (for example, contrastive information), or provides new information about the topic of the question, answer and/or discourse. Furthermore, in order to confirm that any topic and/or focus functions found to be associated with the PRE-SUBJ variant are exclusive to this variant, occurrences of PRE-SUBJ adverbs in the other variant positions will also be reviewed for evidence (or rather, lack thereof) of topicalization

and focalization; only if the data reveal differences in function between the PRE-SUBJ variant and the MID-VP and POST-V variants, will it be necessary to exclude the former from the variable context.

While further details are presented in Chapter 5, note that PRE-SUBJ adverb placement was found to be overall rare (a total of 43 occurrences), though it did occur with seven of the thirteen adverb classes considered in this study, and with one quarter (26%, N=19/74) of the lexical adverbs extracted. So, in order to determine whether these cases of PRE-SUBJ adverb placement were associated with functions distinct from their occurrences in the other variant positions, each was reviewed for independent evidence to this effect. Unfortunately, in many cases, it was essentially impossible to objectively determine whether the PRE-SUBJ adverb in question was topicalized or focused, beyond its very occurrence in the PRE-SUBJ position. For example, the PRE-SUBJ occurrence of *ici* in (4.25a) certainly ‘feels’ like it is being focused; however since it is referenced in the previous discourse, it would also meet Gundel and Fretheim’s (2004) criteria for being old or familiar information, which is also true of the POST-V occurrence of *ici* in (4.25b).

- (4.25) a. Puis à Montréal j’ai travaillé juste deux mois à Banque-provinciale parce qu’on a été retransf-- transférés ici. Ensuite ici qu’est-ce- ensuite **ici** j’ai eu Étienne. (114:1112)
- b. [1]³²: Est-ce-que vous avez eu vos cinq enfants ici à un moment donné ou ...?
[117]: Non, quand je suis arrivée **ici**, on en avait trois. (117:413)

Likewise, while PRE-SUBJ placement of *déjà* in (4.26a) might seem like a good candidate for being functionally different, since, as will be shown in Chapter 5, this adverb strongly

³² This speaker number (i.e. [1]) refers to the interviewer.

prefers MID-VP placement, a review of the contexts in which *déjà* occurred in all of the variant positions suggest nothing obviously different functionally between them, as exemplified in (4.26b-c).

- (4.26) a. [77]: Mais la pendaison par exemple, je suis contre ça.
[1]: Ouais.
[77]: Ah oui, moi je suis- ah, bonrien ça. Ils peuvent manquer leur coup aussi.
Déjà (PRE-SUBJ) ça l a arrivé. (77:1261)
- b. Disons que la peine de mort est remis. Bon ils jugent un gars hein, c'est lui qui a faite le meurtre. C'est ci, c'est ça. Ils le pendent. C'est pas lui qui a faite le meurtre, se sont trompés de gars. Ça a **déjà** (MID-VP) arrivé. (88:1440)
- c. [77]: Bien m-a aller travailler sur les gardes de sécurité.
[1]: Ah oui?
[77]: Bien j'ai travaillé **déjà** (POST-V) à- à l'hôpital Pierre-Janet là, à Val-Tétreau.
(77:190)

Applying this type of comparative process to all of the lexical adverbs which were used in the PRE-SUBJ position resulted in the same basic conclusion: evidence of a distinct function for PRE-SUBJ adverbs was lacking and/or inconclusive. So, while this variant was ultimately excluded from the multivariate analyses due to poor and sparsely distributed data (as will be revealed in Chapter 5), it was retained for the distributional analyses in order to try to identify the linguistic factors which might be associated with its use, given that locating a distinct function associated with it proved impossible.

4.2.3 Exclusions and other considerations

Having now identified the verbal constructions in which to begin examining variable adverb placement and the variants associated with these contexts, as well as having outlined how the six challenges introduced in Chapter 3 would be addressed here, this section lists

variable context exclusions and additional considerations. More specifically, cases which were excluded from the variable context include:

1) Adverbs and adverb types which are known to be invariant in terms of position, including:

- a. All cases of *en* and *y*, as these are said to behave like pronouns and occur before the auxiliary in compound tenses (Grevisse 2011, §682)³³
- b. Adverbs of negation (*pas, jamais* etc.), as these occur after the auxiliary (Grevisse 2011, §1020)³⁴
- c. Interrogative adverbs (*pourquoi, quand, comment, où, combien, que*), as these are placed at the beginning of a phrase (Grevisse 2011, §975c)³⁵
- d. Restrictive and focusing adverbs (e.g. *seulement, même* etc.), whose position is said to depend on the item they modify³⁶ (Grevisse 2011, §972a 3°; Cinque

³³ Also, the status of these items as adverbs is not entirely clear. In particular, while Grevisse (2011, §675) explains that *en* and *y* are considered “adverbes pronominaux ou pronoms adverbiaux,” Grevisse (1990) claims these items are adverbs *or* pronouns. For their part, Arrivé et al (1986:46) insist that these items are “formellement des adverbies” but that their function is such that “on les étudie généralement parmi les pronoms.” Note that *en* and *y* are also clitics.

³⁴ Exceptions to such invariability being in some fixed expressions, in literary language which is “recherchée et archaïsante,” and for insistence in the case of *jamais* (where it is placed either before the subject or between the subject and verb phrase) (Grevisse 2011, §1020a 2°)

³⁵ While these occur at the beginning of the sentence (Grevisse 2011:§975c), Grevisse (2011:399b 1°) notes that “dans la langue parlée familière, il est courant que le mot interrogatif occupe la place que son équivalent aurait dans une phrase énonciative” as in *Ça coûte combien?*

³⁶ For example, Molinier and Levrier (2000) indicate that if these items occur in the PRE-SUBJ position or between the subject and the auxiliary, then they modify the subject; when they occur after the past participle, they modify the direct object. For his part, Cinque (1999:30) indicates that focusing adverbs like *only* and *even* “are found preceding D(eterminer)P(hrase)s, A(djectival)P(hrase)s, Adv(erbial)P(hrase)s, P(repositional)P(hrase)s, and V(erb)P(hrase)s.”

1999; Moliner & Levrier 2000), and which are said to occur in the MID-VP position when they modify the verb phrase (Molinier & Levrier 2000)³⁷

i. Ils ont essayé d'entrer ici, mais ils ont pas réussi [...] Ils ont **juste** brisé ma porte. (117:416)³⁸

ii. J'ai **même** appliqué pour aller en dehors puis, ils en ont pas besoin. (74:80)

e. Adverbs which are modifying nouns phrases (i), other adverbs (ii), or adjectives (iii), including participle adjectives (iv); in such instances, the adverb immediately precedes the item it is modifying, minus a few exceptions³⁹ (Arrivé et al. 1986; Grevisse 1993 §937; Martinet 1979)

i. Son père a pris sa retraite lui aussi. (114:822)⁴⁰

ii. On les avait imaginés **tellement différemment**. (117:13)

iii. Je suis parti de la maison **trop jeune**. (101:765)

iv. Elle était assez **bien instruit** puis toute. Elle parlait mieux l'anglais que le français. (108:105)

2) Items not occurring in adverbial function, including:

a. Polysemous items functioning as prepositions (i), *locutions prépositives* (ii), indefinite pronouns (iii), indefinite determiners (iv),⁴¹ discourse markers (v),

³⁷ Furthermore, according to Laenzlinger (1998:41), the “condition licensing their occurrence...differs from the condition licensing the distribution of V(erb)P(hrase)/S(entence)-adverbs.”

³⁸ Following Molinier and Levrier (2000), if the adverb *juste* occurred after the participle in this example, it would have modified the direct object *ma porte*.

³⁹ Specifically, Grevisse (1993 §937) explains that: a) some adverbs can occur after the adjective “pour être mis en relief;” b) the adverbs *plus* and *moins* can occur after the adjective when they are accompanied by a “proposition correlative” as in *Il est malade plus que je ne croyais*; and c) the adverb *assez* can be postposed when it is accompanied by *pour* + infinitive or *pour que* + clause.

⁴⁰ In this type of construction, where the adverb *aussi* occurs following “le sujet (surtout détaché), notamment un pronom personnel disjoint” (Grevisse 2011, §1034b 2°), it is not entirely clear if *aussi* modifies just the subject it follows or also the entire event expressed by the proposition in which it occurs. Given such ambiguity, all such cases were excluded.

locutions conjonctives (vi), or which are ambiguous in terms of adverbial vs. non-adverbial function:

- i. Elle s'est cassée la tête de même **après moi**. (101:994)
- ii. L'autre il est parti **en dehors de** la ville. (90:1844)
- iii. Elle a appris **beaucoup** ici en ville, hein? (94:2041)
- iv. Il y a eu **beaucoup de** changements. (79:1302)
- v. **Bien**, mon père l'a connue plus que nous-autres lui. (77:155)
- vi. **Après** Ø j'ai eu mon premier enfant, j'ai été un an sans marcher.
(95:1001)

b. Adjectives and adverbs occurring as complements (or *attributs*) to copular verbs (i.e. *verbes attributifs*, like *être*, *devenir*, *paraître*, *tomber* etc.), as in (i)-(v), since they identify an attribute of the subject, and so do not modify the process or event (whether internally or externally) in the same way as do the adverbs in (4.1)-(4.6). Note, though, that cases like those in (vi) were retained, because, even though the adverb *longtemps* occurs with a copular verb, it is not in complement function, but rather the noun phrase *Bridge Street* is; in such instances then, the adverb is taken to be performing an adverbial function, which allows it to be included in the variable context here.

- i. Ça a été un peu **dur**. (120:582)
- ii. J'ai resté tellement **surprise** de voir ça. (94:1315)
- iii. Il a faite une indigestion aigue, puis il est tombé **mort**. (89:1240)
- iv. Mon père est mort **jeune**, il avait rien que quarante-six ans.
(84:1486)

⁴¹ These might alternatively be considered quantifiers, though here I am using a translation of Grevisse's (2011) terminology. Also, as Grevisse (2011 §626, 736) notes, there are several quantity adverbs, such as *beaucoup*, *trop*, *assez*, *tant*, *pas mal*, *peu* etc., which can function as indefinite pronouns and as indefinite determiners.

v. C'est ça je craignais puis ça a **bien** été. (120:2282)

vi. Ça a été **longtemps** Bridge Street. (81:487)

3) Adverbs “marquant une relation logique” (Grevisse 2011, §956c), as in (i) and (ii) below. While Grevisse (2011, §972a 2°) suggests that (at least) some of these can be variably positioned, they tend to be viewed in the literature as performing conjunctive functions (e.g. Brill 1987; Molinier & Levrier 2000; Grevisse 2011, §958; *Le Nouveau Petit Robert* (Robert 1996) considers *donc* to be a conjunction, and *néanmoins* to be an adverb and a conjunction) and are typically absent from existing research on adverbs (e.g. Brill 1987; Cinque 1999 etc). Since their adverbial status and function are not clear, these items, which include *alors*, *deuxièmement*, *donc*, *ensuite*, *finalement*, *pourtant*, *premièrement*, *quand-même*, *toute-bien*, *toutefois* etc. are excluded here

i. J'ai fait mon commercial là, puis **ensuite** j'ai travaillé. (113:225)

ii. Elle aurait été le soutien de famille **alors** elle serait allée travailler. (117:652)

4) All negative and interrogative contexts:

a. In the case of negative polarity contexts, Togeby (1984) explains that negation interacts with the interpretation, or the scope, of adverbs like *souvent* and *toujours*. More specifically, when *souvent* and *toujours* occur after the negative adverb, then they are themselves being modified (i.e. negated), as in (i) and (ii); when they occur before the negative adverb, then they modify the latter as in (iii) and (iv).

i. Ils ont pas **toujours** été bien reçues. (95:1442)

= They were not always well received (but sometimes there were).

ii. Il a pas souvent chanté. (=He sang, but not often.)

iii. Ils ont **toujours** pas été bien reçus.

= They were never (always not) well received.

iv. Il a souvent pas chanté. (=It was often the case that he did not sing.)

b. In the case of interrogative constructions, Molinier and Levrier (2000:96)

provide the examples shown in (i)-(ii) to show that modal adverbs are excluded from such contexts.⁴²

i. *Apparemment, Luc est-il en retard?

ii. *Luc est-il apparemment en retard?

5) Ambiguous or unclear cases:

a. Conjoined clauses where there is deletion of the subject and auxiliary, as it is not apparent whether the adverb occurs in the PRE-SUBJ or MID-VP position.

i. On a toujours eu qu'est-ce qu'on voulait puis (~~on a~~) **toujours bien** mangé. (89:233)

b. The adverb *là*. During the extraction phase, it became clear that distinguishing adverbial uses of *là* from its occurrences as a discourse marker was nearly impossible. Given the extremely high frequency of this item in the data (N=11,819), it was ultimately necessary to exclude it completely from the analyses.

⁴² While ultimately excluded from the analyses, it is interesting to note that there were thirteen interrogative cases in the data (eight occurred with auxiliary-subject inversion (e.g. *As-tu chanté?*), four occurred with the interrogative marker *-tu* (e.g. *Tu as-tu chanté?*) and one occurred with intonation (e.g. *Tu as chanté?*)) among which the MID-VP variant was categorically used. Of course, categorical MID-VP use could be attributed to the lexical adverbs occurring in these interrogative contexts (nine cases of *déjà* and one case each of *bien*, *mal*, *encore*, *proche*_{DEGREE}) as will be discussed in more detail in Chapter 5.

- c. The adverb *bien*. This adverb presented a similar problem to the one encountered with *là*, since it also functions as a discourse marker. However, in many cases it was possible to use the lexical identity of the verb and the surrounding context to distinguish at least some of its adverbial occurrences. Though the majority remained ambiguous, non-ambiguous cases were extracted and distributional results obtained for them.
- d. The lexical item *tout*. This word can perform a number of functions in speech, including, according to Grevisse (2011, §371c), one of “redondance des pronoms (ou noms).” In many cases the adverbial status of *tout* was therefore ambiguous, as in (i). In other cases, while the context suggested that it was performing an adverbial function, it was not clear if it would retain this function in the other variants positions; see (ii).
- i. Les compagnies, les- les sous-contracteurs ils ont **tout(s?)** perdu leur- leur- leur argent, ils ont plus d'argent. (85:785)
= “...the sub-contractors, they_i **all**_i lost their money...”
= “...the sub-contractors, they **completely** lost their money...”
- ii. J'ai **tout** fait (***tout**) le Canada ([?]**tout**), hein? (81:1445)
- e. False starts and incomplete tokens, as well as tokens which are ambiguous in terms of any of the above exclusions:
- i. Souvent j'ai- je les défais. (70:2615)
- ii. Tu avais déjà- rendu au milieu de la session, tu avais fini un cours. (98:420)

Finally, note that cases with two or more adverbs were considered to be two (or more) tokens, except those constructions where one adverb was modifying the second (as

previously indicated in (1e ii) above). Note that only a small number of adverbs are reported to be able to perform this latter (modifying or intensifying) function (i.e. typically degree/quantifying adverbs like *très*, *extrêmement*, *tant*, *pas mal* etc. (e.g. Alexiadou 1997; Laenzlinger 1998).) So, example (4.27) was considered to be two tokens, while (4.28) was counted as one (for the adverb *longtemps*). Finally cases where the same adverb is repeated, like in (4.29), were counted as two tokens (or more, as appropriate).

(4.27) Je me suis toujours bien arrangé. (108:197)
 i. 2

(4.28) Ça leur avait duré pas mal longtemps. (90:818)
 (modifying) 1

(4.29) On a beaucoup, beaucoup écouté le- la radio. (117:1406)
 1 2

4.3 Data extraction and analysis

The data extraction process began by using a concordance program to create an alphabetized list of all the words found in the interviews of the subsample speakers. Extraction from this list proceeded by identifying all past participles and then copying them, and the immediate context in which they occurred, into a Microsoft Excel worksheet.⁴³ A first pass of these tokens was undertaken to include only cases in which the participle was part of a compound tense construction; so for instance, this meant identifying and excluding cases where the participle was functioning as an *épithète*. The retained cases were then

⁴³ While it would have been ideal to locate a list of all possible adverbs in French and use this list to locate and extract the data lexically by adverb, such a list does not exist (cf. Chapter 3, §3.1) While grammars do provide lists of many adverbs (and Grevisse's *Le bon usage* seems quite extensive), it could not be guaranteed that this would generate an exhaustive list. One possible exception is Molinier and Levrier (2000), who provide a large-scale inventory of *-ment* adverbs. They identify 2330 lexical adverbs drawn from three dictionaries (*Trésor de la langue française*, the *grand Robert de la langue française*, and the *grand Larousse de la langue française*) as well as 450 items ignored by the dictionaries but which "la légitimité nous a paru indiscutable" (Molinier & Levrier 2000:29).

systematically searched to exclude all tokens which clearly did not have any adverbial modification, and to include all cases which clearly did contain dictionary-attested single-word or hyphenated adverbs (such as *ailleurs*, *souvent*, *toujours*, *là-bas*, *avant-hier* etc.). During this stage of the process, cases involving multi-word strings occurring in the MID-VP position, as in (4.30), were identified, and any questionable tokens were also marked for follow-up (e.g. ‘quantity’ adverbs which might have been functioning as indefinite pronouns, as in (4.31)).

(4.30) Moi j'ai **tout le temps** eu de misère à école. (74:1603)

(4.31) Ils en ont **beaucoup** appris à télévision. (120:1020)

Cases marked for follow-up were then meticulously reviewed so as to include any legal tokens, and exclude any illegal tokens, following the definition of the variable context outlined in §4.2 above. Also, the lexical identity of all multi-word strings occurring in the MID-VP position was identified, and occurrences of these items in the other variant positions were extracted from among the legal verb constructions retained during the first pass. After this, it was necessary to more carefully consider the legality of retained *être* + past participle constructions, given that these may also function as copula + adjective constructions, which needed to be excluded from this study; details on this process can be found in Appendix C. Finally, all of the retained tokens (N=1070, among which 71 lexical types; see Table 5.3.2 in Chapter 5 for a list of these) were coded for the factors outlined below in §4.4, so that quantitative analyses could be undertaken.

Once extracted and coded, the data were subjected to the variationist methods of analysis described earlier in Chapter 2 (§2.3). The first stage involved obtaining basic distributional

results for each variant, both overall and according to the different factors. Following this, multivariate analyses were undertaken using GoldVarb X (Sankoff, Tagliamonte & Smith 2005) in order to determine the underlying characteristics of the system governing adverb placement in vernacular Quebec French, following the method of interpretation outlined in Poplack and Tagliamonte (2001). More specifically, results of the multivariate analyses reveal which factor groups play a statistically significant role (at the .05 level) in conditioning adverb placement for each adverb, as well as the overall strength of their influence on variable placement, as indicated by the factor group's *range*. The ordering of factors within factor groups, or the *constraint hierarchy*, indicates which factors *favour*, and which factors *disfavour*, a given variant's use, thus exposing the underlying structure of variable adverb placement.

4.4 Factor groups, hypotheses and coding

As noted above, each token extracted from the data was coded for a number of factors, namely, those claimed or previously found to be relevant to variant choice as reported in the literature. Factors which are complements (i.e. men and women, modified adverbs and unmodified adverbs) are grouped together into what is referred to as factor groups. In total, eleven linguistic factor groups and four social factor groups are included at various points in the analysis. These, and the predictions and coding procedures associated with them, are detailed below.

4.4.1 Linguistic factors

4.4.1.1 Adverb Type

The factor most commonly reported to be implicated in conditioning adverb placement is undoubtedly adverb type. For instance, notwithstanding a few lexical exceptions (included as a separate factor group), adverbs of time and place are largely claimed to occur after the participle (POST-V) (see references in Table 4.4.1.1A below), though Le Bidois and Le Bidois (1971) claim that temporal adverbs, and for Grevisse (1993) aspectual adverbs, usually occur between the auxiliary and participle (MID-VP). For their part, adverbs of degree and/or quantity are generally said to occur before the participle (MID-VP) (see references in Table 4.4.1.1A below), although Dauzat (1958:420) maintains that for adverbs of quantity “on peut à volonté encadrer ou non.”⁴⁴ While the distribution of manner adverbs tends to be complicated by the interaction of other factors such as length, both Chevalier et al. (1971) and Grevisse (1993) claim that adverbs of manner occur before the participle (MID-VP). On the other hand, according to Brunot and Bruneau (1969:373), the position in a sentence of manner adverbs is “à peu près libre,” a sentiment echoed by a number of others, including Dauzat (1958), Wagner and Pinchon (1965), Togeby (1984) and Riegel et al. (1998), all of whom claim that adverbs of manner may occur either before or after the participle. According to Cinque (1999) circumstantial⁴⁵ adverbs of place, time and manner occur after the verb and its complements, though the manner adverbs *bien* and *mal*, and perhaps all manner and quantity adverbs, occur before the participle. Finally, the results of Brill’s (1987) variationist study reveals that the MID-VP position is favoured by adverbs of quantity and

⁴⁴ Dauzat (1958:420) does, however, claim that in the case of the latter (i.e. after the participle), “on insiste davantage sur l’adverbe.”

⁴⁵ According to Cinque (1999:28), this group comprises “a varied selection of elements: place, time, manner, means, company, reason, purpose, and so forth” which “are typically realized (with the partial exception of manner adverbials) in prepositional form...or in bare NP form.”

intensity (factor weight of .59), and is strongly favoured by adverbs of manner, affirmation and doubt (factor weight of .79). On the other hand, temporal and frequency adverbs strongly disfavour MID-VP position (factor weight of .18), as do locational adverbs, which never occurred there in her data. To determine how adverb type conditions adverb placement in spoken French, all data were coded for this factor. Please refer to Appendix B for details on why the classification scheme shown in Table 4.4.1.1B was adopted, and for a complete list of the lexical adverbs associated with each of the categories used in this study.

Adverb Type	Favours MID-VP	Favours POST-V	Reference
Locational		X	de Boer 1954; Grevisse 1990
			Michaut & Schricke 1934; Gaiffe et al. 1936; Dauzat 1958; Wagner & Pinchon 1965; Chevalier et al. 1971; Martinet 1979; Brill 1987; Larousse 1988; Ollivier 1998; Riegel et al. 1998; Cinque 1999
Temporal	X		Le Bidois & Le Bidois 1971
Degee/ Intensity	X		Cayrou et al. 1949; Wagner & Pinchon 1965; Togeby 1984; Brill 1987; Grevisse 1993
Quantity	X		Wagner & Pinchon 1965; Chevalier et al. 1971; Le Bidois & Le Bidois 1971; Togeby 1984; Brill 1987
	X	X	Dauzat 1958
Frequency		X	Brill 1987
Manner	X		Chevalier et al. 1971; Brill 1987; Grevisse 1993
	X	X	Dauzat 1958; Wagner & Pinchon 1965; Brunot & Bruneau 1969; Togeby 1984; Riegel et al. 1998; Cinque 1999
Aspectual	X		Grevisse 1993

Table 4.4.1.1B Coding instructions for Adverb Type		
Code	Factor	Example
L	Locational	<i>Un hiver il est sorti dehors puis c'était glissant. (90:2135)</i> <i>Je l'ai appris là-bas (73:1265)</i>
T¹	Temporal	<i>Il m'a appelé hier. (108:140)</i> <i>Puis auparavant il avait été peintre. (117:424)</i>
A¹	Aspectual	<i>J'ai toujours eu peur de manger de la soupagne. (105:350)</i> <i>Ils ont déjà resté dans ce bout ici. (73:251)</i>
F¹	Frequency	<i>J'ai souvent pleuré. (120:732)</i>
D¹	Duration	<i>Il a travaillé longtemps à Canada Packers. (81:865)</i>
N¹	Motion	<i>À ce moment là bien j'ai monté vite. (79:157)</i>
Q²	Quantity	<i>Ça a beaucoup évolué. (79:786)</i> <i>J'ai assez patiné en patins à roulettes. (99:2171)</i>
E²	Degree	<i>On a quasiment passé toutes nos étés en campagne. (114:784)</i> <i>Ça s'est presque commencé. (120:1029)</i>
M	Manner	<i>Le Bon Dieu a bien arrangé les choses. (117:794)</i> <i>Ils l'ont toujours t-- parlé couramment. (79:1888)</i>
O³	Modal	<i>Je l'ai peut-être sortie trois fois (73:71)</i>
V	Evaluative	<i>Bien, malheureusement je m'ai cassé un genou. (100:340)</i>
R	Speaker-oriented	<i>Puis franchement j'avais assez aimé ça. (90:879)</i>
N	domain	<i>C'est sûr ça a faite un peu de bien économiquement. (73:364)</i>
<p>^{1,2} Please see Appendix B for further details on the rationale for including these as independent classes, as well as for information concerning distinguishing between them, in some cases.</p> <p>³ This category presumably coincides with Brill's (1987) category of 'Doubt' adverbs.</p> <p>Additional notes: - Some adverbs fall into more than one category, depending on the context (e.g. <i>bien</i>: manner, quantity; <i>proche</i>: place, degree); see Appendix B for further details.</p>		

4.4.1.2 Lexical Identity of the Adverb

In addition to the claims that adverb placement depends, to a greater or lesser extent, on adverb type, many writers further comment on the idiosyncratic placement behaviour of specific lexical adverbs; sometimes these are listed as exceptions to the placement tendencies associated with the adverb's specific type, elsewhere these are rather listed as preferences for certain adverbs (which may or may not coincide with placement tendencies associated with the adverb's type.) For instance, while Michaut and Schricke (1934), Wagner and Pinchon (1965), Chevalier et al. (1971), and Martinet (1979) all claim that temporal adverbs occur

after the verb, they each list a number of exceptions to this tendency. For Michaut and Schricke (1934), the temporal adverbs *bientôt*, *déjà*, *longtemps* and *toujours* usually precede the participle. For Wagner and Pinchon (1965), it is *longtemps*, *souvent* and *toujours* which are the exceptions to the POST-V placement tendency for temporal adverbs. Chevalier et al. (1971) claim that *maintenant*, *souvent* and *toujours* are all placed before the participle, while Martinet (1979) asserts that *autrefois*, *jadis*, *maintenant* and *naguère* can all occur in MID-VP position. Other grammarians make similar claims about the particular placement behaviour of some adverbs. For instance, Frontier (1997) indicates that *bientôt*, *récemment* and *toujours* have a tendency to occur in the MID-VP position, and Gaiffe et al. (1936) maintain that *aujourd'hui*, *demain* and *hier* never occur between the auxiliary and the participle. Finally, Martinet (1979 :137-8) asserts that *bien* “ne peut se placer qu’entre l’auxiliaire et le participe” and that “*tard* et *tôt* se placent après le syntagme verbal.”

A number of lexically-based predictions about adverb placement can also be drawn from the theoretical linguistic literature. For example, Cinque’s (1999) analysis predicts that the adverbs *bien*, *déjà* and *toujours* will never occur in the POST-V position. Likewise, if Cinque’s (1999) claim regarding the temporal adverbs *ieri* ‘yesterday’ and *domani* ‘tomorrow’ hold for their French equivalents, then *hier* and *demain* should never occur in the MID-VP position. Furthermore, Laenzlinger (1998) claims that *beaucoup*, *bien*, *mal* and *peu* may only occur in the MID-VP position (except when certain conditions are met),⁴⁶ while *hier* (and adverbs like it) are precluded from the MID-VP position. Likewise, Abeillé and Godard

⁴⁶ In particular, Laenzlinger (1998:103) argues that such adverbs are weak or deficient “in the sense of Cardinaletti and Starke (1993)” and, as such, only occur after the participle when they are “lexically modified or stressed.” This idea is captured in an additional factor group; see §4.5.1.10 below.

(2000; 2001; 2003; 2004: *passim*) claim that *bien*, *beaucoup*, *mal*, *peu*, *plus*, *presque*, *soudain*, *toujours*, *trop* and *vraiment* will occur before the participle.

In order to determine whether specific adverbs show particular behaviour in terms of their positioning in the dialect of Quebec French under investigation here, all adverbs were coded according to their lexical identity (N=71; see Table 5.3.2 in Chapter 5).

Table 4.4.1.2B Coding instructions for Lexical Identity of the Adverb		
Code	Factor	Example
A	<i>aujourd'hui</i>	<i>Ma petite fille est revenue aujourd'hui.</i> (88:1375)
B	<i>bien</i>	<i>Ils ont bien arrangé ça.</i> (89:265)
etc.		

Table 4.4.1.2A Hypotheses concerning the effect of Lexical Identity of the Adverb on variant use					
Lexical Adverb	Favours MID-VP	Disfavours MID-VP	Favours POST-V	Disfavours POST-V	Reference
<i>aujourd'hui</i>		X			Gaiffe et al. 1936
<i>beaucoup</i>	X				Laenzlinger 1998; Abeillé & Godard 2000; 2001; 2003; 2004
<i>bien</i>	X				Martinet 1979; Laenzlinger 1998; Ollivier 1999; Abeillé & Godard 2000; 2001; 2003; 2004
				X	Cinque 1999
<i>bientôt</i>	X				Michaut & Schricke 1934; Frontier 1997
<i>déjà</i>	X				Michaut & Schricke 1934
				X	Cinque 1999
<i>demain</i>		X			Gaiffe et al. 1936; Cinque 1999
<i>hier</i>		X			Laenzlinger 1998; Cinque 1999 Gaiffe et al. 1936
<i>longtemps</i>	X				Michaut & Schricke 1934; Wagner & Pinchon 1965
<i>maintenant</i>	X				Chevalier et al. 1971
<i>mal</i>	X				Laenzlinger 1998; Abeillé & Godard 2000; 2001; 2003; 2004
<i>peu</i>	X				
<i>plus</i>	X				Abeillé & Godard 2000; 2001; 2003; 2004
<i>presque</i>	X				
<i>récemment</i>	X				Frontier 1997
<i>soudain</i>	X				Abeillé & Godard 2000; 2001; 2003; 2004
<i>souvent</i>	X				Wagner & Pinchon 1965; Chevalier et al. 1971
<i>tard</i>			X		Martinet 1979
<i>tôt</i>			X		
<i>toujours</i>	X				Michaut & Schricke 1934; Wagner & Pinchon 1965; Chevalier et al. 1971; Frontier 1997; Abeillé & Godard 2000; 2001; 2003; 2004
				X	Cinque 1999
<i>trop</i>	X				Abeillé & Godard 2000; 2001; 2003; 2004
<i>vraiment</i>	X				

4.4.1.3 Adverb Length

A third factor reportedly operative in conditioning adverb distribution is the length of the adverb: long adverbs are said to occur after the past participle (POST-V) (Grevisse 1993;⁴⁷ Ollivier 1999).⁴⁸ For their part, short adverbs are said to occur: between the auxiliary and past participle (i.e. MID-VP) (Grevisse 1993;⁴⁹ Ollivier 1999), or contradictorily, never between the auxiliary and participle (unless an adverb of quantity) (Le Bidois & Le Bidois 1971). It is also claimed that monosyllabic adjectives functioning as adverbs occur after the participle (Grevisse 1993). Brill (1987) reports that one- and two-syllable adverbs favour placement between the auxiliary and participle (factor weights of .62 and .75, respectively), while longer adverbs disfavour this MID-VP position (with factor weights of .37 for three syllable adverbs, and of .26 for adverbs with four or more syllables).⁵⁰ In order to test these claims, all adverbs were coded for their length, measured in number of syllables. Note that the length of adverbs whose syllabication in oral discourse might not be reliably predicted from their orthography (e.g. *tout le temps*, *quasiment*, *presque*, *peut-être*, etc., but not *souvent*, *toujours*, *bien*, *trop* etc.) was confirmed in the audio files, all such tokens being coded impressionistically from the latter.

⁴⁷ For Grevisse (1993 §935 2° R1), this is the case when there the adverb is long and the other complements are “assez courts;” the role of complement length is operationalized in a separate factor group in §4.4.1.11 below.

⁴⁸ Ollivier (1999:178) more specifically claims that it is adverbs which are long *and* “non commun” which are placed after the past participle. This ‘commonness’ measure is captured in a separate factor group; see §4.4.1.5 below.

⁴⁹ Specifically for Grevisse (1993), short adverbs of manner, degree and aspect.

⁵⁰ Togeby (1984:161) also maintains that ‘heavy’ adverbs tend to occur at the end of a sentence (hence, POST-V) with ‘light’ adverbs “régulièrement. . .s’intercalant entre l’auxiliaire et le verbe principal.” However, this heavy/light distinction refers to adverb specificity, a hypothesis which is addressed in a separate factor group outlined below (§4.4.1.4).

Number Syllables	Favours MID-VP	Disfavours MID-VP	Favours POST-V	Reference
1	X			Grevisse 1993; Brill 1987; Ollivier 1999
			X (adj)	Grevisse 1993
		X		Le Bidois & Le Bidois 1971
2	X			Brill 1987
3		X		
4 or more			X	Grevisse 1993; Ollivier 1999
			X	
			X	

Code	Factor	Example
1	1 syllable	<i>Vous avez bien faite. (108:708)</i> <i>Il avait trop travaillé à- tu sais, au plant à Gatineau. (89:1242)</i>
2	2 syllables	<i>On a toujours gardé la même habitude. (105:3542)</i> <i>Une fournaise a déjà explosé en l'huile. (90:186)</i>
3	3 syllables	<i>Ma petite fille est revenue aujourd'hui. (88:1373)</i> <i>Ça a aveuglé le chauffeur complètement. (90 446)</i>
4	4 or more syllables	<i>Auparavant elle avait déjà été à l'Université-du-Québec (98:611)</i>

4.4.1.4 Adverb Specificity

While Togeby's (1984) discussion on adverb placement is confounded by his somewhat contradictory, circular argumentation, as well as by his opaque labeling, his underlying claims seem to implicate the specificity of the adverb in governing adverb placement.⁵¹ In particular, adverbs which can be considered 'specific' occur in the MID-VP position only

⁵¹ In particular, the author first indicates that "par compléments adverbiaux lourds on comprend les adverbes qui s'emploient régulièrement dans la partie finale de la phrase," as such, it is not clear whether these adverbs are placed towards the end of a sentence because they are 'heavy' or if they are considered 'heavy' because they are usually found in the last part of the sentence. Either way, the crucial point comes when he explains that heavy adverbs "marquent un point déterminé," while light adverbs "ont une valeur moins précise [...] indiquent une succession ou une répétition." This suggests that for Togeby (1984) it is the specificity of the adverb which determines its weight (which in turn determines where it is placed with respect to the verb.) Furthermore, while adverbs of manner are considered 'light' in his classification system, Togeby (1984:163) notes that adverbs from this group which "marquent la manière de façon plus spécifique" normally follow the verb (though he provides no clear indication as to what criteria might distinguish a 'more specific' manner reading from a 'less specific' one.) This further suggests that adverb specificity is responsible for POST-V placement, and not some other measure of weight (like number of syllables).

under certain conditions,⁵² while adverbs which can be interpreted as non-specific “s’insèrent facilement entre l’auxiliaire et le verbe principale” (Togebly 1984:162). For this grammarian, this factor seems to primarily concern temporal adverbs, where specific temporal adverbs “marquent un point déterminé,” and include *aujourd’hui*, *demain*, *hier* and *maintenant*, and where non-specific adverbs “ont une valeur moins précise [...] indiquent une succession ou une répétition,” such as *bientôt*, *longtemps*, *souvent* and *toujours*. To test this claim, all temporal adverbs and those explicitly identified by Togebly (1984) are coded according to their specificity using the criteria outlined by these grammarians (i.e. a specific point in time vs. non-specific point in time or repetition/succession).

Adverb specificity	Favours MID-VP	Disavours MID-VP	Reference
specific		X	Togebly (1984)
non-specific	X		

Code	Factor	Example
S	Specific	<i>Je lui ai donné ça hier.</i> (85:1067)
N	Non-specific	<i>Autrefois elle a gardé des enfants du service social.</i> (101:1550) <i>On a toujours parlé avec tous nos voisins.</i> (79:2503)
B	Ambiguous	

4.4.1.5 Adverb Frequency

According to Ollivier (1999:178) adverbs which are “commun” are placed between the auxiliary and past participle, while those which are “pas commun” are placed after the participle.⁵³ In order to gauge the ‘commonness’ of the adverb, the frequency of use in the

⁵² Such as when the verb is accompanied by other complements (Togebly 1984:160); see §4.5.1.12 below.

⁵³ However, this factor supposedly interacts with adverb length (Ollivier 1999), in that adverbs which are long and uncommon occur after the participle.

OH corpus subsample was determined for each adverb extracted from the subsample data, and then a frequency scale and coding scheme was designed accordingly, as shown below.

Frequency	Favours MID-VP	Favours POST-V	Reference
More frequent	X		Ollivier (1999)
Less frequent		X	

Code	Factor	Adverbs included:
A	1-3	bonnement, craintivement, davantage, différemment, économiquement, parfois, récemment, strictement, subitement
B	4-9	apparemment, auparavant, autrefois, avant-hier, couramment, graduellement, malheureusement, raide, sévèrement, simplement
C	10-24	certainement, complètement, dernièrement, direct, directement, énormément, exprès, naturellement, tantôt
D	25-49	anciennement, effrayant, hier, réellement
E	50-99	autant, itou, presque, probablement, proche, quasiment, sévère, tard,
F	100-199	correct, dur, ensemble, fort, franchement, longtemps, maintenant, mal, tant, vite, vraiment
G	200-499	avant, beaucoup, déjà, gros, mieux, moins, pas mal, peut-être, souvent, tellement, tout le temps
H	500-999	après, assez, aujourd'hui, aussi, encore, toujours, trop
I	1000+	bien, plus

Note: These frequencies are based on raw lexical counts, not specifically on frequencies in adverbial function (i.e. adverbial uses of *beaucoup* were not distinguished from determiner uses of this adverb in determining its frequency in the corpus; likewise for adjectival adverbs, *bien* etc.)

4.4.1.6 Lexical Identity of the Auxiliary

The results of Brill's (1987) variationist study suggest that auxiliary type may play a role (albeit small) in conditioning adverb placement, since an *avoir* auxiliary slightly favours (factor weight of .56), and an *être* auxiliary slightly disfavours (factor weight of .44) MID-VP adverb positioning. To determine if this factor is operative in the variety of spoken Quebec French considered here, all tokens were coded according to the lexical identity of the auxiliary.

Auxiliary	Favours MID-VP	Disfavours MID-VP	Reference
<i>avoir</i>	X		Brill (1987)
<i>être</i>		X	

Code	Factor	Example
E	<i>être</i>	<i>Elle est venue hier. (84:816)</i>
A	<i>avoir</i>	<i>Elle a toujours gardé des enfants. (101:1548)</i>

4.4.1.7 Verb Phrase Morphology

In her variationist study, Brill (1987) looks at the effect of verb tense, mood, and voice on adverb placement, and reports important differences in the effect of these on conditioning the variability. In particular, her multivariate analyses reveal that the pluperfect (*plus-que-parfait*) strongly favours MID-VP position (factor weight of .72), and the *passé composé*, the conditional past, and present passives also all favour MID-VP position (factor weights of .58, .59, .59, respectively). On the other hand, past passives slightly disfavor, and past infinitives strongly disfavor the MID-VP position, with factor weights of .42 and .19 respectively. This factor group therefore tests these findings with a detailed breakdown of verb tense, mood and voice.

Verb Phrase Morphology	Favours MID-VP	Disfavours MID-VP	Reference
<i>plus-que-parfait</i>	X		Brill (1987)
<i>passé composé</i>	X		
conditional past	X		
present/simple passives	X		
past/compound passives		X	
past infinitives		X	

Code	Factor	Example
P	<i>passé composé</i>	<i>Je lui ai demandé souvent. (108:501)</i>
Q	<i>plus-que-parfait</i>	<i>J'avais déjà parlé de deça. (81:896)</i>
C	conditional past	<i>Ils avaient itou engagé une compagnie là.(85:796)</i>
S	present/simple passives	<i>Le Français de France, pour nous-autres là, c'est parlé très vite. (79:2093)</i> <i>Ils seraient jugés plus sévèrement. (88:1558)</i>
T	past/compound passives	<i>Nous-autres bien on a été élevés si strictement. (105:450)</i>
Z	past infinitive	<i>Avoir tant donné d'argent pour cette église là. (95:1106)</i>

4.4.1.8 Type of Verbal Head

Brill (1987) reports that a simple head verb favours MID-VP adverb placement (factor weight of .65) while verb phrases, like *faire plaisir* and *faire penser*, disfavour mid-predicate position (factor weight of .35). To determine whether this factor is operative in the variety of spoken Quebec French considered here, all data were coded according to whether the head verb is simple (i.e. a single verb) or a verb phrase.

Verbal Head	Favours MID-VP	Disfavours MID-VP	Reference
simple	X		Brill (1987)
verb phrase		X	

Code	Factor	Example
S	Simple	<i>J'avais déjà faite un paquet d'affaires. (73:929)</i>
P	Verb phrase	<i>Je m'ai déjà faite barrer à vie là pour une niaiserie. (85:477)</i>

4.4.1.9 Adjectival Adverb

According to Grevisse (2011, §972a 2°), (monosyllabic) adjectives functioning as adverbs (e.g. *il a marché droit*) are placed after the participle. To assess this claim here, all adjectival adverbs were distinguished from non adjectival ones.

Table 4.4.1.9A Hypotheses concerning the effect of Adjectival Adverbs on variant use		
Adjectival Adverb	Favours POST-V	Reference
adjectival	X	Grevisse (2011)

Table 4.4.1.9 B Coding instructions for Adjectival Adverb		
Code	Factor	Example
A	Adjectival	<i>J'avais monté vite à- à école. (79:175)</i>
N	Not adjectival	<i>Ça a parti graduellement de même. (101:1627)</i>

4.4.1.10 Adverb Modification

According to Laenzlinger (1998), adverbs like *bien* and *mal* are limited to occurring in the MID-VP position except when they are modified, in which case they may indeed occur in the POST-V position. Similarly for Alexiadou (1997), whose analysis predicts that bare or non-complex (manner) adverbs will not occur in a POST-V position. This factor group will therefore test whether there is any effect of adverb modification on adverb placement for these adverbs, as well as for adverbs in general.

Table 4.4.1.10A Hypotheses concerning the effect of Adverb Modification on variant use			
Adverb Modification	Favours POST-V	Disfavours POST-V	Reference
Yes	X		Laenzlinger 1998
No		X	Alexiadou 1997

Table 4.4.1.10 B Coding instructions for Adverb Modification		
Code	Factor	Example
N	Not modified	<i>Oui, elle a Ø bien changé. (90:875)</i>
M	Modified	<i>Je l'ai faite assez longtemps là. (77:291)</i> <i>J'ai essayé bien souvent. (79:2068)</i> <i>On s'est présentés tout bonnement. (117 :620)</i> <i>Puis j'ai parlé pas mal fort. (108:59)</i>
Note: All cases of modified adverbs were also coded according to the specific lexical identity of the modifier (e.g. <i>plus, assez, tellement, pas mal, trop</i> etc.), but these were ultimately collapsed into a single factor for the analyses.		

4.4.1.11 Complements to the VP

Togebly (1984) indicates that ‘heavy’⁵⁴ adverbs, which he claims normally occur towards the end of a sentence, will only occur between an auxiliary and participle when the verb is accompanied by another complement, as shown by comparing examples a) and b) (from Togebly 1984:160):

- a) *J’ai, **ce soir là**, fini.
- b) J’ai, **ce soir là**, fini le travail qui me pesait depuis le début de l’année.

To determine whether this factor is indeed operative, all tokens were coded for presence and length (in number of words) of verbal complements after the participle.

Table 4.4.1.11A Hypotheses concerning the effect of Complements to the VP on variant use		
Verb complement	Favours MID-VP	Reference
verbal complement	X	Togebly (1984)

⁵⁴ As outlined above, the definition provided by Togebly (1984) for a ‘heavy’ adverb is not entirely clear, though this is ultimately irrelevant, since this factor group will apply to all the data regardless of adverb ‘heaviness’.

Table 4.4.1.11 B Coding instructions for Complements to the VP		
Code	Factor	Example
N	No complement	<i>Ça m'a déjà arrivé.</i> (88:154)
1	1 word	<i>Puis auparavant il avait été peintre.</i> (117:424)
2	2 words	<i>J'en ai pris des vacances déjà.</i> (77:309)
3	3 or more words	<i>Mais il l'a déjà faite à un autre.</i> (100:605) <i>Mais il y a toujours eu le moyen de s-- magasiner dans le centre-ville.</i> (73:152)

4.4.2 Social factors

The four social factors considered in the analysis are speaker age, speaker sex, neighbourhood and level of education of the speaker. As outlined above in §4.2.2, speaker age is used to detect any change across (apparent) time. This would be revealed by a steady increase or decrease in variant frequency across the age groups. Neighbourhood, as a general measure of socio-economic class, and speaker sex are both used to assess the social embedding of variable adverb placement within the community; if these factors are found to condition variant choice, as suggested by Brill's (1987) finding (i.e. that women slightly disfavour, and men favour, MID-VP placement, with factor weights of .43 and .57, respectively), then this will be taken as evidence that variable adverb placement plays some sociolinguistic role in the community. Furthermore, since Brill (1987) observed an effect of a writer's level of education in variant choice (i.e. higher education disfavoured the MID-VP variant), and since this information was available for the OH speakers, the role of this factor is also considered, as it may provide additional information regarding the sociolinguistic status of this variable in the community.

Before concluding this chapter and moving on to the results of this study, a few final comments regarding the coding details outlined above are in order. First of all, while it might appear that this section, and the coding systems described therein, sets the MID-VP variant as

the default variant, note that the predictions actually mirror the way in which they are formulated in the cited references. For example, if it is claimed that longer adverbs never occur between the auxiliary and the participle, then the prediction is that these adverbs will disfavour the MID-VP variant; if longer adverbs are claimed to only occur after the participle, then the prediction is that these will favour the POST-V variant. Secondly, the reader will note that predictions concerning factor effects on use of the PRE-SUBJ are missing in the above discussion; this is a direct reflection of the absence of such claims in the literature, where this variant is typically overlooked or merely mentioned in passing. In fact, the only apparent factor which the literature associates with this PRE-SUBJ variant is the one involving its use for topicalization/focalization, which, as previously discussed above in §4.2.2.6, is a factor which proved to be impossible to objectively code here.

4.5 Chapter Summary

This chapter presented the data and methodology adopted in this study. Section 4.1 gave a description of the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989) from which this study's data are drawn, as well as provided the demographic details of the speaker subsample.

Section 4.2 then provided all of the details concerning circumscribing the variable context. It first identified compound verb tenses composed of an auxiliary and past participle as the underlying variable context, and distinguished three variant positions for adverbs associated with these constructions, namely, PRE-SUBJ, MID-VP, and POST-V variants. While it was acknowledged that Cinque (1999) ascribes at least some cases of these variants to different functions for a small cohort of adverbs, it was argued that these too may be subject

to discourse neutralization, and so could be retained in the analyses in the absence of evidence of these distinct functions. Section 4.2.2 then revisited each of the six challenges identified in Chapter 3, outlining how they were addressed here. First, in terms of morphological diversity, it was decided that all single-word and hyphenated adverbials would be included, as well as multi-string words which were found to occur in the MID-VP position at least once in the data or which were compositionally similar to retained hyphenated adverbials (i.e. *en dehors*). With respect to the issue of functional diversity, it was decided that adverbs performing different types of adverbial functions would be considered together as long as the literature expected that each of these functions could potentially occur in each of the variant positions (e.g. temporal and modal functions can be included, but negation or interrogation functions excluded, as the latter are associated with invariable adverb placement). It was then explained how issues involving polysemy and involving the interaction between position and interpretation for some *-ment* adverbs would be dealt with by using components of the contexts (e.g. absence of subject or direct object with *beaucoup*; semantic compatibility with the verb) in which the adverbs occurred to identify legal cases for inclusion in the variable context. Then, drawing on Bonami et al.'s (2004) arguments concerning the semantic contribution of so-called “parenthetical” adverbs, or *incidentals*, it was decided that such adverbs would not be excluded *a priori* from the analyses. Finally, a case was made for retaining cases of the PRE-SUBJ variant, even though it is ascribed distinct functions in the syntactic literature. More specifically, a review of the contexts in which the PRE-SUBJ adverbs occurred, as well as the contexts in which those same adverbs occur in the other variant positions, failed to reveal that this variant was uniquely associated with some function of topicalization or focalization. Section 4.2.3 then provided a

summary of all of the variable context exclusions, as well as some additional considerations involving use of more than one adverb in a single verb phrase.

Finally, section 4.3 described the data extraction process and methods of analysis, while §4.4 detailed the eleven linguistic and four social factors which are being considered here, including their purported conditioning effects and their associated coding procedures. With the methodology now laid out, it is possible to turn to the results of the quantitative analyses, which are detailed in Chapters 5 and 6.

CHAPTER 5

Results: Linguistic Factors

Overview

This chapter presents the results for adverb distribution according to the linguistic factors tested in this study. Section 5.1 first presents the overall distribution of variant use. This is followed in §5.2 by the results, and a brief summary, of a preliminary multivariate analysis where the specific effects of the linguistic factors on variant choice are revealed. Section 5.3 then presents the distributional results for variant use according to the each of the linguistic factors, and situates this with respect to claims in the literature. Drawing on important observations emerging from these results, additional multivariate analyses are undertaken and presented in §5.4. Section 5.5 then compares the results obtained from the speech data presented in §5.3 and §5.4 to those predictions extracted from the theoretical syntactic literature regarding adverb placement. Finally, section 5.6 concludes with a general summary of the results presented in this chapter.

5.1 Overall distribution

The overall distribution of adverb use in each of the variant positions is shown in Table 5.1. It reveals that adverb placement is essentially divided between two variants, with the POST-V variant accounting for half of all adverb use at 50% (N=540/1070) and the MID-VP variant, accounting for nearly as much of the data, namely, 45% (N=486/1070). Note that this latter finding is consistent with Brill (1987), who reported a rate of occurrence of 43% (N=401/939) for the MID-VP variant in her written data. The PRE-SUBJ variant turns out to be a minor player in the system, accounting for only 4% (N=44/1070) of the data.

Table 5.1. Overall distribution of variant use						
PRE-SUBJ		MID-VP		POST-V		TOTAL
%	N	%	N	%	N	N
4	44	45	486	50	540	1070

5.2 Multivariate analysis (preliminary)

While a typical variationist study would, at this point, present distributional results for variant use according to each of the linguistic factors tested in this study, here we first present the results of a multivariate analysis instead. The distributional results are then presented in §5.3, wherein they provide revelatory information about the significant factor effects obtained in this section.

This multivariate analysis was undertaken using GoldVarb X (Sankoff, Tagliamonte & Smith 2005) in order to determine which factors are statistically significant to the selection of the MID-VP variant when all the factors are considered together. Note that due to sparse (see Table 5.1) and poorly distributed data (as will be shown in §5.3), all occurrences of the PRE-SUBJ variant were excluded; additional (factor) exclusions are noted at the bottom of Table 5.2. Also note that the results shown in Table 5.2 are those obtained after some of the factors have been recoded together; rationale for these recoding decisions will be presented in §5.3 when the distributional results are discussed. As outlined in Chapters 2 and 3, the results of the multivariate analysis are interpreted using three lines of evidence, following Poplack and Tagliamonte (2001). First, statistical significance of a factor group in influencing variable adverb placement is determined (at the .05 level). Second, among the factor groups selected as statistically significant, the factor group's individual *range* indicates the relative strength of its influence on variant use, with a broader range indicating a greater influence. Finally, the ordering of factors within factor groups, or the *constraint*

hierarchy, indicates which factors *favour*, and which factors *disfavour*, a given variant's use; the closer the factor weight to 1 or 0, the stronger its effect on variant use.

The results of the multivariate analysis shown in Table 5.2 indicate that the factor group which exerts the strongest influence on use of the MID-VP variant, as indicated by a range of .73, is **Adverb Type**. In particular, **Aspectual** adverbs strongly favour, and **Manner** and **Frequency** adverbs disfavour, this variant, as indicated by the factor probabilities of .73, .24 and .01, respectively. A second factor found to be statistically significant in the use of the MID-VP variant is **Verb Morphology**; this variant is favoured with past/compound passives, is strongly favoured with present/simple passives, and is slightly disfavoured by the conditional past (though note the small number of tokens here, 13/23). The factor of **Adverb Frequency** was also selected as statistically significant to variant choice, with less frequent adverbs strongly disfavoured the MID-VP variant.¹ Likewise, the factor of **Adverb Modification** is selected as significant to variant use, with the MID-VP variant being disfavoured when the adverb is modified.

¹ While this factor group initially consisted of nine factors (see Chapter 4, §4.4.1.5), ultimately these were regrouped into the two factors shown in Table 5.2 given the distributional results obtained for the nine original factors, as presented in §5.3.5 (i.e. all of the factors which coded adverbs having a frequency of less than 199 occurrences in the subsample data behaved similarly in terms of distribution in the variant positions, and likewise for factors which coded adverbs having 200 or more occurrence in the subsample data).

Table 5.2 Variable rule analysis of the contribution of LINGUISTIC factors to selection of the MID-VP variant			
	ALL		
Input	.759	62	486/783
	Prob.	%	N/N
Adverb Type			
Aspect	.73	93	317/342
Modal	.51	77	20/26
Quantity and Degree	.42	74	101/137
Manner (incl. Motion)	.24	37	44/120
Frequency	.01	6	2/35
<i>Range</i>	72		
Verb Morphology			
present/simple passives	.86	76	32/42
past/compound passives	.64	64	16/25
<i>plus-que-parfait</i>	.55	60	24/40
<i>passé composé</i>	.47	62	399/647
conditional past	.41	57	13/23
<i>Range</i>	45		
Adverb Frequency			
200+	.61	76	464/613
< 199	.17	13	22/170
<i>Range</i>	44		
Adverb Modification			
No	.52	66	473/718
Yes	.24	18	10/57
<i>Range</i>	28		
Factors not selected as significant: Adverb Length, Lexical Identity of the Auxiliary, Type of Verb Head, Verb Specificity, Presence/Length of Verbal Complements			
Factor groups not included: Adjectival Adverbs (categorically POST-v); Lexical Identity of the Adverb			
Additional exclusions:			
a) Locational adverbs were excluded since, as will be shown in §5.3, these adverbs never occur in the MID-VP position, and they also represent about a quarter of the data overall (23%, N=245/1070). Thus, their inclusion would skew the results.			
b) Adverb types that had no occurrences in the MID-VP position (i.e. Temporal, Duration, Domain, Evaluative, and Speaker-oriented) were excluded from the factor group Adverb Type . Note that a parallel run in which these adverbs types were excluded entirely resulted in the same factor groups being selected as statistically significant, and in the same factor effects.			
c) Past infinitives are excluded from the factor group of Verb Morphology , since they accounted for less than 1% of the data (0.13%, N=6/783).			

If the analysis were to stop here, it would have to be concluded that the results shown in Table 5.2 are generally consistent with claims in the literature concerning the factors conditioning adverb placement. For example the MID-VP position is said to be associated with

Aspectual adverbs (Grevisse 1993) and with more frequent adverbs (Ollivier 1999), while also being less likely when the adverb is modified (Alexiadou 1997); these claims are confirmed by the favouring effects of the first two factors, and by the disfavouring effect of the latter factor, as indicated by their factor probabilities in Table 5.2. We might therefore want to conclude that the absence of speech data, and the reliance on intuition, did not pose a real problem with respect to intuiting the grammar of adverb placement. However, closer inspection of the materials in the next section reveals that the factors selected as significant in the multivariate analyses above are actually reflections of other effects, i.e. the disproportionate distribution of specific lexical adverbs within the categories which were labelled “adverb type” etc. In fact, disproportionate distributions of lexical factors are not uncommon (cf Poplack 1992; Poplack et al. 2013 for such a finding in the case of variable subjunctive use in French), and so they constitute a hidden danger which can undermine a proper analysis. Importantly, such confounding lexical effects can only be revealed through systematic quantitative analyses, as will be carried out in the next section.

5.3 Distributional results

This section now summarizes the contribution of the factors identified in Chapters 3 and 4 to the choice of adverb position for each factor in turn, and explicitly compares these to the claims extracted from the literature which were identified in these earlier chapters.

5.3.1 Adverb Type

Brill’s (1987) study suggested that **Adverb Type** was the most important factor in conditioning variant choice, consistent with what is commonly reported in the prescriptive and theoretical linguistic literature, and apparently confirmed by the findings shown in Table

5.2. Table 5.3.1 shows variant distribution according to this factor of **Adverb Type** (note that cells most pertinent to the discussion are shaded and bolded, both here and throughout all of §5.3.)

Adverb Type	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	4	44	45	486	50	540	1070
Locational	1	2	0	-	99	243	245
Temporal	41	26	0	-	59	37	63
Aspect	0	1	92	317	7	25	343
Duration	0	-	0	-	100	39	39
Motion	0	-	0	-	100	20	20
Frequency	13	5	5	2	83	33	40
Quantity	0	-	74	94	26	33	127
Degree	0	-	64	7	36	4	11
Manner	0	-	44	44	56	56	100
Modal	19	6	63	20	19	6	32
Evaluative	50	1	0	-	50	1	2
Speaker-oriented	75	3	0	-	25	1	4
Domain	0	-	0	-	100	1	1
(Unclassified)*	0	-	5	2	95	41	43

*Unclassified cases include 1 token of *bien* which is ambiguous between **Manner** and **Quantity** and 42 tokens of *aussi*, since it is not clear whether this adverb should be grouped with **Quantity** or **Manner** adverbs (see Appendix B).

A number of interesting findings emerge from the results shown in Table 5.3.1, and we begin by situating them with respect to what has been reported in the relevant literature. First of all, consistent with Brill (1987) and with widespread claims in the literature (e.g. Michaut & Schricke 1934; Dauzat 1958; Chevalier et al. 1971; Cinque 1999 etc.), **Locational** adverbs never occur in the MID-VP position, but are essentially categorically limited to the POST-V position (99%, N=243/245). Likewise, **Temporal** adverbs never occur in the MID-VP position, again consistent with most claims in the literature (e.g. Gaiffe et al. 1936; Martinet 1979; Riegel et al. 1998 etc; but contra Le Bidois & Le Bidois 1971). Note that had

incidence in the MID-VP position been adopted as the exclusive criteria for token inclusion in this study, then these two adverb types (and a few others) would not have figured in this study at all, and so their frequency and distribution across the other variant positions would have remained unknown. Note also that in the relevant literature, the distribution of **Temporal** adverbs is usually discussed in terms of their occurring in the POST-V position, though in this data they occur frequently enough in the PRE-SUBJ position as well (41%, N=26/63), a possibility which is acknowledged by Cinque (1999). In terms of **Aspectual** adverbs, these are clearly most commonly used in the MID-VP position (92%, N=317/343), consistent with Grevisse (1993). On the other hand, adverbs classified in the aspectual-related category of **Duration**, as well as those in the **Motion** class, only occur in the POST-V position, though in these cases the effect interacts with the lexical adverbs contained within these categories, as explained below in §5.3.2. Also related to the category of aspectual adverbs, **Frequency** adverbs are extremely rare in the MID-VP position, consistent with Brill's (1987) findings, though contrary to what was predicted by the reviewed theoretical syntactic analyses (Alexiadou 1997; Laenzlinger 1998; Cinque 1999). Note that if **Frequency** and **Duration** adverbs had not been identified as independent classes, but collapsed with the **Aspectual** or **Temporal** adverbs as most grammarians do (e.g. Gaiffe et al. 1936; Wagner & Pinchon 1965; Grevisse 2011; Mertens 2013), then the POST-V variant preferences of the former two types would have been obscured by the strong MID-VP preference of **Aspectual** adverbs, or would have inflated POST-V variant use for **Temporal** adverbs. **Quantity** and **Degree** adverbs are most common in the MID-VP position, consistent with what has elsewhere been claimed (e.g. Cayrou et al. 1949; Brill 1987; Grevisse 1993 etc.), and are also absent from the PRE-SUBJ position, as predicted by Molinier and Levrier (2000); given their similar variant distribution, they were coded together in the multivariate

analyses. For their part, **Manner** adverbs are robustly variable, at least among two variant positions. However, that they are slightly more common in the POST-V position is at odds with reports that these adverbs are most likely to occur in the MID-VP position (e.g. Chevalier et al. 1971; Brill 1987; Grevisse 1993). In terms of **Modal** adverbs, these are placed in all of the variant positions, but occur most frequently in the MID-VP position, while **Speaker-Oriented** adverbs are essentially limited to the PRE-SUBJ variant. Limited data prevents any trends to be discerned for **Evaluative** and **Domain** adverbs.

Extrapolating away from the specific claims in the literature, Table 5.3.1 reveals important differences across adverb type in terms of variant use and frequency in the data. For instance, a remarkable 2/3 of the data is made up of only three adverbs types, namely, **Locational**, **Aspectual** and **Quantity** adverbs (67%, N=715/1070), and each of these adverb types are (near-)categorical in, or very heavily weighted towards, a single variant position (POST-V, MID-VP, and MID-VP, respectively).² Among the remaining ten categories, only seven of them host ten tokens or more, and five of these seven also show extreme or important preferences for one position. More specifically, adverbs of **Duration**, **Motion**, **Frequency**,³ are all categorical or very heavily weighted towards use with the POST-V variant, and **Degree** and **Modal** adverbs show a strong preference for use in the MID-VP position. In fact, only **Temporal** and **Manner** adverbs can be considered as both robust and

² Given their (essentially) categorical use in the POST-V position, and high frequency in the data overall (23%, N=245/1070), **Locational** adverbs are excluded from the analyses from this point onwards, as retaining them would obscure the other constraints on variable adverb placement. The two occurrences of a locational adverb in PRE-SUBJ the position are both with the lexical adverb *ici*.

³ In fact, the finding that **Duration** and **Frequency** adverbs occur most frequently in POST-V on the one hand, and that **Aspect** adverbs occur most frequently in MID-VP on the other, means that grammarians' tradition of grouping all of these together as aspectual adverbs is unsupported (and, consequently, that Laenzlinger's (1998) and Alexiadou's (1997) identification of frequency adverbs as constituting a distinct class seems well founded). Similarly, while most grammarians consider aspectual adverbs to be among the group of temporal adverbs, the results in Table 5.3.1 suggest that they should indeed be considered separately from temporal ones. In fact, these distinctions are likely what lead many grammarians to posit exceptions (as discussed in §5.3.2 below) to the placement tendencies they otherwise associate with temporal adverbs.

truly variable, though note that they are each only distributed across two of the variant positions; POST-V and PRE-SUBJ for **Temporal** adverbs, POST-V and MID-VP for **Manner** adverbs. In fact, while all adverb types have at least one occurrence in the POST-V position, most are limited to occurring in only two variant positions. Only 3 categories (**Aspectual**, **Frequency** and **Modal**) ever occur in all three theoretically possible variant positions, albeit, as noted above, they are certainly not equi-probable in each of these positions, but show strong preferences for one variant over the others (MID-VP, POST-V, and MID-VP, respectively). Finally, as noted in Table 5.1, the PRE-SUBJ variant is a rarely selected option, and even when selected, it is virtually only used with temporal adverbs.

Taken together, the results in Table 5.3.1 (and Table 5.2) suggest that, as predicted by the extant literature, adverb placement is strongly influenced by adverb type, since nearly all of the classes (i.e. **Locational**, **Aspect**, **Duration**, **Motion**, **Frequency**, **Quantity**, **Modal**, **Speaker-oriented** (and perhaps also **Degree**)) show a clear preference for one variant over the others. It is only for two classes (**Temporal**, **Manner**) that the distributional results suggest more balanced variability, though in both these case the variability is limited to two variants. These findings also confirm the general assumption in the literature that (essentially) all adverbs which appear between the auxiliary and the participle are licensed in (at least one of the) peripheral positions, but not vice versa (i.e. occurrence in a peripheral position does not predict occurrence in the MID-VP position). Furthermore, the results in Table 5.3.1 seem to largely confirm what has been claimed in the literature regarding the specific influence of different adverb types in determining adverb placement, though, as will be addressed shortly (in §5.3.2), the role played by specific lexical adverbs in some of these classes cannot be overlooked. Ultimately, there is no real ‘default’ position for adverbs in

general; although the POST-V variant is the only position in which adverbs of each type have at least one occurrence, this position cannot be considered the default position for each adverb type, since for some (e.g. **Aspect, Quantity**; also **Degree, Modal**) the MID-VP position accounts for most of data; as such the MID-VP variant would more accurately be considered the default position for these adverb types. Thus, it can be argued that while the POST-V position may be possible for all adverbs, in reality, there is no default position for adverb placement which is not (in some cases, strongly) dependent on adverb type.

Furthermore, the results presented in the next section will reveal that in some of these cases, the placement behavior of some adverb categories may be more accurately ascribed to the placement behavior of one or more lexical adverbs grouped in those categories.

5.3.2 Lexical Identity of the Adverb

While adverb type, as discussed above in §5.3.1, is the factor most commonly reported to be implicated in adverb placement, a claim which is corroborated by its relative importance (as assessed by the range) in Table 5.2, the placement behaviour of many specific lexical adverbs is also independently identified in the prescriptive literature. Sometimes these are cited as exceptions to the placement tendencies associated with their specific type (§4.4.1.2) (e.g. adverbs of type K (usually) occur in position X, except adverbs A_K and B_K which only occur in position Y); in other cases, these are identified as having a more limited distribution than the other members of the class to which they belong (e.g. adverbs of type K can occur in position X or Y, but lexical adverbs A_K and B_K only occur in position Y.) Likewise, it was possible to extract lexically-specific predictions for adverb placement from the theoretical syntactic literature, either because these were explicitly listed (e.g. Abeillé and Godard 2000, 2001, 2003, 2004) or because in describing the behaviour or certain categories, specific

adverbs were provided as examples for their respective classes (e.g. Laenzlinger 1998; Cinque 1999). Therefore, to determine whether these claimed placement tendencies for specific adverbs hold in the speech data, Table 5.3.2A shows the distribution of variant use according to the **Lexical Identity of the Adverb**, organized according to adverb type (and then alphabetically) so as to facilitate comparison with Table 5.3.1. Note that adverbs marked with an asterisk were those for which particular placement behaviours were specifically identified in the literature. Note also that the discussion following Table 5.3.2A addresses three main types of observations arising for the results in the table. First, the accuracy of the lexically-specific placement predictions extracted from the literature is reviewed. Then, some additional noteworthy lexical tendencies, which were not mentioned in the literature, are identified. Finally, and most importantly, the findings in Table 5.3.2A are related to those reported in Table 5.3.1 and Table 5.2 for adverb type, since there are inextricable associations between them.

Lexical Adverb	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
TEMPORAL	41	26	0	-	59	37	63
anciennement	100	1	0	-	0	-	1
après	8	1	0	-	92	11	12
aujourd’hui*	73	8	0	-	27	3	11
auparavant	100	3	0	-	0	-	3
autrefois	100	1	0	-	0	-	1
avant	33	3	0	-	67	6	9
avant-hier	100	2	0	-	0	-	2
dernièrement	75	3	0	-	25	1	4
hier*	30	3	0	-	70	7	10
maintenant*	50	1	0	-	50	1	2
récemment*	0	-	0	-	100	1	1
tantôt	0	-	0	-	100	3	3
tard*	0	-	0	-	100	4	4
ASPECTUAL	0	1	92	317	7	25	343
déjà*	1	1	89	75	10	8	84
encore	0	-	0	-	100	2	2
subitement	0	-	0	-	100	1	1
toujours*	0	-	98	212	2	5	217
tout le temps	0	-	79	30	21	9	39
DURATION	0	-	0	-	100	39	39
longtemps*	0	-	0	-	100	39	39
MOTION	0	-	0	-	100	20	20
vite	0	-	0	-	100	20	20
FREQUENCY	13	5	5	2	83	33	40
encore	0	-	8	1	92	11	12
parfois	100	1	0	-	0	-	1
souvent*	15	4	4	1	82	22	27
QUANTITY	0	-	74	94	26	33	127
assez	0	-	93	13	7	1	14
autant	0	-	100	1	0	-	1
beaucoup*	0	-	75	6	25	2	8
bien*	0	-	100	27	0	-	27
davantage	0	-	0	-	100	2	2
effrayant	0	-	0	-	100	1	1
énormément	0	-	100	1	0	-	1

	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
QUANTITY (cont)	0	-	74	94	26	33	127
(bien) gros	0	-	0	-	100	4	4
plus*	0	-	50	5	50	5	10
moins	0	-	0	-	100	1	1
pas mal	0	-	47	14	53	16	30
tant	0	-	67	2	33	1	3
tellement	0	-	100	11	0	-	11
trop*	0	-	100	14	0	-	14
DEGREE	0	-	64	7	36	4	11
complètement	0	-	0	-	100	3	3
presque*	0	-	100	1	0	-	1
(bien) proche	0	-	66	2	33	1	3
quasiment	0	-	100	4	0	-	4
MODAL	19	6	63	20	19	6	32
apparemment	100	1	0	-	0	-	1
certainement	0	-	100	1	0	-	1
naturellement	100	1	0	-	0	-	1
peut-être	12	3	68	17	20	5	25
probablement	25	1	50	2	25	1	4
EVALUATIVE	50	1	0	-	50	1	2
malheureusement	50	1	0	-	50	1	2
SPEAKER-ORIENTED	75	3	0	-	25	1	4
franchement	75	3	0	-	25	1	4
DOMAIN	0	-	0	-	100	1	1
économiquement	0	-	0	-	100	1	1
MANNER	0	-	44	44	56	56	100
bien*	0	-	100	37	0	-	37
bonnement	0	-	0	-	100	1	1
correct	0	-	0	-	100	1	1
couramment	0	-	0	-	100	1	1
craintivement	0	-	0	-	100	1	1
différemment	0	-	0	-	100	1	1
direct	0	-	0	-	100	1	1
directement	0	-	0	-	100	2	2
dur	0	-	0	-	100	1	1
ensemble	0	-	0	-	100	20	20

	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
MANNER (cont)	0	-	44	44	56	56	100
exprès	0	-	0	-	100	3	3
fort	0	-	0	-	100	7	7
graduellement	0	-	0	-	100	3	3
mal*	0	-	100	7	0	-	7
mieux	0	-	0	-	100	2	2
pareil	0	-	0	-	100	3	3
raide	0	-	0	-	100	2	2
sévère	0	-	0	-	100	2	2
sévèrement	0	-	0	-	100	3	3
strictement	0	-	0	-	100	1	1
vraiment*	0	-	0	-	100	1	1
UNCLASSIFIED							
aussi	0	-	2	1	98	41	42
bien (manner or quant)	0	-	100	1	0	-	1
No exclusions. Adverbs with an asterisk are those which are specifically identified in terms of their distribution.							

First of all, in terms of assessing claims in the literature regarding distributional properties of specific adverbs (see §4.4.1.2 and table therein for the specific references) five adverbs cannot be evaluated for their placement tendencies, since they did not occur in the data here (*bientôt, demain, peu, soudain, tôt*); four more did occur in the data, but were so rare (*maintenant, presque, récemment, vraiment*) that it is also impossible to evaluate the positioning claims associated with them. Of the remaining twelve adverbs asterisked in Table 5.3.2A, nine of them have distributional tendencies which do align with reports in the literature: *tard* is most common in the POST-V position; *aujourd'hui* and *hier* never occur in the MID-VP position; and *déjà, toujours, beaucoup, trop, bien* and *mal* are most common in the MID-VP position. On the other hand, while the literature suggests that *longtemps, souvent*

and *plus* should be most frequent in the MID-VP position,⁴ the results in Table 5.3.2A indicate otherwise: *longtemps* only ever occurs in the POST-V position; *souvent* is also most common after the participle;⁵ and *plus* is equally as likely to surface in the MID-VP position as in the POST-V position. Thus, while the literature is largely accurate in its predictions regarding placement tendencies for some specific adverbs, it is not correct in all cases.

Beyond these, a few additional lexical tendencies warrant mentioning. First of all, *toujours*, which was correctly identified by the literature as occurring most frequently in the MID-VP position, represents most of the data in its own category of aspectual adverbs (63%, N=217/343) as well as in the data overall (26%; N=217/825.) Also noteworthy is the fact that *toujours*'s nearly synonymous multi-word string, *tout le temps*, also occurs most frequently in the MID-VP position (77%, N=30/39), and this even though adverbial locutions/multi-word strings are said to be excluded from this position.⁶ Among the quantity adverbs, the multi-word string *pas mal* also occurs in the MID-VP position (in all cases without comma intonation), and is about as frequent there as it is in the POST-V position. That both *pas mal* and *tout le temps* are (respectively) frequently and primarily used in the MID-VP position, and this even without comma intonation, means that either adverbial locutions/multi-word strings are not excluded from this position, as the literature typically claims (e.g. Dauzat 1958; Chevalier et al. 1971; Cinque 1999), and/or that these items can be more accurately

⁴ Actually, Michaut and Schricke (1934:848) indicate that *souvent* is placed “indifféremment avant et après” the participle, which is certainly not what the distributional results suggest.

⁵ Actually, this finding is interesting given that both Wagner and Pinchon (1965) and Chevalier et al. (1971) claim that MID-VP placement of *souvent* is the exception to the rule that temporal adverbs (with which they group *souvent*) occur after the participle, when in fact, this exception is clearly not necessary, since *souvent* does occur most often in the POST-V position! Likewise for Michaut and Schricke's (1934) claim regarding *longtemps*; they consider it to be a temporal adverb (which they claim occur after the participle) but maintain that *longtemps* is an exception and occurs in between the auxiliary and the participle; yet here, it only ever occurs in the POST-V position, so the exception is not needed.

⁶ Unless occurring there parenthetically, and thus accompanied by comma intonation; commas only occurred with one of the thirty MID-VP occurrences of *tout le temps*.

considered adverbs, which have simply not, as yet, been bestowed the privilege of orthographic agglutination or dictionary acceptance as adverbs (as have been such items as *quelquefois*, *plutôt*, *aujourd'hui* etc.).

Finally, undoubtedly the most important finding emerging from Table 5.3.2A is the association between lexical adverb and adverb type. In particular, while Table 5.2 and Table 5.3.1 suggested that adverb type was strongly associated with adverb placement, a review of the adverbs which make up each of these categories calls this association into question. For instance, although it was observed in Table 5.3.1 that adverbs of **Duration** and **Motion** were most common in the POST-V position, Table 5.3.2A indicates that there is only one lexical adverb in each of these categories, meaning that the distributional tendencies ascribed earlier to these two types, should more rightly be attributed here to the specific adverbs *longtemps* and *vite*. Furthermore, even for classes which do contain a number of adverbs (i.e. **Manner**, **Quantity**, and **Temporal**), there are strong, and distinct, lexical preferences among the adverbs grouped within them. For example, while the results in Table 5.3.1 suggested that **Manner** adverbs were one of the two categories showing robust variability between two variant positions, the results in Table 5.3.2A reveal that all of the MID-VP occurrences of manner adverbs are with *bien* and *mal*, while all other manner adverbs only occur in the POST-V position. Thus, and importantly, what appears to be robust variability is actually lexically constrained *invariability*. And while exclusive MID-VP use for *bien* and *mal* is widely accepted in the literature, nowhere is it predicted that *-ment* manner adverbs would occur invariably in the POST-V position (quite the opposite, actually), nor is it noted that the group of manner adverbs would be divided so definitively in this way. Likewise, nearly all of the **Quantity** (and the semantically-similar **Degree**) adverbs show a strong, if not

categorical, preference for one variant position over the others, and crucially, not the same one across lexical adverbs. Likewise for **Temporal** adverbs; nearly all show a categorical or strong preference for occurring in just one variant position, and this preference differs depending on the specific adverb. Crucially, these observations suggest that any apparent effect of **Adverb Type** on adverb placement observed in Table 5.3.1 and in Table 5.2 is, in most cases, masking lexical preferences of, and essentially invariability among, the adverbs contained within each of the classes. In fact, among the nineteen lexical adverbs that have at least ten occurrences in the data, six of them are categorically used in a single variant position, five of them have at least 90% use in one variant position, three of them have 80-89% in one position, and 2 more have 70-79% in one variant position; only *pas mal* and *plus*, and maybe *peut-être*, show less obvious preference for a single variant over the others; these results are summarized in Table 5.3.2B below.⁷ Ultimately, only two adverb classes, **Aspect** and **Frequency**, show some measure of internal consistency, with most of their lexical members preferring the same variant (where there is sufficient data; note also that in each of these types, only one adverb (*toujours*, *souvent*) makes up the bulk of the class' data).

⁷ In their investigations on change across time in the pronunciation of /r/ in Montreal French (Sankoff, Blondeau & Charity 2001; Blondeau, Sankoff & Charity 2002; Sankoff & Blondeau 2007; to appear), the authors accept a rate of use of either 85% or higher, or 17% or lower, as the thresholds for considering a speakers use of a variant to be categorical. Applying these thresholds here, this means that, of the nineteen adverbs occurring more than ten times in the data, eleven of them would be categorical in one variant position, while seven would be considered truly variable.

Lexical Adverb	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
bien (all)	0	-	100	65	0	-	65
tellement	0	-	100	11	0	-	11
trop	0	-	100	14	0	-	14
ensemble	0	-	0	-	100	20	20
longtemps	0	-	0	-	100	39	39
vite	0	-	0	-	100	20	20
toujours	0	-	98	212	2	5	217
assez	0	-	93	13	7	1	14
aussi	0	-	2	1	98	41	42
encore (both)	0	-	7	1	93	13	14
après	8	1	0	-	92	11	12
déjà	1	1	89	75	10	8	84
souvent	15	4	4	1	82	22	27
tout le temps	0	-	79	30	21	9	39
aujourd'hui	73	8	0	-	27	3	11
hier	30	3	0	-	70	7	10
peut-être	12	3	68	17	20	5	25
pas mal	0	-	47	14	53	16	30
plus	0	-	50	5	50	5	10

Taking all of this into consideration, the results in Table 5.3.2A suggest that, where the literature has identified specific placement tendencies associated with specific adverbs, these claims are generally, but not always, accurate in the aggregate. On the other hand, what the literature fails to detect is that many of the categories identified in Table 5.3.1 and Table 5.2 which are posited to explain variable adverb placement, are, in speech, made up just one, or one predominant, adverb, as in the case of adverbs of **Aspect** (*toujours*), **Motion** (*vite*), **Frequency** (*souvent*), and **Duration** (*longtemps*). Thus, placement tendencies claimed to be associated with the different adverb types can, for at least some classes, be more accurately attributed to the particular behavior of specific lexical adverbs grouped within those categories. Moreover, for all the discussion regarding variable placement according to adverb

class, and the care taken to identify lexical exceptions or limitations to these class-based tendencies, the literature fails to note that overall, most lexical adverbs show a strong, if not categorical, preference for one variant position over the others, and furthermore, that these preferences may not hold for all adverbs within the same category. Thus, the combined results from Tables 5.3.1 and 5.3.2A-B suggest that adverb placement is primarily lexically motivated.

5.3.3 Adverb Length

Table 5.3.3.A shows the distribution of variant use according to **Adverb Length**. Though not selected as significant to variant choice in Table 5.2, the distributional results are consistent with Brill (1987), in that the MID-VP variant is most common with shorter adverbs (1 or 2 syllables). Also consistent with the literature (Brill 1987; Grevisse 1993; Ollivier 1999), longer adverbs (3 syllables, 4 or more syllables) are less (in fact least!) likely to occur between the auxiliary and the participle.

Adverb Length	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
1 syllable	2	3	63	94	35	53	150
2 syllables	3	17	62	382	35	216	615
3 syllables	37	15	17	7	46	19	41
4 or more syllables	37	7	16	3	47	9	19
No exclusions.							

Of course, given the strong lexical tendencies observed above in Table 5.3.2A, it stands to reason that at least some of these effects may be attributed, here too, to an interaction with lexical identity; the data suggestive of such a possibility is summarized in Table 5.3.3B below, with relevant cells shaded.

Adverb Length	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
1 syllable							
<i>bien, mal, trop</i>	0	-	100	86	0	-	86
All others	5	3	13	8	83	53	64
2 syllables							
<i>toujours</i>	0	-	98	212	2	5	217
All others	4	17	42	170	53	211	398
3 syllables	37	15	17	7	46	19	41
4 or more syllables							
<i>différemment, directement, graduellement</i>	0	-	0	-	100	6	6
All others	54	7	23	3	23	3	13
No exclusions.							

Consider for instance *bien, mal* and *trop* which together account for 57% (N=86/150) of all the data in the one-syllable adverb category and for 91% of MID-VP variant use (N=86/94) among one-syllable adverbs. If these three adverbs are separated from the others, the strong preference for the MID-VP variant disappears, and the POST-V variant is most common (83%, N=53/64). Thus, the one-syllable adverbs are divided into two diametrically opposed sets, with *bien, mal* and *trop* favouring MID-VP placement, and the other one-syllable adverbs favouring POST-V placement. This shows that syllable length is not the explanatory factor here. A similar conclusion can be made in the case of two-syllable adverbs: if *toujours*, which accounts by itself for 35% of these adverbs, is considered on its own, use of the MID-VP variant among the other two-syllable adverbs drops to 42% (N=170/398) (from 62% in the amalgamated data shown in Table 5.3.3A). Thus, while the MID-VP variant may indeed appear to be more common than the other variants with shorter adverbs, the fact that these categories consist of lexical adverbs which are diametrically opposed in their variant preferences, means that the apparent effect of adverb length is misleading.

Likewise, variant distribution for adverbs which are four or more syllables long also seems attributable to the lexical adverbs occurring in this category. More specifically, two-thirds of POST-V variant use in this group are due to three *-ment* manner adverbs, *différemment*, *directement*, and *graduellement* (67% of POST-V variant use, N=6/9), which were shown in Table 5.3.2A to be independently associated with this variant. Once these three manner adverbs are separated from the others in their length group, the most common position for long adverbs is the PRE-SUBJ variant. Once again then, it would appear that the apparent length effects noted for longer adverbs are to a large extent due to particular variant preferences associated with specific lexical adverbs; closer inspection of the adverbs grouped in these categories reveals opposing placement tendencies among them.

Overall then, once the lexical items grouped in each length category are considered along with their variant preferences, the effects on variant use of **Adverb Length** suggested in Table 5.3.3A, and as reported in the literature, may in reality be epiphenomenal with the effect exerted by the **Lexical Identity of the Adverb**.

5.3.4 Adverb Specificity

According to Togeby (1984), adverbs which are temporally non-specific, and may express such notions as repetition and succession, are supposed to occur more frequently in the MID-VP position, while adverbs which mark a specific point in time are less likely to occur between the auxiliary and participle. While this factor group was not selected as significant to variant choice in the multivariate analyses in Table 5.2, the relative frequencies in Table 5.3.4A suggest support Togeby's (1984) claims in terms of adverb specificity.

Specificity	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	7	32	66	319	27	133	484
Specific	56	14	0	-	44	11	25
Non-specific	4	18	69	319	27	122	459

All Motion (N=20), Quantity (N=127), Degree (N=11), Manner (N=100), Modal (N=32), Evaluative (N=2), Speaker-oriented (N=4) and Domain (N=1) adverbs, as well as *aussi* (N=42) and ambiguous Manner/Quantity *bien* (N=1) were ultimately excluded from the quantitative component of this analysis, since they were neither predicted by Togeby et al.(1984) to be sensitive to this factor for placement, nor was it possible to objectively code them for this factor.

On the other hand, the effect suggested in Table 5.3.4A may again be reflective of the distributional tendencies associated with specific lexical adverbs, as shown in Table 5.3.4B below. In particular, the ‘**Specific**’ temporal adverbs *aujourd’hui*, *avant-hier* and *hier* are all independently claimed to be excluded from the MID-VP position, supposedly due to their having nominal properties. As such, it is perhaps not surprising that temporally **Specific** adverbs do not appear in this position in Table 5.3.4A. Likewise, variant use among **Non-specific** adverbs changes drastically when *toujours* is excluded from the calculations, with MID-VP placement dropping to 44%, and POST-V placement increasing to 48%. Thus, the results summarized in Table 5.3.2B suggest that here as well the labels for temporal specificity may more rightly be labels for other lexical factor categories.

Specificity	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
Specific	56	14	0	-	44	11	25
<i>aujourd’hui</i>	73	8	0	-	27	3	11
<i>avant-hier</i>	100	2	0	-	0	-	2
<i>hier</i>	30	3	0	-	70	7	10
<i>maintenant</i>	50	1	0	-	50	1	2
Non-specific	4	18	69	319	27	122	459
<i>toujours</i>	0	-	98	212	2	5	217
All others	7	18	44	107	48	117	242

Exclusions as indicated in Table 5.3.4A

5.3.5 Adverb Frequency

The multivariate results obtained in Table 5.2 suggested that **Adverb Frequency** is statistically significant to the selection of the MID-VP variant, with less frequent adverbs disfavoured this variant. While Table 5.3.5A summarizes variant distribution according to several frequency categories, ultimately these results motivated the binary coding system which was applied for the multivariate analyses. In particular they reveal that, generally speaking, adverbs whose lexical frequency in the subsample corpus can be considered less common (<199) occur after the participle (POST-V), while those for which the lexical frequency is higher (>200) tend to occur in the MID-VP position, consistent with Ollivier's (1999) predictions.

Frequency	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
	5	42	59	486	36	297	825
1-3	10	1	0	-	90	9	10
4-9	44	8	0	-	56	10	18
10-24	21	4	11	2	68	13	19
25-49	33	4	0	-	67	8	12
50-99	4	1	41	11	56	15	27
100-199	4	4	9	9	88	92	105
200-499	5	11	63	154	32	78	243
500-999	3	9	76	241	21	67	317
1000+	0	-	93	69	7	5	74
No exclusions.							

Again, however, once these frequency categories are unpacked to ascertain the lexical adverbs they contain, the familiar lexical effect emerges, as shown in Table 5.3.5B. For instance, the most frequent category (1000+) contains only two lexical adverbs, *bien* and *plus*; the strong predilection for MID-VP placement of the former has already been mentioned. Also strongly associated with the MID-VP variant, the adverb *toujours* accounts for the vast

majority of tokens found in the 500-999 category, and *déjà* makes up half of the tokens in the 200-499 category; when these two adverbs are separated from the others in their respective groups, the frequency of the MID-VP variant (predictably) decreases. So, it would appear that the effect of frequency on use of the MID-VP variant may be more accurately ascribed to a preference for this variant among certain lexical adverbs, which just happen to fall into certain frequency categories.

Frequency	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
1-3	10	1	0	-	90	9	10
4-9	44	8	0	-	56	10	18
10-24	21	4	11	2	68	13	19
25-49	33	4	0	-	67	8	12
50-99	4	1	41	11	56	15	27
100-199	4	4	9	9	88	92	105
200-499	5	11	63	154	32	78	243
<i>déjà</i>	1	1	89	75	10	8	84
All others	6	10	50	79	44	70	159
500-999	3	9	76	241	21	67	317
<i>toujours</i>	0	-	98	212	2	5	217
All others	9	9	29	29	62	62	100
1000+	0	-	93	69	7	5	74
<i>bien</i>	0	-	100	65	0	-	65
<i>plus</i>	0	-	44	4	56	5	9
No exclusions.							

5.3.6 Lexical Identity of the Auxiliary

While the **Lexical Identity of the Auxiliary** was not selected as significant to variant choice, the distributional results shown in Table 5.3.6 do align with those reported in Brill (1987), wherein an auxiliary *avoir* was found to favour the MID-VP variant, though the effect is not large. Also, nearly all of the tokens for (the becoming notorious) *toujours*, *déjà* and

bien occur with *avoir*, such that when they are separated out, the apparent favouring effect disappears.

Auxiliary	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
	5	42	59	486	36	297	825
<i>avoir</i>	5	33	61	413	34	231	677
<i>toujours, déjà, bien</i>	0	1	96	352	4	13	366
All others	10	32	20	61	70	218	311
<i>être</i>	6	9	49	73	45	66	148
No exclusions.							

5.3.7 Verb Phrase Morphology

Table 5.3.7A shows adverb distribution according to tense, mood and voice of the verbal construction, a factor group which was selected as statistically significant to variant choice in Table 5.2. Consistent with Brill's (1987) findings and the results of the multivariate analyses, these distributional findings show the MID-VP variant to be associated with present/simple passives, and the *plus-que-parfait*. Likewise, she reported the MID-VP variant to be disfavoured in past infinitive constructions, also suggested by the results in Table 5.3.7A (but this factor was excluded from the multivariate analyses). On the other hand, Brill found that the MID-VP variant was disfavoured by past/compound passives, the opposite of which was reported above and what is suggested by the distributional results below.

Tense/mood/voice	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
present/simple passives	9	4	69	32	22	10	46
past/compound passives	4	1	62	16	35	9	26
<i>passé compose</i>	4	26	59	399	37	249	674
<i>plus-que-parfait</i>	13	6	53	24	33	15	45
conditional past	18	5	46	13	36	10	28
past infinitives	0	-	33	2	67	4	6
No exclusions.							

Still, some of these effects might be due to the co-occurrence of certain verbal constructions with specific lexical adverbs which were shown above to be more likely in a specific variant position. For example, nearly all (88%, N=14/16) of the MID-VP occurrences of past/compound passives co-occur with lexical adverbs showing a strong independent preference for this variant, namely, *bien*(8), *déjà*(3), *toujours*(2), and *trop*(1). Likewise for MID-VP use among present/simple passive constructions; most occurrences are with adverbs independently shown to be associated with this variant (*bien*(9), *mal*(5), *toujours*(2), *trop*(7); 72%, N=23/32). And again, *toujours* accounts for much of the data in the *passé composé* constructions. These lexical effects, which are summarized in Table 5.3.7B, undermine the apparent effect of verb tense/mood/voice on variable adverb placement.

Tense/mood/voice	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
present/simple passives							
<i>bien, mal, toujours, trop</i>	0	-	96	23	4	1	24
All others	18	4	41	9	41	9	22
past/compound passives							
<i>bien, déjà, toujours, trop</i>	0	-	93	14	7	1	15
All others	9	1	18	2	73	8	11
passé composé							
<i>toujours</i>	0	-	99	204	1	3	207
All others	6	26	42	195	53	246	467
plus-que-parfait	13	6	53	24	33	15	45
conditional past	18	5	46	13	36	10	28
past infinitives	0	-	33	2	67	4	6
No exclusions.							

5.3.8 Type of Verbal Head

Although the factor of **Type of Verbal Head** was not selected in the multivariate analysis, the distributional results shown in Table 5.3.8 are consistent with Brill's (1987) findings. More specifically, they suggest that the MID-VP variant is more likely to be used

with simple verbal heads, while the POST-V variant is more likely with verb phrases (though these are rare in the data). While the effect here is small, it is also influenced by the highly frequent *toujours*, which only ever occurs with simple verbal heads. Once the effect of this adverb is factored out, the effect essentially disappears.

Verbal Head	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
Simple	5	41	59	480	36	289	810
<i>toujours</i>	0	-	98	212	2	5	217
All others	7	41	45	268	48	284	593
Verb phrase	7	1	40	6	53	8	15

5.3.9 Adjectival Adverb

According to Grevisse (2011, §972a), (monosyllabic) adjectives functioning as adverbs are placed after the participle; here, it is found that all (eleven) adjectival adverbs⁸ are categorically placed after participle, and this regardless of their syllabicity (as in the disyllabic *correct*, *direct*, *exprès*, *pareil* and *sévère*; the trisyllabic *effrayant*). Because of this categoricity, this factor group was excluded from the multivariate analyses summarized in §5.2.

Adjectival Adverb	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
Adjectival	0	-	0	-	100	45	45
Not adjectival	5	42	62	486	32	252	780

⁸ The adjectival adverbs include: *correct*(1), *direct*(1), *dur*(1), *effrayant*(1), *exprès*(3), *fort*(7), *gros*(4), *pareil*(3), *raide*(2), *sévère*(2), and *vite*(20).

5.3.10 Adverb Modification

In the syntactic literature, short adverbs, like *bien* and *mal* are claimed to occur only in the MID-VP position, unless they are modified (or more complex), in which case they can occur after the participle (Laenzlinger 1998; Alexiadou 1997). This hypothesis was tested for all the adverbs, and Table 5.3.10A suggests that when modified, adverbs are more likely to occur after the verb. Indeed, this factor group was selected as significant to variant choice as shown in Table 5.2, with modified adverbs disfavoured the MID-VP variant.

Adverb Modification	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
Not modified	5	39	63	476	33	250	765
Modified	5	3	17	10	78	47	60
No exclusions.							

Still, in keeping with the practice above of considering whether apparent effects for factors might be linked to the lexical adverbs found under each label, closer inspection of the data suggests that this is the case here too, as summarized in Table 5.3.10B. Of course, there is the now familiar effect of *toujours*, which was never modified in the data, and so which inflates rate of MID-VP use for this factor. In the modified group, all of the POST-V occurrences are with adverbs which have been shown to be independently associated with this variant. These include *longtemps* (N=7), *souvent* (N=8), *-ment* manner adverbs (N=6), and adjectival adverbs (N=20). Since each of these occur exclusively (or almost so, i.e. *souvent*) in the POST-V position even when not modified, the apparent effect of adverbial modification observed in Table 5.3.10A is likely epiphenomenal of lexical factors as well.

Adverb Modification	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
Not modified	5	39	63	476	32	250	765
<i>toujours</i>	0	-	98	212	2	5	217
All others	7	39	48	264	44	245	548
Modified	5	3	17	10	78	47	60
<i>longtemps</i>	0	-	0	-	100	7	7
<i>souvent</i>	0	-	0	-	100	8	8
<i>-ment</i> manner adverbs	0	-	0	-	100	6	6
adjectival adverbs	0	-	0	-	100	20	20
All others	16	3	53	10	32	6	19
No exclusions							

5.3.11 Complements to the VP

According to Togeby (1984), the presence of verbal complements may be associated with adverb use between the auxiliary and the participle. Although this factor group was not selected as significant to variant choice in the multivariate analyses, the results shown in Table 5.3.11 are suggestive of an effect of the verbal complement in the data considered here. However, while Togeby (1984) suggests it is the mere presence of a complement which will affect placement, here the effect is apparently more appropriately attributable to the length of the complement than simply to its presence. More specifically, the MID-VP variant is about equally as likely to be used when there are shorter complements as when there is no verbal complement at all, though this variant certainly seems to be more common when longer complements are present (i.e. 68% among complements of 3 or more words). Of course though, as repeatedly shown above, this effect may be influenced by the lexical adverbs with which longer complements occur. More specifically, most occurrences of the MID-VP variant with complements of three words or more happen to be with *toujours* and *déjà* (80%, N=118/148) both of which were shown in Table 5.3.2A to be strongly associated with the MID-VP variant in general.

	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	41	58	454	37	291	786
None	5	14	55	168	41	126	308
1 word	5	5	56	56	39	39	100
2 words	5	8	52	82	43	70	160
3 or more words	6	14	68	148	27	56	218
<i>toujours, déjà</i>	0	-	98	118	2	3	121
All others	14	14	31	30	55	53	97

Excluded are 39 tokens where the presence/length of the complements could not be determined due to such factors as false starts, interruptions, non-transcribed incomprehensible material etc.

5.3.12 Distributional results summary

Table 5.3.12, COLUMN A, gauges the extent to which the findings reported here for variable adverb placement according to the eleven linguistic factors are consistent with claims in the literature. COLUMN B in Table 5.3.12 indicates which of the factor effects observed here can be (at least partly, if not entirely) attributed to the disproportionate distribution of lexical adverbs across the different factors, given that lexical adverbs show specific placement preferences. Generally speaking, COLUMN A in Table 5.3.12 suggests that variant use in speech appears at first-glance to be remarkably consistent with what has been claimed in the literature in terms of linguistic factors. On the other hand, as repeatedly argued above, and as summarized in COLUMN B, most of these effects can be accounted for by considering the lexical adverbs which make up the different (supposedly) influencing categories, and the strong variant preferences associated with these different lexical adverbs. Crucially, not only does the adverb literature fail to consider whether these purportedly influential linguistic factors might interact with specific lexical adverbs, they also fail to identify the strong placement predilections of lexical adverbs for specific variants, beyond some cursory observations. Indeed, the distributional results suggest that variable adverb

placement is first and foremost a lexically constrained phenomenon, and this undermines the results obtained in the multivariate analyses reported earlier.

Factor	COLUMN A	COLUMN B
	Are the general factor effects consistent with literature?	Are lexical factors implicated in the factor effects?
Adverb Type	mostly	YES
Adverb Length	YES	YES
Lexical Identity of the Adverb	mostly	n/a
Adverb Specificity	YES	YES
Adverb Frequency	YES	YES
Lexical Identity of the Auxiliary	YES	YES
Verb Morphology	mostly	mostly
Type of Verbal Head	YES	mostly
Adjectival Adverb	YES	no
Adverb Modification	YES	YES
Complements to the VP	partly	partly

5.4 Multivariate analyses: Take two

While the distributional results presented in §5.3 above indicated that many of the apparent factor effects were consistent with those reported in the literature, closer inspection revealed that some of these effects may be more accurately attributed to the co-occurrence of certain factors with specific lexical adverbs which are themselves independently affiliated with MID-VP use. This means that the accuracy of the results obtained in the initial multivariate analyses presented in Table 5.2 needs to be reassessed. As such, additional multivariate analyses were undertaken in which some of the potentially confounding lexical items were excluded. As in Table 5.2, the PRE-SUBJ variant is excluded from the analyses due to sparse and poorly distributed data. Also as above, **Degree** adverbs were recoded with **Quantity** adverbs, since they behaved similarly in terms of overall rate of use in the MID-VP

position. Likewise, **Motion** adverbs were recoded with **Manner** adverbs since the former contained just one lexical adverb (*vite*) which behaved like all of the other **Manner** adverbs (except *bien/mal*) and which, in some typologies, is considered to be a **Manner** adverb anyhow. Also, since multivariate analyses cannot be run with categorical factors, the groups of **Temporal**, **Duration**, **Domain**, **Evaluative**, and **Speaker-oriented** adverbs are excluded from the factor group for **Adverb Type** for all of the runs shown in Table 5.4 (as they were in Table 5.2), since they never occurred in the MID-VP position.⁹ Finally, here again the factor groups **Adjectival Adverbs** and **Lexical Identity of the Adverb** were not included in the runs, since the former were categorically POST-V, and, as noted in §5.3.2, most lexical adverbs were also categorical in terms of placement.

The results for the additional multivariate analyses are shown in Table 5.4. In RUN #1, the categorically POST-V adjectival adverbs were entirely excluded, to discover whether they may be confounding the results obtained in Table 5.2 for **Adverb Modification**, since they accounted for almost half of the data in the modified category (43%, N=20/47). Indeed, RUN #1 shows that, as compared to the results in Table 5.2, the factor **Adverb Modification** loses significance, suggesting that it is the co-occurrence of adjectival adverbs with modifiers which resulted in the apparent conditioning effect reported above in Table 5.2 for this factor. Similarly, in order to consider whether the factor of **Adverb Frequency** was also sensitive to the lexical effects, in RUN #2, the adverbs *toujours*, *déjà* and *bien* are removed, as they are all strongly or categorically associated with the MID-VP variant, and together account for half (50%, N=366/739) of all the data, and three-quarters (72%, N=352/486) of all MID-VP use.

⁹ Again, however, parallel runs in which Temporal, Duration, Domain, Evaluative, and Speaker-oriented were excluded entirely (and not just from the factor group **Adverb Type**) resulted in the same factor effects as shown in Table 5.4.

Removing these three adverbs suggests that the statistically significant conditioning effect associated with **Adverb Frequency** in Table 5.2 is more accurately ascribed to the combined lexical effects of these three adverbs, since once they are removed from the analyses, this factor also fails to reach statistical significance. Furthermore, *toujours*, *déjà* and *bien* also interact with the results for **Verb Phrase Morphology**, since their exclusion results in a change in the direction of the conditioning effects for some of the factors, most notably among past/compound passives (from favouring to disfavouring). Finally, and remarkably, note that the overall probability of the MID-VP variant (as indicated by the **Input** values) drops from .819 in RUN #1 to a mere .330 in RUN #2. This finding further highlights the important influence of these highly frequent and strongly MID-VP -preferring lexical adverbs; once they are factored out, the overall frequency of MID-VP placement decreases substantially.

Table 5.4 Variable rule analysis of MID-VP variant use according to LINGUISTIC factors with lexical adverbs excluded						
	RUN #1			RUN #2		
	EXCLUDES adjectival adverbs			EXCLUDES <i>toujours, déjà</i> and <i>bien</i>		
Input	.812	%	486/739	.330	%	134/418
	Prob.	%	N/N	Prob.	%	N/N
Adverb Type						
Aspect	.70	93	317/342	.88	73	30/41
Modal	.47	77	20/26	.89	77	20/26
Quantity and Degree	.41	77	101/132	.82	67	74/110
Manner (incl. Motion)	.29	54	44/82	.06	8	7/84
Frequency	.01	6	2/35	.15	6	2/35
<i>Range</i>	69			83		
Verb Morphology						
present/simple passives	.79	80	32/40	.96	69	20/29
past/compound passives	.61	76	16/21	.48	27	3/11
<i>plus-que-parfait</i>	.58	67	24/36	.67	32	7/22
conditional past	.50	68	13/19	.51	55	12/22
<i>passé composé</i>	.47	65	399/617	.42	27	90/329
<i>Range</i>	32			54		
Adverb Frequency						
200+	.58	77	464/606	[]	45	112/249
< 199	.20	17	22/133	[]	13	22/170
<i>Range</i>	38					
Adverb Modification						
No	[]	68	473/693	.54	35	124/356
Yes	[]	27	10/37	.26	15	8/55
<i>Range</i>				38		
Square brackets indicate that factor was not selected as significant.						
Factors never selected as significant: Adverb Length, Lexical Identity of the Auxiliary, Type of Verb Head, Verb Specificity, Presence/length of complements						

Overall, while the results of the preliminary multivariate analysis reported in Table 5.2 seemed to be confirmed by the distributional results, and together these results were largely consistent with what was reported in the literature, a closer review of the items which make up the different categories indicated that lexical effects are implicated. So, although **Adverb Modification** and **Adverb Frequency**, which are both cited as influencing adverb placement, are initially found to be statistically significant to variant choice in Table 5.2,

these factor turns out to be sensitive to the influence of specific lexical adverbs or groups of adverbs, such that when these adverbs are excluded from the analyses, the conditioning effects disappear.

Ultimately, the objective of this exercise was to attempt to obtain the “true”, i.e. *independent* results for variable adverb placement, free from lexical contamination. When the lexical factors are factored out, only two linguistic factors remain statistically significant to selection of the MID-VP variant, **Adverb Type** and **Verb Phrase Morphology**. The potential role of the latter in conditioning variant use figures in neither the prescriptive nor theoretical literature, but was tested by Brill (1987) in her variationist study of the same variable. Here, this factor is found to be sensitive to the lexical effect, since it experiences various changes in factor probabilities depending on which lexical adverbs are included in the analyses. Furthermore, since the final results obtained for this factor group from RUN #2 only partially align with what Brill (1987) reported, the possibility that lexical effects may be implicated in her findings must be acknowledged. In the case of **Adverb Type**, while the results in Table 5.2 would largely confirm a cursory assessment of the role of **Adverb Type** in adverb placement, and while this factor exerts the most influence on variant use in each multivariate analysis, consonant with its prominence in the literature, the idiosyncratic placement tendencies (and varying overall frequencies) of specific lexical adverbs which are grouped in these categories must not be overlooked. And while the effect of **Adverb Type** on selection of the MID-VP variant reported in RUN #2 of Table 5.4 is very strong, and remains mostly consistent with what is reported elsewhere (i.e. **Aspectual**, **Modal**, **Quantity** and **Degree** adverbs are expected to favour MID-VP placement) lexical effects linger: *souvent* accounts for most of the **Frequency** adverbs (N=23/35), *tout le temps* most of the **Aspectual**

adverbs (N=39/42), *peut-être* most of the **Modal** adverbs(N=22/26), and *mal* is the only **Manner** adverb to occur in the MID-VP position.

Taken together then, while the results of the multivariate analyses generally confirms the factor effects reported in the literature, this is only the case when these effects are considered on a superficial level; a more meticulous investigation reveals important interactions between factor groups and lexical adverbs, so much so that the latter must be necessarily acknowledged as a key determinant of adverb placement.

5.5 Theoretical linguistics comparison

In Chapter 3, some attention was given to identifying testable claims emerging from a few of the prominent syntactic approaches to adverb placement. Ultimately, these claims were operationalized in three of this study's factor groups, namely, **Adverb Type**, **Lexical Identity of the Adverb**, and **Adverb Modification**. This section revisits the hypotheses drawn from those syntactic analyses by situating them with respect to the speech data results for these factor groups.

First of all, a review of the results shown in Tables 5.3.1, 5.3.2A, 5.3.10A, and 5.4 reveals that in some cases the syntactic analyses considered in §3.4 were indeed accurate in predicting where adverbs may or may not occur. For instance, the syntactic approaches are essentially correct in expecting adverb placement to be largely dependent on **Adverb Type**, as this factor was repeatedly selected as the statistically significant to MID-VP use in the multivariate analyses summarized in Tables 5.2 and 5.4, even when some of the lexical effects were factored out, and always had the highest range among the statistically significant factor groups in each of the different analyses. In terms of specific **Adverb Types**, both

Cinque (1999) and Laenzlinger (1998) predict variable placement of frequency adverbs,^{10,11,12} which, while extremely limited, is found to occur in the data. Laenzlinger (1998) is also accurate in claiming that nominal temporal adverbs (e.g. *hier*, *aujourd’hui*) will never occur in the MID-VP position¹³ and that there will be no PRE-SUBJ uses of aspectual VP adverbs (which for him includes quantity, degree, and positive/assertive¹⁴ adverbs). With respect to the behaviour of specific **Lexical** adverbs, Cinque’s (1999) theory accurately expects the temporal adverb *hier* and the manner adverb *vite*¹⁵ to be absent from the MID-VP position, while correctly predicting invariance in the distribution of *bien* and *mal*¹⁶ in the MID-VP position. Likewise for Abeillé and Godard (2000; 2001; 2003; 2004), who maintain invariable MID-VP use for the (lexically-specified) ‘*lite*’ adverbs *bien*, *mal*, *presque* and *trop*. Finally, in terms of **Adverb Modification**, Alexiadou’s (1997) analysis accurately suggests that an internally non-complex (i.e. non-modified) manner adverb *bien* will only occur in the

¹⁰ On the other hand, in keeping with the tenet of form/function symmetry, Cinque (1999) attributes distinct functions to (at least some of) these cases. This is further discussed below.

¹¹ In the data here, this equates to *souvent* and *encore*, though only the former is explicitly identified as a frequency adverb in Laenzlinger’s (1998) analysis.

¹² On the other hand, Laenzlinger (1998) seems to contradict himself on this point. In particular, he first claims that frequency adverbs are in the specifier position of an aspect projection which is associated to the Inflection (IP) domain (Laenzlinger 1998:89). Since the IP domain is higher than the VP domain, it would be expected that frequency adverbs would occur invariably before the participle, since the participle remains in the VP domain (either staying in V⁰ or moving to the head position of one of the two other projections (AgroP or AspP_{VP}) which he assumes are part of the VP domain, following Belletti’s (1990) analysis). He later develops an analysis in which frequency adverbs occur in the VP domain, in the specifier position of AspP_{VP},

(Laenzlinger 1998:96) which would then allow for their variable placement in the MID-VP and POST-V positions.
¹³ He claims that the only kind of temporal adverbs which can occur in the MID-VP position are non-nominal, like *réemment*.

¹⁴ Examples he provides of positive/assertive adverbs include *toujours*, *réellement*, and *vraiment* (Laenzlinger 1998:42, 45).

¹⁵ Actually, Cinque’s (1999) claim regarding this tendency pertains to the English adverb *fast*, but nonetheless holds for its French equivalent *vite* in the data analysed here, as there were no cases like *j’ai vite fait ça* (although, there were cases where *vite* occurred before a participle, but not in compound tense construction, as in “Les musiciens vont partir **vite faite**.” (73:1374).)

¹⁶ The only exception to this was in the case of *se faire mal/faire mal* (N=7), in which the adverb *mal* always occurred after the past participle. However, since these are best analyzed as invariable fixed expressions, they were ultimately excluded from the analyses. No other occurrences of *mal* with *faire* were found in the data, though such cases would have been retained had they existed (e.g. *J’ai (mal) fait (mal) le gâteau (mal)*).

MID-VP position,¹⁷ while Laenzlinger's (1998) proposals correctly allow this same adverb to occur before the participle even when it is modified (contra Alexiadou).

Despite these accuracies, the syntactic approaches all make some claims which are not necessarily consistent with what was observed in the data. For instance, many of the theoretical claims essentially predict categorical use or absence of certain **Adverb Types** in certain positions, which the results in Tables 5.3.1 and 5.4 indicate is often not the case. For her part, Alexiadou's (1997) analyses suggest that aspectual/quantificational and frequency adverbs should always occur before the participle, though here adverbs from each of these categories do occur (in some cases, predominantly) in the POST-V position. Also, since her theory places temporal adverbs in the complement position of either TP (via overt movement) or VP (with covert movement to TP), with the participle either staying in V⁰ or moving to Voice⁰ (both of which are lower than TP), it could be expected that temporal adverbs would show some variability with respect to their placement around the participle, which is not the case since they are entirely absent from the MID-VP position in the data (and this meant they had to be excluded from the factor group of **Adverb Type** in the multivariate analyses). Furthermore, while Alexiadou (1997) and Laenzlinger (1998) both expect temporal adverbs in the PRE-SUBJ position to (always) occur with comma intonation, in the data analysed here, the majority do not (80%, N=20/25).¹⁸

¹⁷ While Alexiadou's theory predicts that all internally non-complex manner adverbs will occur before the participle, it is not clear whether the group of *-ment* manner adverbs are considered complex or not. If they are considered internally complex (possibly due to being derived?) then her theory holds, since none of the *-ment* manner adverbs occurred in the MID-VP position. On the other hand, given the association the author draws between complexity and prepositional phrases, if complexity is related to the adverb being part of a small phrase-type construction (i.e. modified by other adverbs), then her complexity theory is incorrect, since even the unmodified *-ment* adverbs extracted in the data do not occur before the participle.

¹⁸ For Laenzlinger (1998), this expectation of comma intonation with PRE-SUBJ use also applies to locational adverbs, though it too is not supported by the data here, as the two cases of PRE-SUBJ *ici* do not co-occur with comma intonation.

A few of Cinque's (1999) claims regarding **Adverb Type** also falter. For instance, he tentatively suggests that quantitative adverbs (which he refers to as 'measure' adverbs) will occur in the same projection as occupied by *bien* (i.e. Spec-Voice) in his hierarchy. Given his claim that the participle does not raise beyond Voice⁰, his theory would thus predict that quantity adverbs should all categorically occur before the participle, which was not found to be the case in the spontaneous speech data analysed here (although they did in fact favour the MID-VP variant in the multivariate analyses shown in Table 5.4).¹⁹ Similarly, his analysis fails to account for the observed distributional differences between *bien/mal* and all of the other *-ment* manner adverbs. In particular, while he is correct in expecting invariant MID-VP use of *bien/mal*, his predictions for *-ment* manner adverbs require more careful consideration in terms of their accuracy, since they are less clear. First, he suggests that the projection occupied by *bien/mal* in his hierarchy (VoiceP) is the same projection occupied by "manner adverbs in general" (Cinque 1999:7); if this is so, then his predictions are not correct in the case of *-ment* manner adverbs, since the data revealed categorical POST-V use of these items, even though *bien/mal*'s projection coincides with the MID-VP position.²⁰ On the other hand, Cinque also indicates that manner adverbs figure among the group of *circumstantial* adverbs, which do occur after the participle (hence, POST-V) and which, furthermore, are not possible in the MID-VP position. Thus, if he is wrong in suggesting that "manner adverbs in general" (Cinque 1999:7) occur in VoiceP, and/or if all of the *-ment* manner adverbs extracted in this

¹⁹ Alternatively, on the basis of an example provided by Vinet (1995), Cinque (1999:173, fn31) suggests that, for some speakers, the specific lexical item *beaucoup* might belong to the same class as his groups of completive adverbs. In this case, variable MID-VP and POST-V placement could be expected for this adverb given his proposed hierarchy of projections (i.e. that there are two projections available for completive adverbs). It is not clear whether he would also allow other quantity adverbs to be classified with completives for some speakers.

²⁰ Unless, of course, the *-ment* adverbs are all either focused or, contradictorily, de-accented, in which case Cinque (1999) would allow them in the POST-V position (even if they typically occur in the same projections as *bien/mal*).

study were *circumstantial*, then the finding of categorical POST-V use of these adverbs in the data here is potentially accounted for. On yet the other hand, while he indicates that circumstantial adverbs are to be placed after the verb's complements, at least two of the *-ment* manner adverbs do occur between the participle and its complements, as shown in (5.1).²¹ This suggests that either these two adverbs are not circumstantial in these instances, and that their POST-V uses are unexpected (i.e., they should occur in the same projection as *bien/mal*, and so occur in the MID-VP position), or that circumstantial adverbs need not follow the verb's complements after all, contra his assertion.

- (5.1) a. Mais celui qui a faite **vraiment** le coup [...] Moi me semble qu'il mériterait un bon châtement. (90:1303)
- b. Si ils ont parlé **directement** au propriétaire ou comment ils se sont arrangés. (73:410)

Furthermore, regardless of whether *-ment* manner adverbs can occur in the same projection as *bien/mal*, and/or whether the *-ment* manner adverbs are *circumstantial*, his theory does not capture the unmistakable distributional preferences observed in speech for *-ment* manner adverbs vs. *bien/mal*. In other words, if *-ment* manner adverbs can occur in the same projections as *bien/mal*, then it is not obvious why they are categorically used in the POST-V position in speech. On the other hand, if *-ment* manner adverbs cannot occur in the same projection as *bien/mal*, then it is not clear in his theory why there would be a distinction between these two groups of manner adverbs, with *bien/mal* entitled to their own projection, but all *-ment* manner adverbs considered *circumstantial* adverbs and denied their own projection.

²¹ There were no verbal complements in the other occurrences.

In addition to issues with explaining variant use among quantity and manner adverbs, Cinque’s claims regarding the (categorical) placement behaviour of some of his other classes may need to be amended, given some counterexamples found in the data. In particular, while overall the quantitative results do support Cinque’s predictions that the adverbs in the classes represented by *franchement*_{SPEAKER-ORIENTED},²² *peut-être*, *probablement*, *déjà*, *proche*_{DEGREE}²³ and *toujours* should all always occur somewhere before the participle, note that each of these lexical adverbs have at least one occurrence in the POST-V position, as shown in (5.2). Therefore they are not categorically absent from this POST-V position, as Cinque expects. While Cinque does allow POST-V placement²⁴ of the first three of these adverbs when they are “de-accented²⁵” or used parenthetically, their occurrences in (5.2a-c) do not suggest that such processes are involved.²⁶ Cinque would also allow POST-V use of *toujours* and *déjà* in situations where the entire VP, including VP-internal post-complement circumstantial adverbials, is raised above the adverb; however, this does not apply in (at least) (5.2f), since the circumstantial adverbial *dans Hull* remains lower than *toujours*.²⁷

²² He refers to this class as ‘Mood_{speech act}’.

²³ This adverb would coincide with Cinque’s class of ‘Asp_{prospective}’ adverbs, which he associates with English adverb *almost*.

²⁴ Specifically, he allows POST-V placement of de-accented or parenthetical adverb after the verb’s complements and any other VP-internal circumstantial adverbials, unless the latter are themselves de-accented or parenthetical.

²⁵ In his examples of de-accented adverbs, they occur preceded by commas, which, as explained in earlier chapters, are generally taken to indicate comma intonation/parentheticality in discourse. It is not clear whether he considers parentheticality and de-accentuation to be the same or distinct phenomena.

²⁶ Lack of de-accentuation was confirmed by impressionistically reviewing the prominence/intonation contours of the phrases in question in the original recordings using the software program Sound Studio 3.2 (Felt Tip Inc 2011).

²⁷ While Cinque (1999:16) explains that an adverb like *toujours* should, when de-accented, follow VP-internal post-complement circumstantial adverbials, which includes locatives like *dans Hull*, if the circumstantial adverbials are themselves de-accented, then they can come at the very end of the sentence after adverbs like *toujours*. In the example in (5.2f), the intonation contours obtained from the original recordings actually that *dans Hull* is more accented than *toujours*, meaning that *toujours* should come after the prepositional phrase, given Cinque’s account.

- (5.2) a. Ça m'a faite un coup **franchement** quand- ça faisait pas du- ça faisait pas du bien de recevoir ça dans le dos. (90:364)
- b. Quand-que les- les frigos ils ont sorti là, bien on a été un des derniers **peut-être** à les avoir. (101:345)
- c. Si tu tues un policier c'est parce tu es engagé **probablement** dans une crocherie d'avance. (100:602)
- d. Le gros feu qu'il y avait eu **déjà**. (90:153)
- e. J'ai été dans une assemblée moi, puis ils m'ont mis dehors bien **proche**. (105:2045)
- f. Peut-être parce j'ai vécu **toujours** dans Hull ou quelque chose. (94:1451)

So, while the examples in (5.2) may be exceptions to the trends found in the data, and trends which can be seen as accurately predicted by Cinque, they cannot be dismissed or ignored. Rather, these counter-examples are at odds with Cinque's predications of categorical placement of these adverbs. Ultimately, cases like those in (5.2) must be acknowledged and accounted for.

Besides representing counter-examples to Cinque's (1999) analysis, POST-V uses of the **Lexical** adverbs²⁸ *toujours* (5.2f), *plus* (5.3a), and *vraiment* ((5.1a) above) also contradict Abeillé and Godard's (2000; 2001; 2003; 2004) assertions. Likewise, while Laenzlinger (1998) claims that *beaucoup* is ungrammatical when it occurs after the participle, it was not excluded from the POST-V position in the data, as shown in (5.3b).^{29, 30} Again, even if these are exceptions to trends, and trends correctly identified by these authors, such actual cases do

²⁸ Cinque's (1999) claims discussed immediately above can be taken to apply either to **Adverb Type** or **Lexical Identity of the Adverb**.

²⁹ One of the other two cases of POST-V *beaucoup* co-occurred with both comma intonation and with use of the same adverb in the MID-VP position. The third case occurred without comma intonation in a negative polarity sentence: "Mais on a pas eu de contact **beaucoup**" (117:1936).

³⁰ See also footnote 11 above; namely, if frequency adverbs are located in an aspect projection found in the IP domain, as Laenzlinger (1998) claims at one point in the analysis, then his theory would also incorrectly predict invariable use of *souvent* (and *encore*, *parfois*) in the MID-VP position, which was certainly not found to be the case in the data analysed here.

need to be acknowledged, given that they call into question the theoretical predictions of categorical adverb distribution.

- (5.3) a. Bien, mon père l'a connue **plus** que nous-autres lui. (77:155)
b. Son travail, c'est ça qui l'a aidée **beaucoup**. (117:1879)

Finally, in terms of **Adverb Modification**, Alexiadou's arguments seem to suggest that complex, or modified, instances of the manner adverb *bien* will not occur before the participle, though both cases of modified *bien* (both as quantity interpretation) were found in the MID-VP position, albeit in simple passive constructions.³¹ Note also that *bien*'s antonym, *mal*, also occurred three times with modification in the MID-VP position with passive constructions. For his part, Cinque (1999:7) claims that POST-V use of manner adverbs is only allowed when they are “modified, coordinated, or focused” though none of the *-ment* adverbs in this position meet these criteria.

Beyond these discrepancies, there are two other issues which the reviewed syntactic approaches fail to properly address. First of all, there are distinct positional preferences even for adverbs which are expected to be variable, as in the case of the frequency adverb *souvent*.³² In particular, this adverb is found to be most frequent in the POST-V position (82%, N=22/27), with PRE-SUBJ placement a distant second (15%, N=4/27) and MID-VP placement rare (N=4%, 1/27). While both Cinque (1999), and (in one interpretation of his theory,)

³¹ Given the arguably semi-adjectival status of past participles when used in passive sentences, these two attested pre-participle uses of modified *bien* may not necessarily constitute evidence against Alexiadou's arguments. On the other hand, the third case of pre-participle use of modified *bien*, which occurred in the negative polarity sentence shown in (a), does challenge her claim.

a) Ça a l'air que comme brasserie ça a pas si bien marché (73:1359)

³² Here, *encore* was also classified as a frequency adverb, even though Cinque considers this adverb to be “repetitive.” Nonetheless, the arguments developed in this section for use of *souvent* should hold for variable use of *encore*.

Laenzlinger (1998) predict this adverb's placement to be variable, neither of the analyses can predict the relative distribution of this adverb in these different positions. Furthermore, given that there are more landing spots for a raising participle below than above the specifier position in which Laenzlinger's (1998) theory locates frequency adverbs, and given that his theory fails to posit a mechanism for determining where the participle might land, why, or how often, Laenzlinger's (1998) analysis would actually predict *souvent* to be most frequent in the MID-VP position, all things being equal. A similar critique can be made of Cinque's (1999) analysis. Identification of these frequency patterns for adverbs which are expected to be variable is thus an important component absent in the theoretical syntactic approaches.

Finally, other than the accuracies (and inaccuracies!) noted above for the expected placement tendencies of some specific lexical adverbs (e.g. Abéillé & Godard 2000; 2001; 2003; 2004 regarding *bien, mal, presque* and *trop*; Laenzlinger 1998 regarding *hier, aujourd'hui.*), the important role of the **Lexical Identify of the Adverb** in determining adverb placement is largely overlooked. Specifically, regardless of the accuracy of the predictions concerning adverb types, the reviewed analyses fail to acknowledge that there may be differences in adverb placement preferences among the different adverbs classified within a given type. In fact, where variable adverb placement is acknowledged for an adverb type, the only apparent explanation offered for this variability is verb movement (or in a small subset of cases, an interaction with modification), when the data here would suggest that this variability may be accounted for by differences in placement preferences among lexical adverbs of the same 'type'. Admittedly, Cinque's (1999) theory seems to predict at least some of these idiosyncratic preferences, and so, among the approaches reviewed here, it would be the one most supported by this study's findings. However, his accuracy in this

matter would be due to his positing so many adverb types, and adverb types which generally contain only a few (if even more than one) lexical adverbs. Thus, the identification of, and lack of explanation for, the lexical predilections observed in speech constitutes a major issue which the syntactic approaches do not adequately address.

Considering everything together then, it can be said that the syntactic analyses posited by Alexiadou (1997), Laenzlinger (1998), Cinque (1999), and Abeillé and Godard (2000, 2001, 2003, 2004) are in the aggregate accurate in predicting where adverbs do and do not occur. Their accuracies are notable in that they emerge without undertaking quantitative analyses in usage-based corpora. Still, the present study's use of variationist methodology allows us to nuance, in important ways, the claims emerging from the syntactic analyses, since it identifies tendencies associated with adverb use in spontaneous speech that are not properly addressed in these theoretical approaches. First, there is the absence in speech of adverbs (sub-)types occurring in positions where the theory predicts them to occur (e.g. (non-nominal) temporal adverbs occurring in the MID-VP position). While admittedly, absence of adverb use in an expected position in speech does not necessarily mean that theoretical predictions are incorrect, it is nonetheless suggestive of a dispreference for that variant's use which is not adequately accounted for in the syntactical analyses reviewed. A second issue concerns the occurrence of lexical adverbs, adverb types, and/or of modified adverbs, in positions not predicted, or even prohibited, by the syntactic analyses (e.g. modified *bien/mal* occurring in MID-VP (Alexiadou 1997), quantity adverbs and *toujours, probablement* etc. occurring in POST-V (Cinque 1999) etc.). While theory may explain away at least some of these cases by ascribing them to various, and sometimes syntax-external, processes, like parentheticality or de-accentuation, it is not evident in the speech data that such processes

are necessarily at work. Furthermore, the very necessity of positing such explanations and/or of dismissing apparent “exceptions” only emerges because of an obstinate commitment to form/function symmetry, and the expectation of categorical adverb positioning. If the possibility of inherent variability were allowed, then such aberrant cases would cease to be problematic. Finally, among adverb types which are predicted to exhibit distributional variation, there is the finding of important lexical preferences for variant use in speech, as revealed by their frequencies in the different positions, which again are not properly addressed in the syntactic theories consulted (e.g. *souvent* most frequent in POST-V position; different variant preferences among **Quantity** adverbs etc.) Crucially, such lexical preferences can only be discerned through systematic quantitative analysis of adverb placement patterns in usage-based corpora, which may explain why such predictions are largely absent from the syntactic approaches reviewed. Overall then, even if the results emerging from the speech data lend support to some of the claims expounded in the theoretical syntactic analyses considered here, in other cases, the speech results challenge them, meaning that none of these theories are perfectly accurate in predicting adverb placement as instantiated in practice.

5.6 Chapter Summary

This chapter began with a presentation of the overall distribution of adverb placement in the different variant positions, finding that adverbs occurred just slightly more often in the POST-V position than in the MID-VP position, and that PRE-SUBJ placement was rare. Then, the data were then subjected to an initial multivariate analysis where several factors (adverb type, frequency, and modification, and verb morphology) were selected as significant to use of the MID-VP variant. However, it was argued that these effects were misleading, in that they

were epiphenomenal of other factor effects, namely, those exerted by the **Lexical Identity of the Adverb**. The distributional results were then presented, beginning with variant use according to the linguistic factor of **Adverb Type**. Consistent with the multivariate analyses, these results revealed that there were important differences across types in terms of the most frequent variant; in most cases, a single variant predominated or was categorical, and it varied with just one of the other variants. Only three adverb types (**Frequency**, **Modal**, **Aspectual**) occurred in all three variant positions, and only two types (**Temporal**, **Manner**) appeared to be robustly variable. However, as foreshadowed, this last finding became suspect when variant use according to **Lexical Identity of the Adverb** was considered; most lexical adverbs showed a strong or categorical preference for one variant position over the others, and while in some cases this was consistent for a given type (e.g. **Aspectual**), in other cases it was not (e.g. **Quantity**). Furthermore, some of the adverb types consisted of just a single lexical adverb, or a single predominating adverb, meaning that their apparent conditioning effects are more accurately ascribed to the positioning preferences of the specific lexical adverbs which happened to be classified into those type categories. Similarly, while variant distribution according to the other linguistic factors tested here (adverb length, specificity, modification and frequency, whether the item was an adjectival adverb, verb morphology, complexity of the verbal head, and ‘weight’ of verbal complements) initially suggested that the literature was largely accurate in their accounts of variable adverb placement, once the variant predilections of specific lexical adverbs were considered, these effects were also called into question. Indeed, once the data were again subjected to multivariate analyses with some of the lexical effects factored out by excluding certain lexical adverbs from the analyses, most of the conditioning effects disappeared. Crucially then, it is primarily the lexical effects, masquerading as other factors, which condition adverb placement in speech.

This finding of strong idiosyncratic placement preferences of lexical adverbs is not noted in the literature, where **Adverb Type** seems to be accepted as the preeminent determiner of adverb placement.

Finally, with the distributional and final multivariate analyses results in hand, it was then possible to revisit the theoretical syntactic analyses that were reviewed here in order to assess how their explanations for adverb placement held up against the patterns observed in vernacular speech. It was first acknowledged that these approaches were, in the aggregate, notably correct in their account of this phenomenon. On the other hand, none was entirely accurate, since the speech results revealed that adverbs occurred in positions where the syntactic analysis would prohibit them, and that there were important distributional trends which the theories simply did not accurately predict, or even identify. Thus, the variationist approach, and its focus on systematic quantitative analysis, allowed this study to nuance the prevailing theoretical claims regarding adverb distribution.

CHAPTER 6

Results: Social Factors

Overview

While the potential contribution of external factors is almost never mentioned in the reviewed literature,¹ Brill's (1987) study did reveal that some social conditioning might be associated with this variable. As such, having examined the role that linguistic factors play in variable adverb placement in Chapter 5, this chapter now considers whether, and if so how, social factors might be implicated in conditioning variant use. Here, the distributional results are presented first, followed by the results obtained from multivariate analyses of the data.

6.1 Distributional results

Table 6.1A summarizes the distributional results for variant use according to the four social factors examined in this study, namely, **Speaker Age**, **Speaker Sex**, **Level of Education**, and **Neighbourhood** (as a general measure of socio-economic class (SEC)). As explained in Chapter 4, **Speaker Age** was included in order to detect whether any change may have occurred across (apparent) time, given Brill's (1987:363) conclusion that "adverb syntax is becoming more flexible." Here, the distributional results do not suggest any change across (apparent) time, since the rates of use of all the variants are very similar across the three age groups. Also contra Brill (1987), who reported that male writers favoured the MID-VP variant, the results here for **Speaker Sex** suggest that, if anything, it is women who are more likely to use an adverb between the auxiliary and the participle. Likewise, while

¹ A notable exception to this is corpus-based research on pre- vs. post-auxiliary placement of adverbs in English (e.g. Granath 2002; Waters 2013; etc.); see Chapter 3, §3.4.

Brill (1987) reported that less educated writers favoured the MID-VP variant, the results in Table 6.1A for **Level of Education** indicate that, if anything, it is greater use of the POST-V variant which distinguishes the less educated (elementary and secondary) speakers from the more educated (post-secondary) ones in the speaker sample, though here as well the rates are very close. Finally, the results for **Neighbourhood** suggest that, while there is little distinction according to SEC in use of the MID-VP variant, there may be some usage preferences associated with SEC for each of the other two variants (i.e. lower SEC may be associated with POST-V use, and higher SEC with PRE-SUBJ use).

	PRE-SUBJ		MID-VP		POST-V		TOTAL
	%	N	%	N	%	N	N
TOTAL	5	42	59	486	36	297	825
Age							
Younger	6	13	60	138	35	81	232
Middle-aged	6	16	55	154	39	110	280
Older	4	13	62	194	34	106	313
Sex							
Women	4	16	63	261	33	137	414
Men	6	26	55	225	39	160	411
Level of Education							
Elementary	4	15	59	227	37	144	386
Secondary	6	21	59	219	36	134	374
Post-secondary	9	6	62	40	29	19	65
Neighbourhood							
Higher SEC	8	33	60	256	32	138	427
Lower SEC	2	9	58	230	40	159	398

Overall, the distributional results suggest that variable adverb placement is a case of stable variation which may be slightly socially embedded in the sampled community, though socially constrained in a way which differs from what Brill (1987) reported for the same

variable. Note, however, that since Brill's data was drawn from a corpus of written materials, and not spoken language, and since the writers which provided the samples for her corpus originate from different communities (European and African) than the speakers from the OH corpus, such divergences are not unexpected.

On the other hand, as was observed for the linguistic factors, the apparent effect of some of the social factors may be associated with the effects of specific lexical adverbs. Such a lexical effect was reported by Poplack (1997) in her study of use of the French subjunctive among the (full sample of the) OH speakers. In particular, Poplack (1997) reports that uneven distributions across social groups of lexical matrices which differ in their propensity to co-occur with subjunctive initially confound the results by masking the true social correlates of subjunctive use. She notes that:

If speakers from two groups show quantitatively different preferences for two lexical items, and these items behave differently with respect to some linguistic variable, this will show up as a difference between the two groups with respect to that variable, if no provision is made for factoring out the lexical effect. (Poplack 1997:293)

Here then, given the lexical disproportions of certain adverbs in the data and with certain variants, it is prudent to consider whether groups of speakers differ in the lexical adverbs used. Indeed, carrying out this exercise reveals that the adverb *toujours* accounts for 36% of the data (N=113/313) among older speakers but only 16% of the data (N=37/232) among younger speakers, and over half of the MID-VP occurrences among the older speakers (56%, N=109/194), but only 1/4 of this variant's use among the younger speakers (26%, N=36/138).² Thus, the high rate of use of the MID-VP variant among the older speakers could

² These differences are found to be extremely statistically significant using Fischer's exact test (one-tailed) ($p < 0.0001$ in both cases). Similarly, in the case of **Neighbourhood**, *toujours* accounts for slightly more of the data in the Higher SEC neighbourhood (30%, N=129/427) than in the Lower SEC neighbourhood (22%, N=88/398),

be at least partly associated with the high frequency of use of *toujours* in their data.

Likewise, the lexical item *bien*, which is used invariably with the MID-VP variant, also differs across the age groups; for example, when *toujours* is excluded altogether, *bien* accounts for 17% of all data (N=34/200) and 40% (N=34/85) of all MID-VP use in older speakers, but 6% (N=12/195) of the data and only 12% (12/102) of MID-VP use in younger speakers.³ The role played in variant use by these distributional differences among different social groups of these frequent lexical items is revealed in the next section, once the multivariate analyses are undertaken.

However, before moving on to the multivariate analyses, we take a closer look at the distribution of some of the lexical adverbs across the different social factors, as some findings deserve to be mentioned. For instance, as indicated above, *toujours* accounts for more data among the older speakers than it does among the younger speakers; interestingly, the opposite is true of *toujours*'s synonym *tout le temps*, which is virtually absent among the older speakers but notably present among the middle-aged and younger speakers, as shown in Table 6.1B.

Speaker Age	<i>toujours</i>		<i>tout le temps</i>	
	N/N	%	N	%
Older	113/300	38	2/300	0.7
Middle-Aged	67/264	25	20/264	8
Younger	37/219	17	17/219	8
TOTAL	217/783	28	39/783	5

a difference which is found to be very statistically significant ($p=0.0051$). On the other hand, there are no statistically significant differences in the distribution of *toujours* according to **Speaker Sex**.

³ Again, these differences are found to be extremely statistically significant using Fischer's exact test (one tailed) ($p=0.0006$ for all data and $p < 0.0001$ for MID-VP use).

Another interesting finding concerns the two multi-word strings included in this study, *pas mal* and *tout le temps*. More specifically, MID-VP use of these two items really only occurs among the middle-aged and younger speakers, and actually increases in frequency from the former to the latter, as shown in Table 6.1C. While admittedly the data are limited, and so it would be precarious to draw concrete conclusions based on them, it would appear that the acceptability of using these multi-word items in the MID-VP position (and thus perhaps their classification as true adverbs, and not just adverbials) may be increasing. This is particularly notable in the case of *tout le temps*; it appears to have become both more frequent overall (Table 6.1B) and in the MID-VP position (Table 6.1C), the latter of which is the preferred variant for its synonym *toujours*.

	<i>tout le temps</i>		<i>pas mal</i>	
Speaker Age	N/N	%	N	%
Older	0/2	0	1/5	20
Middle-Aged	15/20	75	5/12	42
Younger	15/17	88	8/13	62
TOTAL	30/39	77	14/30	52

6.2 Multivariate analyses

In the next phase of the investigation, the data were subjected to multivariate analyses so that the specific role exerted by the different social factors could be determined when they are all considered together. Table 6.2 presents the results of the three independent variable rule analyses of the contribution of social factors to the selection of the MID-VP variant. Note that the factor group **Level of Education** had to be excluded entirely from the analyses, since there were interactions between this factor and the other factors due to empty cells (i.e. all

the younger speakers had at least some high school education, and only young male speakers had at least some post-secondary education.)

The first analysis (RUN #1 - NO EXCLUSIONS) indicates that only one factor conditions variant choice in a statistically significant, albeit minor, way, namely, **Speaker Sex**. As was suggested by the distributional results, women slightly favour, and men slightly disfavour, the MID-VP variant. In the second analysis (RUN #2), the lexical adverb *toujours* was removed given the combined observations noted above in §6.1 (differences in distribution across age groups) and earlier in Chapter 5 (near categorical use of MID-VP variant, high frequency in the data), as well as Poplack's (1997) admonition to factor out lexical effects where these may be implicated. In this second analysis then, **Speaker Sex** is still selected as significant, and now the effect is actually stronger, as indicated by an increase in the range from 8 to 14. Once again, women favour, and men disfavour, the MID-VP variant. On the other hand, in this second analysis an additional factor is selected as statistically significant, namely, **Speaker Age**. Opposite what was observed in the distributional results, here the factor weights do suggest a distinction between younger speakers, who actually favour the MID-VP variant, and the other two age cohorts, who disfavour this variant. Finally, in a third multivariate analysis (RUN #3), the lexical adverb *bien* was also excluded, since once *toujours* is removed from the analyses, the uneven distribution of *bien* across the age cohorts now threatens to skew the results in the same way as *toujours* does. In this third multivariate analysis, the effect of **Speaker Sex** remains significant (with a small increase in the range) and the constraint hierarchy stays the same, with women favouring and men disfavouring MID-VP variant use. Likewise, **Speaker Age** is again selected as significant, though here the factor weights *are* ordered successively, with older speakers disfavouring MID-VP use more than middle-aged

speakers, and younger speakers favouring this variant. Such a steady increase across age groups is typically interpreted in variationist research as evidence of change in progress. Thus, the multivariate analyses reveal there to be some social conditioning associated with variable adverb placement (as women consistently favour the MID-VP variant) and may be suggestive of language change towards greater MID-VP use among a subset of the data. Crucially, these effects were previously blurred by the skewing effects of the two lexical adverbs *toujours* and *bien*, since they were unevenly distributed across the different social groups, and so inflated the rate of MID-VP use among the older speakers specifically. Once these lexical effects were factored out, we see a strengthening of the small but significant sex effect, with women favouring the MID-VP variant, and some indication of language change in progress towards this same variant.

	RUN #1			RUN #2			RUN #3		
	NO EXCLUSIONS			EXCLUDING <i>toujours</i>			EXCLUDING <i>toujours</i> and <i>bien</i>		
Input	.622	62	486/783	.484	48	274/566	.412	42	209/502
	Prob.	%	N/N	Prob.	%	N/N	Prob.	%	N/N
Speaker Sex									
Women	.54	66	261/397	.57	55	161/293	.58	49	127/260
Men	.46	58	225/386	.43	41	113/273	.42	34	82/242
<i>Range</i>	8			14			16		
Age									
Younger	[]	63	138/218	.58	56	102/181	.62	53	90/170
Middle-aged	[]	58	154/265	.45	44	87/198	.46	38	68/179
Older	[]	65	194/300	.47	45	85/187	.41	33	51/153
				11			21		
Neighbourhood									
Higher SEC	[]	65	256/394	[]	49	130/265	[]	43	100/235
Lower SEC	[]	59	230/389	[]	48	144/301	[]	41	109/267
Square brackets indicate that the factor was not selected as significant.									
Excluded: Level of Education									

6.3 Chapter Summary

This chapter aimed to determine whether there are any social factors implicated in conditioning variable adverb placement, and whether it is involved in ongoing language change, given Brill's (1987) findings of such effects. Indeed, the multivariate analyses did suggest some mild social conditioning associated with **Speaker Sex**, as women were consistently found to slightly favour the MID-VP variant, and the distributional results revealed some differences in rates of variant use according to **Level of Education** and **Neighbourhood** (as a measure of socio-economic class). Furthermore, once the highly frequent and unevenly distributed adverbs *toujours* and *bien* were excluded, **Speaker Age** was also selected as significant to variant choice, with factor weights suggestive of change towards greater use of MID-VP variant in apparent time. Still, interesting as these effects may be, given that they are but modest and based on a subsample of the OH speakers, no definitive conclusions should be drawn from them at this time. Finally, some interesting placement patterns were noted for both *pas mal* and *tout le temps*, the only two multi-word adverbials which qualified to be included in this study; specifically, there is an increase in use of the MID-VP position in apparent time.

CHAPTER 7

Discussion and Conclusions

The present study set out to investigate the phenomenon of variable adverb placement as instantiated in vernacular Quebec French. The study was couched within the sociolinguistic framework of Variation Theory (Labov 1969; Labov et al. 1968; Weinreich et al. 1968) so that it could apply this framework's methodological machinery to examine such variability in the context of compound verb tenses (e.g. *passé composé*, *plus-que-parfait* etc.) in the spontaneous speech of twenty-four speakers from the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989). In this pursuit, the present study drew on both normative and syntactic approaches to adverb placement, as well as the (limited) corpus-based research on this topic in French, in order to discover the factors that have been suggested as influencing this variability. These claims were then operationalized into factors which could be tested against the data, to determine whether, and the extent to which, they accurately account for adverb placement in speech. As the first study to address this issue from a variationist perspective in a corpus of spontaneous spoken French, the present research constitutes a new approach to the issue of variable adverb placement, and thus stands to provide vital insight into this phenomenon. In the following, these insights are highlighted through a review of the main research objectives and their corresponding results, and related discussions are presented. The chapter closes with general conclusions.

A first research objective of the present study was to determine the incidence of variable adverb placement, which was revealed by looking at the frequency of adverb use in each of the variant positions. These results initially suggested that adverb placement was robustly

variable between two variants, with placement after the participle (POST-V) just edging out placement between the auxiliary and the participle (MID-VP) as most common. Additionally, adverbs were found to occur at least occasionally in a third variant position, namely, at the beginning of the sentence preceding the grammatical subject (PRE-SUBJ), though these rare cases were eventually found to be poorly distributed in the data. It was also noted that frequency of use of the MID-VP variant was consistent with that reported by Brill (1987) in a study of the same variable using the same variationist framework that was adopted here, albeit in a corpus of written (European and African) French. Nonetheless, a conclusion of robust competition between placement in the MID-VP and POST-V positions would have been premature at this initial stage of the analysis, since the distributional results ultimately revealed important distinctions in variant use according to a few key linguistic factors.

Indeed, an additional research objective, which was couched within the first, was to determine whether any linguistic factors might constrain variable adverb placement and if so, which ones and in which way. For this, both normative and theoretical linguistic accounts were consulted, and from these were operationalized a number of linguistic factors which would be tested in the data. These factors included adverb type, length, specificity, modification and frequency, the lexical identity of the adverb, verb phrase morphology (i.e. the tense, mood and voice of the verbal construction), the lexical identity of the auxiliary, the complexity of the verbal head, the presence and ‘weight’ of verbal complements, and whether the item was an adjectival adverb. As is standard in variationist research, the data were analysed in terms of variant distribution according to each of these factors, and were also subjected to multivariate analyses in order to assess the effect of these factors on adverb placement when all were considered simultaneously.

An initial multivariate analysis indicated that four factor groups exerted a statistically significant effect on use of the MID-VP variant, namely, adverb type, adverb frequency, verb phrase morphology, and adverb modification. The contribution of most of these factors was generally consistent with what has been claimed in the literature, and particularly with respect to the predominating role accorded to adverb type therein, since this factor group was found to exert the most influence on MID-VP use. However, it was argued that a close and systematic quantitative analysis of the distribution of the variants according to each of the operationalized factors would reveal that some of these factor effects were in fact epiphenomenal of others factor effects, particularly those associated with the lexical identity of the adverb.

Nonetheless, the distributional results first considered the role of adverb type in variant use, where it was observed that the seemingly robust variability between the MID-VP and POST-V variants is actually mitigated by a strong association between adverb type and position, and this in a manner that is generally consistent with predictions expounded in the literature. Indeed, the extent of this association was so strong that in some cases it equated to invariability in adverb placement. More specifically, among the ten adverb types hosting at least ten occurrences, two of them (**Modal, Degree**) were found to have a healthy association with one variant (63% and 64% rates of use, respectively), two more classes (**Frequency, Quantity**) had a stronger association with just one variant (83% and 75% rates of use) and four more classes (**Locational, Aspectual, Duration, Motion**) displayed a categorical (or nearly so) preference for a single position. Only two adverb types appeared to be actually variable, namely, **Temporal** and **Manner** adverbs, though in both cases the variability was restricted to just two variant positions, and different ones at that. In fact, only three adverb

types (**Aspect**, **Frequency**, **Modal**) even occurred in all three variant positions. Thus, the role of adverb type in adverb placement seemed confirmed, and these results constituted strong proof that the initial overall rates of use which had been obtained were misleading.

On the other hand, a second linguistic factor group operationalized from the literature proved to be particularly instructive in understanding variable adverb placement. More specifically, once variant use was considered for each lexical adverb independently, it was found that nearly all adverbs showed a strong, if not categorical, association with a single variant. In some cases, these strong lexical preferences could account for the apparent effect of adverb type, as when the category contained only a single lexical adverb (e.g. **Duration**, **Motion**). In other cases, these lexical predilections were so prevalent that they even negated the apparent variability observed for a given class, as when the placement tendencies of the members of the class were diametrically opposed. Such was the case among **Temporal** and **Manner** adverbs, where apparently robust variability between two variants was the result of an averaging out of opposing effects on variant use of the adverbs within these classes. This was particularly notable in the case of manner adverbs: while *bien* and *mal* only ever occurred in the MID-VP position, consistent with claims in the literature, all of the other manner adverbs were restricted to POST-V use. This latter finding is one which the relevant literature not only fails to predict, but which is actually contrary to the many claims (especially in the prescriptive literature) that *-ment* adverbs can occur before *or* after the participle. Ultimately, only two adverb types were found to have some measure of internal consistency in terms of variant use among their lexical members: **Frequency** adverbs (*souvent*, *encore*) are more likely to occur in the POST-V position, and **Aspectual** adverbs

(*déjà*, *toujours*, and *tout le temps*) are most often found in the MID-VP position. Beyond this, adverb placement seems largely dependent on the lexical adverb in question.

Keeping these lexical effects in mind, the influence exerted by the other linguistic factors on variant use was also systematically reviewed. While the predictions operationalized from the literature for these factors again seemed largely confirmed by the distributional results at first glance, a careful examination of the lexical adverbs co-occurring with them indicated that most of the effects were epiphenomenal of the lexical preferences. Particularly important were the confounding effects of *toujours*, and also *bien* and *déjà*, which were each categorically associated (or nearly so) with the MID-VP variant, were frequent in the data, and were disproportionately distributed across the different factors.

In a final attempt to more judiciously assess the effect of the linguistic factors on variable adverb placement, the data were again subjected to multivariate analyses. However, given the strong lexical preferences that had been identified in the systematic quantitative analysis of the distributional result, these additional analyses successively excluded specific lexical adverbs in order to eliminate any confounding role they might be playing. As suspected, these subsequent multivariate analyses revealed that some factors previously selected as conditioning variant use were no longer significant, thus further attesting to the role of the lexical preferences in determining adverb placement.

Crucially, while lexical associations with variant use *are* noted in the adverb literature, this is done in an inconsistent and cursory fashion; they are usually listed as exceptions or restrictions to the placement tendencies claimed to be characteristic of their specific adverb type, with the latter remaining the preeminent determinant of adverb placement. Here, the

results clearly suggest that the lexical identity of the adverb, and its role in adverb placement, deserve much more attention than currently accorded them in the literature.¹ In fact, the vital role played by lexical identity of the adverb in determining its placement is highly reminiscent of the lexical associations noted for subjunctive use in French (Poplack 1992; St.-Amand 2002; Poplack et al. 2013), where a few highly frequent governor and embedded verb combinations are strongly associated with, and account for most, subjunctive morphology in vernacular speech. Although that variable differs from the present one in that lexical identity is at least frequently invoked in the literature as implicated in subjunctive use, in neither case has the literature been able to accurately identify the true nature of the relationship between lexical identity and variant use as instantiated in speech. Furthermore, while it is common in variationist research to identify and, if not necessarily exclude, then at least limit the number of tokens extracted for highly frequent lexical items (especially in studying phonological variables) the possible role of lexical factors in general, never mind their masquerading as other factor effects, tends to be overlooked in variationist studies, and are even more rarely considered in non-variationist research. The results obtained in this study thus highlight the importance of considering independently the behaviour of specific linguistic items or contexts which are grouped within a single factor, just in case the former are in fact responsible for the effects of the latter. Only in applying the type of systematic quantitative analyses which was applied here is it possible to confidently identify the true factors conditioning variant use.

¹ It would even be prudent to use the observed placement preferences of lexical adverbs to develop a more appropriate and accurate adverb classification system (as opposed to the current posited systems which are developed *a priori* to, and in the absence of, systematic quantitative study in usage-based corpora.

With the quantitative results in hand, and so the first objective (of uncovering variant conditioning) of this study addressed, it is possible to consider a second research goal, which was to assess the extent to which descriptions and explanations of adverb placement offered in the prescriptive and theoretical literature are true reflections of adverb use in the speech of native speakers. In terms of the prescriptive literature, while the effects of most of the factors posited to account for variable adverb placement (adverb length, specificity, frequency, adjectival status, and the presence/length of verbal complements) seemed to be confirmed in the speech data, as noted above, closer inspection revealed that these were epiphenomenal of the particular placement preferences associated with lexical adverbs. Even the effect of adverb type, which easily emerged as the most popular predictor of adverb placement in the normative literature, and for which the grammarians were largely accurate in their claims, turned out to be sensitive to these lexical preferences. Ultimately then, the prescriptive approaches are only partly able to account for variable adverb placement.

For their part, as explained in §5.5 of Chapter 5, the theoretical syntactic analyses of adverb placement were also correct in predicting adverb placement in many cases. Note that among these, Cinque's (1999) analysis, which, in positing so many adverb classes, and classes which often contain just one or a very few lexical adverbs, would be most supported by the present study's findings of strong lexical effects. Still, a number of inadequacies were also identified in these syntactic approaches, such as the use of adverbs or adverb types in unexpected positions, the absence of adverbs in expected positions, and a failure to properly address frequency differences and lexical placement preferences. Thus, while it can be said that the theoretical literature was correct in the aggregate, the application of variationist

methodology to study variable adverb placement in speech allowed this study to nuance those claims.

Nonetheless, the number of parallels that were found between the theoretical syntactic approaches reviewed and the results of the variationist analyses that were applied here is striking, especially considering that these two approaches adopt distinctly different methodologies and draw on decidedly distinct sources of data (cf. Poplack, Zentz and Dion 2012 for a similar finding concerning phrase-final prepositions in Quebec French). On the other hand, that neither the prescriptive nor the theoretical linguistic literature identified the strong lexical placement predilections uncovered in this study undoubtedly stems from the very nature of the data on which they are based. More specifically, while intuitions, casual observations, and the like, can be useful for theory-generation, failure to consult usage-based data, and to undertake systematic quantitative analyses of such data, means that important patterns may be missed. Indeed, a disjoint between prescription and theory on the one hand, and praxis on the other, has been identified for several sectors of French grammar using the same variationist framework applied here (e.g. Poplack & Dion 2009 on future temporal reference; Poplack 1992, St.-Amand 2002, Poplack et al. 2013 on the subjunctive; Elsig & Poplack 2006 on question formation; Sankoff & Thibault 1980, Willis 2000 on auxiliary *avoir/être* alternation; Sankoff & Vincent 1977, 1980, Poplack & St.-Amand 2007 on negation; Leblanc 1999, Poplack 2001 on tense selection in hypothetical *si* clauses, etc.). Thus, while the congruencies observed between the results of this study and the claims in the theoretical and prescriptive literature are remarkable, the divergences discovered can be taken as ratification of Austin et al.'s (2004:40) recommendation to “supplement the highly developed state of theory construction [on adverb behaviour] with...corpus-oriented work.”

Before moving on to review the third research goal, it is worth noting that this study is rather unusual in its attempt to specifically operationalize factors from the theoretical literature and test their claims in speech data. Studies endeavouring to do this are rare in variationist research, mostly because it is usually difficult, if not impossible, to operationalize theoretical constructs into objectively codeable and testable factors. Nonetheless, considerable effort was made here to do exactly this, and ultimately this study succeeded in operationalizing theoretical explanations for variable adverb placement into three linguistic factors: **Adverb Type**, **Adverb Modification**, and **Lexical Identity of the Adverb**. This enabled the present research to confront theoretical syntactic claims head on, by undertaking quantitative analyses of the role of these factors in conditioning variable adverb distribution in practice.

Finally, the third research objective of this study was to determine if, and if so how, variable adverb placement might be a socially embedded variable in the community of Quebec French speakers examined, and furthermore, whether there might be any evidence of change across (apparent) time for this variable. The specific motivation for this research objective emerged both from Brill's (1987) findings, which indicated there to be some social conditioning and which led her to suggest that "adverb syntax is becoming more flexible" (Brill 1987:363), and from a lack of information about these potential external factors in the prescriptive and linguistic literature reviewed. To this end, the speaker subsample was designed so as to be equally stratified according to the factors of speaker age, speaker sex, and neighbourhood (as a general measure of socio-economic class); level of educational attainment was also considered. While the distributional results for speaker age did not provide any evidence of language change, the multivariate analysis of a subset of the data,

when the lexical effects of the adverbs *toujours* and *bien* were factored out, were consistent with what would be interpreted in variationist research as a change in progress towards increased use of the MID-VP variant. Also, the results do implicate some mild social conditioning for this variable, since women were consistently found to favour the MID-VP variant in the multivariate analyses, and since the distributional results did suggest that less education may be associated with use of the POST-V variant. Ultimately though, since these effects are modest and based on a subsample of the OH speakers, no definitive conclusions should be drawn from them at this time, though further research on these effects would be worthwhile. Finally, while overall the findings for the social factors are generally opposite to those reported by Brill (1987), given that her corpus consisted of written language samples obtained from participants from Europe and Northern Africa, such differences are not unexpected, though they do highlight the distinctions that can be seen across different language communities and/or data genres.

Finally, a number of additional observations emerging from this study warrant some discussion. First, as indicated in the introductory chapter, and then expanded on considerably in Chapters 3 and 4, developing the methodology for a study of variable adverb placement required careful handling of a number of challenges inherent to the adverb category (e.g. morphological and functional diversity, polysemy, interaction between position and meaning) as well issues which, while not characteristic of adverbs per se, nonetheless presented obstacles to a variationist study of adverb distribution in speech (comma intonation and parentheticality, ascription of specific functions to specific variants). The task of addressing such challenges was encumbered by disparities between, or ambiguities within, previous treatments of adverbs. As such, it is perhaps not surprising that little quantitative

corpus-based work has been done on variable adverb placement in French, and those that have (e.g. Oates 1969; Brill 1987) may have fallen victim to these challenges. The present study thus sought to more explicitly address the various obstacles encountered and explain how were overcome. Contra Oates (1969), this study considered adverb placement in compound tenses only, extracted all adverbs which fell into the variable context (as defined in Chapter 4), regardless of their frequency, and explicitly considered the role of linguistic factors in conditioning adverb placement. Drawing on Brill's (1987) variationist study, the present research attempted to more clearly define the variable context by providing more explicit details on the adverbials which were included, how these were identified, and why their inclusion was justified, as outlined in Chapter 4. Likewise, unlike Brill (1987), the present study identified and directly addressed those contexts which may have been problematic for defining the variable context (e.g. comma intonation, position-dependent interpretation for some *-ment* adverbs etc.), and ultimately excluded those cases which are not consistent with the definition of the sociolinguistic variable (e.g. negative polarity contexts). Finally, this study diverges from both Brill (1987) and Oates (1969) in that it investigated variable adverb placement in a corpus of vernacular spoken language, and not in written data, given the evidence for caution against using the latter as a substitute for the former (e.g. Poplack & Malvar 2007; Poplack & St.-Amand 2007).

A second noteworthy observation concerns the reported interaction between position and meaning for a number of *-ment* adverbs. Despite being a common preoccupation of theoretical linguists, as well as presenting potential variable context issues for this variationist study, the magnitude of the problem ultimately proved to be overestimated when adverb use in speech was actually considered. Not only are *-ment* adverbs extremely rare,

but use of *-ment* adverbs which are theoretically subject to the problematic position/interpretation interaction even rarer. Furthermore, none of the potentially problematic *-ment* adverbs ever actually occurred in the MID-VP position, where their interpretation is claimed to be ambiguous (e.g. Laenzlinger 1998). Likewise, among those adverbs which were candidates for a meaning change with a position change, most could be disambiguated given the context in which they occurred, and these suggested them to be event-external adverbs (e.g. modal, speaker-oriented); thus, they could occur in each of the variant positions without a change in meaning, and be retained in the variable context.

In terms of the ascription of distinct functions to the PRE-SUBJ variant, a review of the adverbs occurring in these contexts revealed that it was essentially impossible to objectively determine whether these occurrences were indeed topicalized or focalized. However, comparing these PRE-SUBJ adverbs against their occurrences in the other variant positions suggested that there are no obvious functional distinctions between them.

Finally, there is the widely accepted claim that adverbial locutions and other multi-word adverbials are excluded from the MID-VP position, except in cases where they are accompanied by comma intonation; in these instances they are usually considered to be parentheticals, which licences their occurrences in this position, but which also typically constitutes justification for excluding them from analysis. Here, however, two multi-word adverbial items, *tout le temps* and *pas mal*, were found in this variant position at high rates, and this without being parenthetical. Furthermore, their frequency in this position has increased over apparent time. Thus, either the claims regarding positioning possibilities for multi-word adverbials need to be re-evaluated, and/or the current classification of these two items as simply *adverbials*, as opposed to “true” *adverbs*, needs to be reconsidered.

In conclusion, by exploiting the framework of variationist sociolinguistics, the present study was able to evaluate existing explanations and descriptions of variable adverb placement and determine exactly how this variation is constrained by linguistic and social factors in spontaneous spoken Quebec French. It was revealed that this variable is primarily lexically-constrained, with most adverbs showing a strong preference for one variant over the others, a finding which can be only minimally and indirectly inferred from the relevant prescriptive and syntactic literature. Thus, while it remains to be seen whether an investigation into the vernaculars of other regional varieties of French would yield the same results as those obtained here, these findings do provide new and vital insight into the mechanisms underlying variable adverb placement in French, and so contribute essential information to the discussion. This study has also shown that it is indeed possible to apply the methodological construct of the linguistic variable to the study of a true syntactic variable, and that doing so can prove fruitful in the pursuit of discovering the constraints on variation. Finally, the result obtained here highlight the importance of considering variable language phenomena in corpus-based data, and particularly in spontaneous speech, since such tendencies only emerge with systematic quantitative analysis of vernacular language.

APPENDIX A

Grammars Consulted

RHGF grammars

Year of Publication	Author(s)	Title
1922	Radouant, René Charles	Grammaire française
1923	Hermant, Abel	Xavier; ou, Les entretiens sur la grammaire française
1928	Frei, Henri	La grammaire des fautes : introduction à la linguistique fonctionnelle; assimilation et différenciation; brièveté et invariabilité; expressivité
1930	Damourette, Jacques & Edouard Pinchon	Des mots à la pensée: essai de grammaire de la langue française
1933	Académie française	Grammaire de l'Académie française
1934	Michaut, Gustave & Paul Schricke	Grammaire française, cours complet
1936	Gaiffe, Félix, Ernest Maille, Ernest Breuil, Simone Jahan, Léon Wagner & Madeleine Marijon	Grammaire Larousse du 20 ^e siècle
1948	Cayrou, Gaston, Pierre Laurent & Jeanne Lods	Le français d'aujourd'hui; grammaire du bon usage
1951	Togebly, Knub	Structure immanente de la langue française
1954	Boer, Cornelius de	Syntaxe du français moderne
1958	Dauzat, Albert	Grammaire raisonnée de la langue française
1963	Gougenheim, Georges	Système grammatical de la langue française
1965	Wagner, Robert Léon & J. Pinchon	Grammaire du français classique et moderne
1965	Brunot, Ferdinand	La pensée et la langue : méthode, principes et plan d'une théorie nouvelle du langage appliquée au français
1967	Galichet, Georges	Grammaire structurale du français moderne
1969	Brunot, Ferdinand & Charles Bruneau	Précis de grammaire historique de la langue française
1971	LeBidois, Georges & Robert	Syntaxe du français moderne : ses

	LeBidois	fondements historiques et psychologiques
1971	Chevalier, Jean-Claude, Claire Blanche-Benveniste, Michel Arrivé & Jean Peytard	Grammaire Larousse du français contemporain
1979	Martinet, André	Grammaire fonctionnelle du français
1986	Arrivé, Michel, Françoise Gadet & Michel Galmiche	La grammaire d'aujourd'hui : guide alphabétique de linguistique française
1988	Larousse	Grammaire, difficultés usage 4000 exemples
1990	Bescherelle, Louis-Nicolas	La grammaire pour tous : dictionnaire de la grammaire française en 27 chapitres; index des difficultés grammaticales
1992	Charaudeau, Patrick	Grammaire du sens et de l'expression
1993	Grevisse, Maurice	Le bon usage : grammaire française
1994	Le Goffic, Pierre	Grammaire de la phrase française
1994	Leeman-Bouix, Danielle	Grammaire du verbe français : des formes aux sens : Modes, aspects, temps, auxiliaires
1997	Frontier, Alain	La grammaire du français
1998	Grevisse, Maurice	Le français correct : guide pratique
1998	Riegel, Martin, Jean-Christophe Pellet & René Rioul	Grammaire méthodique du français

Non-RHGF grammars

Year of Publication	Authors	Title
1984	Togebly, Knud (edited by Magnus Berg, Ghani Merad & Ebbe Spang Hanssen)	Grammaire française. Volume 4. Les mots invariables
1990	Grevisse, Maurice	Précis de grammaire française
1991	Jarvis, Gilbert A., Thérèse M. Bonin & Diane W. Birckbichler.	Invitation Essentials
1999	Ollivier, Jacqueline	Grammaire française
2011	Grevisse, Maurice (& André Goosse)	Le bon usage : grammaire française

APPENDIX B

Adverb Classification

1. Introduction

As was detailed in Chapter 3, while there is variety in the number and types of adverb classes posited among the prescriptive, theoretical, and corpus-based approaches, **Adverb Type** is repeatedly cited in the literature as an (if not the most!) important factor in determining adverb placement. Consequently, it was essential that this factor be included in the present study, so that its role in variable adverb positioning could be properly evaluated. The following thus outlines how the number and types of adverbs were settled on (§2), and then provides a summary (§3) of where the specific lexical adverbs were classified, with additional details provided as necessary.

2. Identifying adverb classes

In order to isolate distinct adverb classes, it seemed that an obvious place to start would be to identify those adverb types which tend to be recognized in most of the literature, even if they occur therein with different epithets. So, as explained in Chapter 3, adverbs which perform some type of event-internal modification (whether specifically verb-modifying or not) and which express the semantic notions of Place (Locational/Locative), Time (Temporal), Manner, and (some construal of) Quantity are ubiquitous in the literature, regardless of the specific analysis (e.g. prescriptive, syntactic, etc.). Similarly, the literature frequently mentions adverb types which perform event-external modification, such as those expressing the speaker's attitude towards, or opinion of, the content of the proposition, or those which detail the speaker's self-

described manner of speaking. Adverbs performing these functions are typically labeled as Evaluative and Speaker-Oriented¹ adverbs, respectively. There is also the group of Modal adverbs which concern the truth values of the proposition (i.e. the likelihood that the event expressed by the proposition is true). Finally, Domain (or Frame) adverbs are said to situate the expressed proposition within a defined context, specifying the domain in which “the truth conditions of the proposition are satisfied” (Laenzlinger 1998:43).

The present study therefore started out with eight basic adverb types which tend to recur in the literature, defined in terms of inherent meaning and/or general type of function performed. These included Temporal, Manner, Quantity, Modal, Locational, Evaluative, Speaker-Oriented, and Domain.² However, the first four of these adverb classes (Temporal, Manner, Quantity, Modal) coincide with two or more distinct types in at least some of the literature. As such, it was necessary to consider whether these four classes would be further subdivided here, and if so, in which way.

Consider first the case of **Temporal** adverbs. While for some authors, the class of **Temporal** adverbs contains adverbs like *toujours* and *déjà* (e.g. Michaut & Shricke 1934; Oates 1969; Chevalier et al. 1971; Mertens 2013), for other authors, these adverbs are specifically categorized in an independent class typically labeled **Aspectual** adverbs (e.g. Grevisse 1993; Alexiadou 1997; Laenzlinger 1998; Cinque 1999).³ According to Grevisse (2011, §1004)⁴ temporal

¹ These are also referred to as Speaker-Hearer Oriented adverbs (Laenzlinger 1998) or Speech-Act adverbs (Abeillé & Godard 2004).

² As explained in Chapter 4, adverb types which have been referred to as, or which perform functions which are, restrictive, focusing, negating, interrogative, and logical relation/conjunctive/ordinal/relational were excluded from the variable context given their (essentially) invariable distribution; as such, they are not included in the present discussion. Likewise, since there were no occurrences of Subject-Oriented (also referred to as Agent-Oriented) – *ment* adverbs in the data, such a class was ultimately unnecessary.

³ Alternatively, these are sometimes grouped with the class of **Frequency** adverbs (e.g. Jarvis et al. 1991), which itself may or may not constitute its own class; this is addressed below.

adverbs “situent les faits dans la durée par rapport au moment de la parole” while aspectual adverbs “font intervenir des nuances de soudaineté, répétition etc.” Interestingly, grammarians who do not identify an independent class of **Aspectual** adverbs tend to list the placement behavior of adverbs like *toujours* and *déjà* as being exceptions to the placement tendencies associated with the class of **Temporal** adverbs. Given this observation, it was decided to follow Alexiadou (1997), Laenzlinger (1998), and Grevisse (1993), and isolate **Aspectual** adverbs as constituting their own class distinct from the class of **Temporal** adverbs, using Grevisse’s (2011, §1004) criteria mentioned above for distinguishing between them, and drawing on examples provided by these authors to help determine where specific lexical adverbs might best be grouped. Ultimately, this decision seems to have been well-motivated given the distributional results that emerged (i.e. **Aspectual** adverbs were nearly categorical in the MID-VP position, while **Temporal** adverbs never occurred there.)

In addition to the distinction between temporal and aspectual adverbs, there is the case of **Frequency** and **Duration** adverbs sometimes constituting distinct classes. In many cases, like with **Aspectual** adverbs, elsewhere-identified **Frequency** and **Duration** adverbs are grouped within the class of **Temporal** adverbs (e.g. Gaiffe et al. 1936; Wagner & Pinchon 1965; Togeby 1984; Mertens 2013), or with the **Aspectual** adverbs (if such a class is identified; e.g. Grevisse 2011). On the other hand, Oates (1969), Brill (1987), Alexiadou (1997), and Laenzlinger (1998)

⁴ Actually, Grevisse (2011) first introduces Aspectual adverbs as members of the broader group of Manner adverbs (§956), explaining that they are “proche à la fois des adverbes de manière et des adverbes de temps.” Ultimately though, he discusses Aspectual adverbs in his section on Temporal adverbs (§1004), which suggests that he considers them more similar to Temporal adverbs than to Manner adverbs. For his part, Cinque (1999) identifies several different types of Aspectual (and Temporal) adverbs (e.g. repetitive, prospective, celerative, frequentative, completive etc.). Though such fine divisions were not necessarily applied here, the placement behavior of the different types that Cinque posits can nonetheless be gleaned from the results for adverb distribution according to Lexical Identity of the Adverb (§5.3.2), since most of his categories would contain just one lexical adverb from the extracted data. Finally, similar to Cinque (1999), both Alexiadou (1997) and Laenzlinger (1998) also posit different (sub-)types of Aspectual adverbs, and some of these were considered as independent types in this analysis, as outlined below.

all identify **Frequency** adverbs as constituting their own class⁵ and Abeillé and Godard (2004) list both **Frequency** and **Duration** as entirely independent categories. In order to minimize the chance of missing any conditioning effects associated with **Frequency** and **Duration** adverbs specifically, they were thus considered independent classes here, again using examples provided by the above authors to determine the lexical adverbs which would be coded in these classes. Ultimately, the distribution of these adverb types in the three variant positions was certainly found to differ from variant use among **Temporal** and **Aspectual** adverbs, which thus justified considering the **Frequency** and **Duration** adverbs separately.

Finally, in his analysis of adverb use in French, Laenzlinger (1998) isolates **Motion** adverbs as a subtype of **Aspectual** adverbs distinct from **Frequency** adverbs. While elsewhere, especially in the prescriptive literature, Laenzlinger's so-called **Motion** adverbs are usually considered to be grouped among the class of **Manner** adverbs (e.g. Grevisse 2011 §976), it was decided that these adverbs would be (at least initially) considered an independent class following Laenzlinger, as his analysis was specifically aimed at accounting for adverb placement in French. In so doing, it would be possible to minimize the chance of missing any conditioning effects associated specifically with them. Indeed, while only one **Motion** adverb (*vite*) was ultimately found in the data, its behavior differed completely from the group of **Aspectual** adverbs, and so keeping the former separate from the latter was well-motivated. On the other hand, its behavior *was* consistent with the placement behavior noted for **Manner** adverbs, in which also happened to be grouped nearly all of the other adjectival adverbs extracted in the data. Ultimately then, it seemed reasonable to recode the **Motion** adverbs (*vite*) with the **Manner** adverbs for the multivariate analyses. Had other motion adverbs (e.g. *lentement, rapidement*)

⁵ Laenzlinger (1998) considers **Frequency** adverbs to be a sub-type of **Aspectual** adverbs, along with **Motion**, **Positive/Assertive**, **Quantification**, and **Degree** adverbs.

occurred in the data, the need for an independent class of **Motion** adverbs may have emerged in support of Laenzlinger’s (1998) classification scheme, and/or the recoding decision may have been different.

Another group of adverbs for which there is variety and/or overlap in the number of classes associated with them are adverbs which express some notion of quantification. In some cases these adverbs are considered to form one group, though they are variably referred to as adverbs of **Quantity** (e.g. Radouant 1922; Gaiffe et al. 1936; Dauzat 1958; Galichet 1967; Larousse 1988), **Degree** (Grevisse 2011 §956, §981; Abeillé and Godard 2003).⁶ In other cases, two distinct classes are posited, as in **Quantity and Intensity** (Wagner & Pinchon 1965; Brill 1987), **Degree and Quantificational** or **Quantity** (Laenzlinger 1998; Mertens 2013). Generally speaking then, one or two distinct classes are typically identified, and there are about four different labels that are used to refer to these classes. While the literature did not explicitly ascribe distinct placement behaviors to these different classes (when more than one class was indeed posited), it was decided that an initial distinction would nonetheless be made between a group of **Quantity** adverbs and a group of **Degree** adverbs, just in case there were distributional differences. That there was a distinction which could be made between **Quantity** and **Degree** adverbs was inspired by Grevisse’s (2011 §626, 736) observations that most (of his so-called) ‘degree’ adverbs can function as indefinite pronouns and as indefinite determiners (when followed by the preposition *de*) (i.e. *J’ai fait beaucoup hier soir*; *J’ai vu beaucoup de gens*), though others cannot (e.g. **J’ai fait presque hier soir*; **J’ai vue presque de gens*). Then, in reviewing those approaches which did identify two distinct classes, and the lexical adverbs

⁶ Also, within category distinctions are sometimes made, as in the case of Grevisse (2011), for whom Degree adverbs differ in terms of whether they refer to “le degré relatif...[ou] absolu,” as well as in terms of their strength (i.e. weak, medium or strong degree).

contained in these classes, it was observed that one class tended to contain lexical adverbs which can be used in these pronominal/determiner functions, and the other group tended to contain those adverbs which cannot occur in such functions. Thus, the ability to function as indefinite determiners and/or pronouns was initially used to distinguish **Quantity** adverbs from **Degree** adverbs, though in the end these two classes were collapsed for the multivariate analyses given their similar placement tendencies and the low frequency of **Degree** adverbs in the data.

The class of **Manner** adverbs also posed a potential problem. While in the prescriptive literature there tends to be a single general class associated with, and labeled as, **Manner** adverbs (e.g. Chevalier et al. 1971; Togeby 1984; Grevisse 2011 etc.) in other cases, finer divisions are posited depending on the perceived role and/or provenance of the manner adverb. For instance, Laenzlinger (1998:44) distinguishes between **Verb-oriented** manner adverbs which have “narrow scope over the verb” (e.g. *péniblement, correctement*) and **Object-oriented** manner adverbs which have “‘wide’ scope over the verb and its complement” (e.g. *entièrement, lourdement*).⁸ Alternatively, Molinier and Levrier (2000 :149; 119; 120) distinguish between **adverbes de manière verbaux** and **adverbes de manière orientés vers le sujet**;⁹ the former stem from adjectives which designate “des propriétés prédicables de procès, mais non prédicables, normalement, d’êtres humains ou animés ” while the latter are based on adjectives

⁷ In this study, had this specific adverb occurred, it would have been coded among the **Degree** adverbs, following Molinier and Levrier (2000) and Alexiadou (1997).

⁸ Laenzlinger also identifies two types of sentence-modifying (instead of VP-modifying) **Subject-oriented** adverbs namely, **Passive-sensitive** adverbs (*intentionnellement*) and **Agent-oriented** (*violemment*).

⁹ This latter class is distinct from the class of **adverbes (de phrase disjonctifs) d’attitude orientés vers le sujet** which coincides with the class typically referred to in the literature as **Agent-oriented** (or **Subject-oriented** adverbs), none of which were found in the present data (these are the notorious *-ment* adverbs that are said to experience a change in meaning with a change in position, e.g. *Intelligemment, il l’a laissé s’exprimer* (**Agent-oriented/adverbes d’attitude orientés vers le sujet**) vs. *Il a répondu intelligemment* (**manner/adverbes de manière orientés vers le sujet**). All of the adverbs Molinier and Levrier (2000) consider to be among the class of **adverbes d’attitude orientés vers le sujet** class are also members of the class of **adverbes de manière orientés vers le sujet**, but not vice versa.

which are “essentiellement compatibles avec un *N[om]* humain” and have “une portée principale sur le verbe de la phrase et une portée secondaire sur le sujet de cette même phrase.”

Furthermore, not only are there differences in the criteria used for distinguishing among types of manner adverbs, attempts to consolidate these systems is complicated by the differences across approaches in how specific lexical adverbs are best analysed. So, as described in Chapter 3, while Laenzlinger (1998) considers both *violemment* and *intentionnellement* to be subject-oriented **sentence** adverbs, Molinier and Levrier (2000) lists them as adverbs which are integrated into the phrase (i.e. **verb**-modifying, so distinct from sentence adverbs). Similarly, the adverb *entièrement* is variably classified as an object-oriented VP circumstantial (manner) adverb (Laenzlinger 1998), a resultative/completion adverb (Alexiadou 1997), and a quantitative manner adverb (Molinier & Levrier 2000). Given these discrepancies, it was decided that a single general class of **Manner** adverbs would initially be posited, and then an attempt would be made to subdivide this class, and analyze the placement behavior of, these adverbs according to the different classification systems that have been proposed. Ultimately, this last step was unnecessary; not only were *-ment* **Manner**¹⁰ adverbs rare in the data, they were used invariably in the POST-V position.

Finally, the last group of adverbs for which the literature presented some diverging classification strategies are adverbs referred to here as **Modals**. In particular, while some authors (e.g. Laenzlinger 1998; Molinier & Levrier 2000; Abeillé & Godard 2003) only mention a single group of **Modals** (also referred to as Epistemics, or, especially in the prescriptive literature, as adverbs of Doubt or simply as *adverbes de phrase*), in other cases, two or more classes are

¹⁰ Of course, *bien* and *mal* are also manner adverb, though they have independently been claimed to have unique placement tendencies due to their weight and/or length (e.g. Alexiadou 1997; Abeillé and Godard 2000, 2001, 2003, 2004).

posited for such adverbs. For instance, Cinque's (1999) hierarchy identifies at least four different types of modals, namely, **Epistemic** (*probably*), **Possibility** (*possibly*), **Necessity** (*necessarily*), and **Volitional** (*intentionally*),¹¹ and two of his **Mood** classes consist of lexical items which are elsewhere considered to be Modals, namely, **Irrealis** (*perhaps*) and **Evidential** (*allegedly*). Similarly, Austin et al. (2004) propose a class for **Evidentials** (*evidently*) which are distinct from their class of **Modals**. Here it was decided to follow Laenzlinger (1998) and Molinier and Levrier (2000) and posit just a single class of **Modals**, since applying finer distinctions would have resulted in several classes with just a single lexical adverb and/or token, and this would have made quantitative analyses of these classes impossible.^{12,13}

Overall then, the analysis started off with thirteen classes of adverbs (Locational, Temporal, Aspectual, Frequency, Duration, Quantity, Degree, Manner, Modal, Evaluative, Speaker-Oriented, and Domain) though in the final multivariate analyses, some of these were recoded together (i.e. **Degree** with **Quantity**; **Motion** with **Manner**.)

¹¹ Note that for other authors, adverbs such as *intentionnellement* are most certainly not considered to be among the class of **Modals**, but rather are classified as (some type of) **Manner** adverbs (e.g. Molinier & Levrier 2000) or as **Subject-oriented Sentence** adverbs (Laenzlinger 1998; Austin et al. 2004 (*deliberately*)). For their part, Abeillé and Godard (2003) also posit a class of **Volitionals** (*volontairement*) which are distinct from **Modals** (though again, Molinier and Levrier (2000) consider *volontairement* to be a **Manner** adverb).

¹² In fact, Cinque (1999:11) posits so many distinct modal and mood classes because of the observation that members of these distinct classes can both co-occur in a single sentence, which “would be unexpected if they were members of the same class,” and co-occur in a fixed relative order to each other. Since neither of these are behaviors under investigation here, retaining such fine distinctions seemed unnecessary.

¹³ And on the other hand, some authors seem to collapse together types which were here considered to be independent classes, namely, **Modals**, **Evaluatives**, and **Speaker-oriented adverbs** (e.g. Ernst 2004 (speaker-oriented); Mertens 2013 (enunciative).)

3. Classification of lexical adverbs

The table below summarizes which lexical adverbs were classified into the different classes outlined above for coding of the factor group **Adverb Type**. Additional comments concerning the classification of some specific adverbs follow below.

Adverb Type	Lexical identity of the adverb
Locational	<i>ailleurs, dedans, dehors, dessus, en arrière, en avant, en bas, en dedans, en dehors, en dessus, en haut, ici, icitte, là-bas, là-dedans, là-dessus, loin, partout</i>
Temporal	<i>anciennement, après, aujourd’hui, auparavant, autrefois, avant, avant-hier, dernièrement, hier, maintenant, récemment, tantôt, tard</i>
Aspectual	<i>déjà, encore, subitement, toujours, tout le temps</i>
Frequency	<i>encore, parfois, souvent</i>
Duration	<i>longtemps</i>
Motion	<i>vite</i>
Quantity	<i>assez, autant, beaucoup, bien, davantage, effrayant, énormément, (bien) gros, plus, moins, pas mal, plus, tant, tellement, trop</i>
Degree	<i>complètement, presque, (bien) proche, quasiment</i>
Manner	<i>bien, bonnement, correct, couramment, craintivement, différemment, direct, directement, dur, ensemble, exprès, fort, graduellement, mal, mieux, naturellement, pareil, raide, sévère, sévèrement, strictement,</i>
Modal	<i>apparemment, certainement, naturellement, peut-être, probablement</i>
Evaluative	<i>malheureusement</i>
Speaker-oriented	<i>franchement</i>
Domain	<i>économiquement</i>
Unclassified	<i>aussi</i>

In many cases, the specific classification of a given lexical adverb seemed semantically and/or functionally obvious, and was supported by a general agreement in the literature, by consulting examples provided therein. For instance, it would be difficult to argue that adverbs like *ici*, and *ailleurs* could be grouped in any class other than **Locational**, and *autrefois* and *récemment* in some class other than **Temporal**. Similarly, *beaucoup* and *presque* seem natural in one of the quantitative classes, and it was merely a matter of applying the criteria outlined above based on Grevisse (2011) (i.e. ability to function as an indefinite pronoun or determiner) which decided

whether the items were coded as adverbs of **Quantity** or **Degree**. Furthermore, as outlined in Chapter 4 (§4.2.2.4), the adverbs coded as **Evaluative**, **Speaker-oriented** and **Domain**, as well as the **Modal** *naturellement*, were coded as such given the interpretations obtained from the contexts in which they occurred.

On the other hand, the classification of some of the adverbs in Table B requires further clarification. For example, while the adverb *proche* is usually considered as a **Locational** adverb, in the data it was also used in contexts where a locational interpretation was precluded, but where a reading synonymous to *presque* (**Degree** adverb) emerged, as in (1); the classification of this adverb was thus determined based on the context in which it occurred. Similarly, *bien* is typically taken to be a **Manner** adverb, but in some cases it functions as a **Quantity** adverb synonymous with *beaucoup* (Robert 1996); so for cases of this adverb too, context had to be used to distinguish the type in each occurrence, as in (2).¹⁴ Furthermore, the lexical item *gros* can also occur in adverbial function synonymous with *beaucoup* (Robert 1996), as in (3), and so context was again used to determine how each occurrence of this adverbial adverb should be coded for type.

1) Ils auraient bien **proche** eu dix-huit ans. (90:1236)

2) a. [1] : Trouvez vous que ça a pas mal changé, le Vieux-Hull?

[77] : Ah, ça a **bien** (*quantity*) changé. Depuis qu'ils ont démoli les maisons là, ça a **bien** (*quantity*) changé. (77:94)

b. Et puis on s'est toujours **bien** (*manner*) entendus, mon mari- on a eu des hauts c-- des bas comme de- comme tout le monde. (94:1068)

¹⁴ Of course, ultimately its type in a given occurrence was irrelevant, since *bien* occurred categorically in the MID-VP position regardless.

3) Ça m'a affecté bien **gros** parce que c'était un petit gars qu'on prenait en pitié. (104:677)

Finally, the specific classification of *aussi* proved to be a difficult one. Most of the grammars consulted consider it to be an adverb of **Quantity** (e.g. Radouant 1922; Cayrou et al. 1949; Dauzat 1958; Chevalier et al. 1971; Grevisse 1990; etc.). On the other hand, it certainly did not meet the criteria for being considered an adverb of **Quantity** on par with *beaucoup*, nor did it semantically seem to align with the adverbs classified here as adverbs of **Degree**. The possibility of including it with the **Manner** adverbs was considered, but since it is virtually never mentioned as member of this category in the grammars consulted¹⁵ it seemed like grouping it there was unjustified. Ultimately, it was decided to leave this adverb unclassified for adverb type for the analyses, since, while its near-categorical POST-V use seems to align it with the **Manner** adverbs, it also behaves like at least some of the lexical adverbs considered to be **Quantity** adverbs (e.g. *davantage*). Since it would have accounted for a large portion of the data in either of these categories, and therefore would have had an important effect on the overall variant distribution for these categories, its inclusion in one or the other without stronger justification for its inclusion in one category over the other seemed imprudent.

¹⁵ One exception is Michaut and Schricke (1934:255), who group it with manner adverbs when it is synonymous with “de même” or “en outre”.

APPENDIX C

Être + participle constructions

1. Overview

In order to maintain comparability with Brill (1987), which is the only existing variationist study of variable adverb placement in French, the present study sought to code for passive constructions in the factor group for **Verb Phrase Morphology** (§4.4.1.7). During the extraction phase, however, it became clear that the task of identifying legitimate passive constructions was in some cases complicated by issues associated with *être* + past participle constructions in general. This section thus explains what these issues are, how they interact with circumscribing the variable context, and ultimately how they were dealt with.

We begin by looking at passive sentences. Semantically, a passive sentence is one in which the grammatical subject is the recipient, or patient, of the action expressed by the verb, and the agent may or may not be explicitly expressed, as exemplified in (1).¹ Structurally, a passive verb phrase² is composed of a past participle preceded by an auxiliary *être*, which itself may occur in a simple tense (1a) (e.g. present, imperfect, conditional, inflected future) or in a compound tense (1b) (e.g. *passé composé*, pluperfect, conditional past, future perfect).

- (1) a. La chanson est chantée (par les enfants).
b. La chanson a été chantée (par les enfants).

¹ In the active counterpart to the examples in (1), the agent (*les enfants*) would function as the grammatical subject, and the patient (*la chanson*) would be the direct object, as in *Les enfants chantent/ont chanté la chanson*.

² Here the term *verb phrase* is used to refer only to verbal elements (auxiliaries and participles), and excludes verbal complements, specifiers, and adjuncts.

The fundamental challenge encountered here with passive constructions centers on whether the past participle is adjectival or verbal; crucially, only cases of the latter should be included in this study.

In the prescriptive literature, discussions on the nature of the participle are not uncommon. For instance,³ Sauvegeot (1962:130) indicates that:

La construction dite passive n'est qu'un cas particulier d'une construction plus générale : celle du verbe être avec un adjectif attribut accordé en genre (et théoriquement en nombre) avec le sujet. Ce qui produit l'illusion que l'on se trouve en présence d'un passif, c'est que l'adjectif attribut est en l'occurrence un adjectif verbal, autrement dit, un participe, et que ce participe a un sens passé.

Le Goffic (1994:200-201, §134) further explains that:

En tant que formes verbales, [les participes] retiennent l'expression du procès verbal et une partie au moins de sa puissance nodale; en tant qu'adjectifs attributs, ils se rattachent à un nom et lui attribuent une qualité (plus ou moins statique ou dynamique). Selon les cas (le type de verbe, le contexte), ils sont sentis comme plus ou moins « verbaux » ou « adjectivaux » (avec une marge appréciable de liberté d'interprétation)

Additionally, the status of the participle as verbal or adjectival may be problematic even in non-passive constructions. As Sankoff and Thibault (1980:316) explain in their study on variable auxiliary use with *être* verbs,⁴ there are cases where the *être* + participle construction refers to the “stative sense of the completed action [...] a resulting state.” In such cases, “the use of *être*...[is] a natural parallel to its use as a copula” (Sankoff & Thibault 1980:316). In other words, with the class of *être* verbs, some cases of *être* + participle are actually copula + adjective

³ A *structure attributive* is defined by Le Goffic (1994:196) as one in which an adjective attributes a permanent or temporary quality to a subject via a copula verb *être* (or via another *verbe attributif*, such as *devenir*, *tomber*, *sembler*, *(ap)paraître* etc.)

⁴ The *être* verbs refer to a small group of verbs for which Standard French prescribes the use of *être* as the auxiliary when conjugated in a compound tense (e.g. *le passé composé*, pluperfect, past conditional etc.), as opposed to *avoir*, with which the majority of French verbs are conjugated. (Also note that variable use of auxiliary *avoir* with these *être* verbs has been reported in several varieties of spoken French (e.g. Montreal French: Sankoff & Thibault 1980; Ottawa Hull French: Willis 2000; European French: Gadet 1992)).

constructions, analogous to *il est gentil*. In these instances, the participle in question would be adjectival, not verbal, and the verb phrase would be in a simple tense.

Since this study's variable context explicitly excludes adverbial modification of adjectives, and is further circumscribed to adverbial modification with compound tenses only, it was crucial that adjectival uses of past participles be distinguished from verbal uses, so that only the latter were retained.⁵ Moreover, this issue affects the variable context slightly differently depending on whether the case in question is structurally analogous with that in (1a) (referred to here as *simple passives*; cases with the *être* verbs are grouped here) or with that in (1b) (referred to here as *compound passives*);⁶ as such, we consider each of these contexts in turn.

2. Simple passives

In the case of simple passives and the *être* verbs, the problem of distinguishing auxiliary + participle constructions from copula + adjective ones directly affects which cases are included in this study. In line with Sankoff and Thibault's (1980) observations regarding the stative reading of some *être* + participle constructions, Grevisse (2011, §772a) notes that:

Quand il n'y a pas de complément d'agent, si le verbe est à l'indicatif présent, imparfait ou futur, il est fréquent que le participe passé soit l'équivalent d'un simple adjectif attribut; on n'envisage que le résultat : Le magasin est fermé le dimanche. La rue était obstruée. Vous entrerez facilement : la porte sera ouverte.

⁵ Given that Brill (1987) found passive constructions to be generally rare (accounting for only 3% of her tokens, n=32/939), and since constructions which are structurally passive-like (i.e. *être* + past participle) were very frequent in the data here, with over 400 potential cases encountered during the initial phase of extraction, one solution may have been to exclude such cases outright. However, doing so would have prevented a true comparison with Brill (1987). Furthermore, it would still have been necessary to distinguish stative from non-stative cases of non-passive constructions involving *être* + participle (i.e. with the group of *être* verbs). As such, resolving the problem of distinguishing verbal uses of participles from adjectival uses was crucial from a methodological perspective.

⁶ These terms are inspired by Brill (1987:362), who distinguishes past passives, which includes "other compound aux. passives" from present passives, which includes "other simple aux. passives."

Le Goffic (1994:201 §134) goes a bit further, claiming that there is a “continuum qui est inscrit dans le système de la langue” in terms of the adjectival or verbal interpretation of the participle. To illustrate this continuum, he provides the examples in (2), specifying (what he claims to be) the verbal/adjectival interpretations of each (in brackets):

- (2) a. Paul est très fatigué (valeur adjectivale, attributive)
b. Paul est constamment fatigué par le bruit des marteaux-piqueurs qui n’arrêtent pas en bas de chez lui (valeur verbale, passive)
c. Paul est fatigué de toutes ces querelles (valeur intermédiaire)
d. La porte est ouverte (état, valeur adjectivale, attributive)
e. La porte est ouverte par le Comte, hors de lui (indication scénique, valeur verbale, passif d’action)

Looking closely at the examples in (2), the main distinction between constructions Le Goffic (1994) considers to be passive, and those he deems attributive, seems to be the presence of an expressed agent with the former. In fact, Sauvegot (1962:134) explains that “c’est le complément d’agent qui décide souvent de la nature passive de l’énonciation.” However, both Grevisse (2011) and Le Goffic (1994) note that in many cases the agent is merely implied,⁷ meaning that this criteria cannot necessarily be solely relied on for disambiguating passive constructions from non-passives ones. Indeed expressed agents were extremely rare in the data examined here, occurring but a handful of times.⁸

⁷ According to Le Goffic (1994), *Le Monde* undertook a survey in 1970 and found that only 1/4 of passive constructions contained an expressed agent.

⁸ It is interesting to note that the adverbs *très* and *constamment* used in 2a and 2b may also be implicated in the adjectival vs. verbal reading of *fatigué*. More specifically, it is widely claimed that *très* cannot modify verbs, necessarily making an adjective of *faitgué*. On the other hand, *constamment* could be indicating iterativity, which, following Sankoff and Thibault’s (1980) reasoning explained below, would make the proposition non-stative, and thus legal here.

On the other hand, both Grevisse (2011, §772a) and Le Goffic (1994:203, §136) claim that the presence of complements *other* than the agent indicates that a construction is passive; they provide the examples in (3) and (4), respectively, to illustrate this:

- (3) La porte est ouverte lentement/avec précaution.
- (4) Ce discours a été bien reçu au Quai d’Orsay (=par les responsables de la diplomatie française).

Similarly, Sankoff and Thibault (1980) explain that a number of temporal and non-temporal indices can be used to distinguish auxiliary uses of *être* from copular ones. The most obvious of these are temporal adverbs(!) or expressions which “punctualize or indicate a specific time” for the act or “which mark iterativity or the repetition of the same action” (Sankoff & Thibault 1980:318, 319); this includes such items as dates, times, and adverbs or expressions like *souvent*, *tout de suite*, *une fois*, *un jour*, *à l’âge de douze ans* etc.⁹ Other mechanisms they indicate can be used to make this distinction include discourse sequencing,¹⁰ considerations of tense concordance in constructions involving *quand*,¹¹ and indications, in the form of prepositional phrases, of the manner in which, the reasons for which, or the circumstances under which, the act took place.¹²

⁹ On the other hand, Sankoff and Thibault (1980) explain that adverbs and expressions referring to the present, like *maintenant* and *à cette heure* “now,” indicate a copula + adjective reading of the proposition.

¹⁰ More specifically, “the setting of an action within a sequence of actions” or “membership in a series” (Sankoff & Thibault 1980:319) points to an auxiliary + participle reading, while the occurrence of the questionable proposition either paraphrasing, following, or in a sequence of other copula + adjective constructions would indicate a stative reading for the proposition.

¹¹ Sankoff and Thibault (1980:323-24) explain that “when the verb of the higher sentence is in a simple (non-*composé*) tense that is the same as the tense of the verb *être* in the sentence embedded under *quand*, the verb [*être* embedded under *quand*] is interpreted as a copula [...] In contrast, when the verb of the higher sentence is in any *composé* tense, or in a simple tense other than that of the *être* in the sentence embedded under *quand*, this embedded *être* is interpreted...as an auxiliary.”

¹² According to Sankoff and Thibault (1980:325) “In making explicit the manner in which an act was accomplished, or in stating the goals of an act, or in providing other circumstantial details, a speaker is pointing to the act itself rather than the resulting state.”

Given this information, the present study identified legal simple passives and active cases of *être* + participle constructions among the potentially ambiguous cases using the criteria outlined above, which were gleaned from the prescriptive literature and from Sankoff and Thibault (1980). These are summarized with examples in (5):¹³

- (5) a. The presence of an adjacent or contextually provided agent:
- i. Parce **souvent** l'enfant est battu par son père, et non par sa mère. (75:1509)
- b. The use of temporal expressions which “punctualize or indicate a specific time” for the act or “which mark iterativity or repetition of the same action” (Sankoff & Thibault 1980:318, 319):
- i. Non, elle est venue **hier**, madame. ¹⁴ (84:816)
 - ii. Parce nous-autres à chaque fois qu'on a faite de quoi Gérard est **toujours** venu. (79:2574)
- c. Considerations of discourse sequencing (see fn 10):¹⁵
- i. Accepted token:
Onze heures moins vingt, elle a sorti, puis j'étais **déjà** rendu là. (30:1512)
 - ii. Rejected tokens:
 1. J'étais un garçon qui était **pas mal** averti. (108:107)
 2. Mais ils parlent tellement- c'est **tellement** ouvert. (117:1820)
- d. Tense concordance under *quand* (see fn 11):
- i. Accepted token:

¹³ In each of the examples in (5), the targeted adverb for the token is in bold, and the criteria used for token inclusion, or exclusion where indicated, is underlined.

¹⁴ In this example, the adverb serves as both the reason for which the token is under consideration for inclusion for the study, and the reason for which ultimately including it is justified (i.e. *hier* punctualizes the act and is also a case of the POST-V variant.) The same situation occurs for the examples in (5bii) and (5ei).

¹⁵ This criterion proved most useful for rejecting tokens than for accepting them.

QUAND la famille était **assez** sortie de misère comme on dit puis maman aurait repris ses forces, quand bien même j'aurais eu dix-huit, dix-neuf ans. (120:755)

ii. Rejected token:

QUAND-qu'il était **mal** pris, il venait nous chercher moi oubedonc il prenait ma femme. (79:2513)

- e. The presence of complements which indicate the manner in which (i), the reasons for which (ii), or circumstances under which (iii), the act occurred:
- i. Puis mon père lui est mort **vite**. (89:1230)
 - ii. Faut que ça soit peinturé assez **souvent** pour pas que ça pourrit. (70:1822)
 - iii. La madame est **quasiment** tombée en-bas de sa chaise. (73:1886)

After applying these criteria, cases where the status of the participle remained ambiguous were ultimately excluded.

3. Compound passives

In terms of compound passives, the initial challenge was again to separate out adjectival uses of the participle from verbal uses, which was accomplished using the same criteria that was applied to cases of simple passives and the *être* verbs, as outlined in the previous section in (5). However, unlike with simple passives, cases where the participle was an adjective, or where its adjectival/verbal status was ambiguous, were not outright excluded. Rather, such cases could be retained as long as the adverb was not directly modifying the adjectival or ambiguous participle, since the verb phrase *avoir été* is itself a compound tense, which places it within the variable context as defined in this study. In other words, tokens like the ones in (6) were accepted as legal, since they are essentially analogous to the ones in (7), and in none of the cases is the adverb directly modifying the adjective.

- (6) a. Mon frère il- il a **toujours** été accoté. (100 :1028)
b. Elle a **tout le temps** été habituée à faire ça. (109:1017)
- (7) a. Mon mari et moi on a **toujours** été heureux. (117:1647)
b. J'avais été malade moi de- assez **longtemps**. (120:675)

On the other hand, in (8), the adverbs *bien* and *plus* occur immediately before the adjectival participle, just like they occur before the adjectives *malade* and *fort* in (9), and so the tokens in (8) would be excluded from this study given prescriptive dictates that adverbs occur immediately before the adjectives they modify, minus a few exceptions¹⁶ (e.g. Arrivé et al. 1986; Grevisse 1993 §937; Martinet 1979).

- (8) a. Il a toujours¹⁷ été **bien** bâti. (90:2123)
b. Ottawa a toujours été **plus** évolué qu'à Hull (79:441)
- (9) a. Ma belle-mère a été **bien** malade. (88:657)
b. Les cours ont toujours été **plus** forts. (120:1363)

An additional challenge encountered with compound passives was determining how to handle adverb placement within the auxiliary, i.e. between conjugated *avoir* and *été*. More specifically, if in simple passives, the MID-VP variant occurs between the auxiliary *être* and the past participle, as in (11a) below, then it follows that the same should be true for compound passives; the MID-VP variant should be located between *été* and the past participle, as illustrated in (11b).

- (11) a. La tarte était **toujours/rapidement** faite (par Anne).

¹⁶ Specifically, Grevisse (1993 §937) explains that: a) some adverbs can occur after the adjective “pour être mis en relief;” b) the adverbs *plus* and *moins* can occur after the adjective when they are accompanied by a “proposition correlative” as in *Il est malade plus que je ne croyais*; and c) the adverb *assez* can be postposed when it is accompanied by *pour* + infinitive or *pour que* + clause.

¹⁷ The use of the adverb *toujours* does constitute a legal token, just as in (6a). The same holds for the use of *toujours* in (8b) and (9b).

b. La tarte a été **toujours/rapidement** faite (par Anne).

However, there were some cases in which the adverb occurred between the conjugated *avoir* and *été*, as in (12):

(12) a. On a **toujours** été reconnus par le- du monde qui nous- qui nous connaissaient pas.
(105:2568)

In attempting to address such cases, three solutions were considered. First, tokens like those in (12) could be excluded from the study altogether. Alternatively, these tokens could be considered additional cases of the MID-VP variant, since they do technically occur within the verb phrase. Finally, they could be coded as an additional variant, distinct from the three others (PRE-SUBJ, MID-VP and POST-V).

In considering these three options, the possibility of coding these cases as an independent variant was quickly eliminated, since it would ultimately have resulted in having to apply either the first option (these tokens would be excluded given their low frequency of less than 5% of the data) or having to apply the second option (since their low frequency would prevent them from being independently assessed, they would be collapsed with the other MID-VP variants during the recoding phase). Left with either option one or two, it was decided that these tokens would simply be recoded with the MID-VP variant, since such mid-auxiliary cases were both rare and essentially limited to the adverb *toujours*, which itself was found to be essentially limited to occurring in the MID-VP position.

APPENDIX D

-ment Adverbs

The following is a list of all the *-ment* adverbs identified by Molinier and Levrier (2000) which occurred in the OH subsample (in any and all contexts). The number of occurrences of each is indicated in brackets. Lexical items with at least fifty occurrences are bolded.

absolument (56)	extrêmement (1)	présentement (2)
actuellement (4)	facilement (9)	probablement (78)
agréablement (1)	finalement (21)	professionnellement (1)
amèrement (1)	fondamentalement (1)	profondément (1)
anciennement (27)	franchement (137)	publiquement (1)
apparemment (4)	généralement (2)	quasiment (91)
automatiquement (9)	graduellement (7)	raisonnablement (1)
autrement (57)	gravement (1)	rarement (5)
bonnement (2)	habituellement (17)	récemment (2)
carrément (8)	immédiatement (1)	réellement (39)
certainement (12)	indirectement (1)	régulièrement (13)
chaudemment (1)	joliment (1)	relativement (1)
comparativement (1)	justement (147)	sensiblement (2)
complètement (21)	lentement (1)	sérieusement (2)
constamment (2)	malheureusement (8)	seulement (69)
continuellement (7)	méchamment (1)	sévèrement (6)
couramment (10)	mentalement (5)	simplement (6)
craintivement (1)	moindrement (14)	spécifiquement (1)
décemment (1)	naturellement (14)	strictement (2)
définitivement (52)	nécessairement (18)	subitement (1)
dépendamment (1)	normalement (6)	suffisamment (1)
dernièrement (13)	occasionnellement (2)	superficiellement (1)
deuxièmement (7)	officiellement (2)	supposément (2)
différemment (2)	parfaitement (3)	sûrement (18)
difficilement (2)	partiellement (2)	tellement (311)*
directement (12)	péjorativement (1)	totalement (1)
doucement (4)	périodiquement (1)	tranquillement (3)
drôlement (1)	personnellement (18)	vaguement (1)
économiquement (1)	physiquement (3)	vraiment (194)
énormément (15)*	poliment (1)	
exactement (22)	pratiquement (4)	
exclusivement (1)	premièrement (38)	

*Note that this number indicates overall frequency in the sub-sample data, and does not distinguish adverbial from non-adverbial uses of these adverbs.

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