On the role of the present indicative in variable future-time reference in Hexagonal French

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Abstract

This study investigates variable future-time expression among native speakers of Hexagonal French who participated in informal conversations. The quantitative analysis is the first to examine the inflectional future, periphrastic future, and present indicative as separate forms in a single statistical model of French oral production. Results indicate that temporal distance and presence/absence of a temporal expression predict use of these verb forms. The second phase of the analysis focused on the use of the present indicative in future-time contexts. The examination of each instance of the present indicative shows that an immediate lexical temporal indicator is not necessary for this form to convey futurity and that future-time reference is often established at the discourse level and occasionally through apparent shared knowledge between the interlocutors. This investigation suggests the value of including the present indicative in the analysis of future-time reference in Hexagonal French in order to fully capture variation.

Keywords: future-time reference, present indicative, Hexagonal French, variation, temporality

1. Introduction

Future-time reference (FTR) in different varieties of French has been the focus of extensive study.¹ Linguists, as well as grammarians, have identified different verb forms that convey futurity, with the periphrastic future (PF), inflectional future (IF), and futurate present (or present-for-future) being the most commonly identified, as illustrated subsequently in (1). Whereas work by grammarians has tended to claim that each verb form is associated with a different linguistic context of future-time (e.g., proximal future, distal future, see Poplack and Dion (2009) for a more in-depth discussion), numerous sociolinguistic investigations have shown that FTR is variable. This means that more than one verb form can be used in the same linguistic context of futurity (e.g., Comeau 2011; Grimm 2015; Poplack and Turpin 1999). In this vein, these studies have demonstrated that a range of linguistic factors condition verb-form use in future-time contexts. In terms of the verb forms that have been investigated, research has focused on forms carrying morphological future endings, rather than the futurate present (see Grimm (2015) and Poplack and Turpin (1999) for exceptions). Linguists examining variable FTR in Canadian (e.g., Comeau 2011; King and Nadasdi 2003), Hexagonal (Roberts 2012; Villeneuve and Comeau 2016), and Martinique (Roberts 2013, 2016) French have justified the exclusion of the futurate present on the

¹ Abbreviations for this study are as follows: Future-time reference (FTR); Inflectional future (IF);

Inflectional future-conditional (IF-Cond); Lexical temporal indicator (LTI); Native speaker (NS); Nearnative speaker (NNS); Overt marker of futurity (OMF); Periphrastic future (PF); Futurate present indicative (PI). basis of the low frequency of the form in future-time contexts. However, Edmonds et al. (in press) suggest that present-for-future forms play a more important role in FTR in Hexagonal French than earlier studies on various varieties of French have claimed. In light of our previous research, the aim of the current article is to contribute to the understanding of variable FTR in Hexagonal French in two primary ways. Foremost, we expand quantitative analyses to include a multinomial dependent variable that consists of the IF, PF, and – most crucially – the futurate present indicative (PI); this analysis constitutes the first examination of three separate forms in a single statistical model of this variable phenomenon in spoken French (see the *Data Coding and Analysis* section for further discussion on the terms *futurate present* and *futurate PI*). Additionally, in order to better understand the scope of the use of this form in FTR in Hexagonal French, we conducted a follow-up examination of the PI in which discourse context was analyzed with the goal of identifying how futurate PI forms are licensed in this corpus.

2. Background

In our investigation of the use of the IF, PF, and PI in contexts of FTR in Hexagonal French, we employ a variationist approach, informed by functionalism. Functionalism "holds that linguistic structures can only be understood and explained with reference to the semantic and communicative functions of language, whose primary function is to be a vehicle for social interaction among human beings" (Allen 2007: 254). In other words, we began our analysis of FTR by identifying contexts of futurity (the function) in the discourse and then coded every verb form used in these contexts. In this section we begin with a brief overview

of future-time expression in French and then we highlight the relevant findings that have emerged primarily from variationist sociolinguistics on future-time expression in different varieties of French, paying close attention to observations made about the futurate present. We conclude this section with a discussion of Edmonds et al. (in press), whose method and results provided a vital first step to the current investigation.

2.1 Future-Time Expression in French

Linguists and grammarians recognize three principal verb forms in the expression of futurity in French: the PF, IF and the futurate present (cf. Poplack and Dion 2009). Examples of these forms, which come from the current corpus, are given in (1). Although previous research is in agreement that the futurate present is the least frequent among these forms (e.g., Grimm 2015; Poplack and Turpin 1999; Roberts 2012), findings differ as to whether speakers use the IF or PF most often. In most studies of Laurentian Canadian (e.g., Blondeau 2006; Emirkanian and Sankoff 1985; Grimm and Nadasdi 2011; Poplack and Turpin 1999) and Hexagonal French (Fleury and Branca-Rosoff 2010; Roberts,2012; Söll 1983; Villeneuve and Comeau 2016), researchers have observed that the PF is used more frequently than the IF to express futurity in oral discourse. In Acadian Canadian French (Comeau 2011; King and Nadasdi 2003) and in at least one study of Hexagonal French (Jeanjean 1988), the IF has been reported to be either almost as frequent or slightly more frequent than the PF.

In addition to the differing frequency of the IF, PF, and futurate present in oral production, the ways in which speakers use these forms to express futurity has been discussed. In Poplack and Dion's (2009) examination of French grammars spanning five centuries, they found that scholars have often tried to ascribe each verb form to specific characteristics of future events. For example, a grammar from 1943 states that the IF is used with indefinite and uncertain actions, the PF with proximal events that are linked to the present, and the futurate present with proximal events that are certain to occur and accompanied by temporal adverbials (Poplack and Dion 2009: 562). Despite the tidy and compartmentalized nature of these explanations, Poplack and Dion (2009) assert that, "[i]n spontaneous speech, however, they [the verbal forms] are rarely used in accordance with the values proposed" (p. 558). This claim has been supported by variationist studies on different varieties of French, including their own, that have submitted the characteristics of

² NS refers to native speaker and NNS denotes near-native speaker. The number adjacent to this abbreviation is the participant number. The second number is the token number. Thus, this first example comes from native speaker 2 and is the 86th token in our dataset.

future events described in French grammars to empirical analyses of language use. We turn now to this body of sociolinguistic research.

Variationism is an approach to sociolinguistics that quantitatively models the variation and change of variable linguistic phenomena according to a range of internal and external factors within the envelope of variation (Labov 1969; Tagliamonte 2012). The envelope of variation corresponds to the contexts in which the forms (i.e., variants) are in variation with each other and excludes categorical usage. Thus, what previous variationist research on FTR in French has shown is that multiple factors impact whether speakers use a particular verb form in any given future-time context and that different verb forms may occur in the same context. For instance, a future-time context including a temporal adverbial and that expresses an uncertain, distal event could be expressed with the IF (e.g., *Elle gagnera peut-être l'élection dans dix ans*), the PF (*Elle va peut-être gagner l'élection dans dix ans*). In conducting a quantitative variationist analysis, the researcher seeks to reveal which verb forms are most or least likely to occur in a range of future-time contexts.

There are two main commonalities among the numerous variationist studies on FTR in French. First, most have investigated Canadian varieties (e.g., Comeau 2011; Grimm 2015; Grimm and Nadasdi 2011; King and Nadasdi 2003; Poplack and Dion 2009; Poplack and Turpin 1999). Hexagonal and Martinican French (Roberts 2012, 2013, 2016; Villeneuve and Comeau 2016) have received less attention. Second, a majority of this research has analyzed interview data and just two forms, the PF and IF, in a statistical model. Of the studies that have limited their analysis to the PF and IF (e.g., Blondeau 2006;

Comeau 2011; Grimm and Nadasdi 2011; King and Nadasdi 2003; Roberts 2012, 2013, 2016; Villeneuve and Comeau 2016), we see that five linguistic factors have been investigated most often: sentential negation (polarity), adverbial specification, temporal distance, certainty (imminence), and grammatical person.³ Sentential negation refers to whether the verb in question is negated or not. Adverbial specification distinguishes predicates that are accompanied by a temporal adverbial from those that are not, and in some cases the presence of a temporal adverbial is further divided into two categories: specific adverbials (e.g., à dix heures 'at 10 o'clock') that convey exact information with regard to time and non-specific adverbials (e.g., à un moment donné 'at a given moment') that situate the action in the future without identifying the precise moment of realization. Temporal distance accounts for the amount of time between the moment of speaking and the anticipated accomplishment of the future action. Certainty refers to whether or not the speaker believes the event is certain to happen, and grammatical person identifies the person and number of the future-time verb. The role that each of these factors plays in variable FTR in French is not uniform across all studies. We offer Roberts (2012) as an example since his investigation focused on Hexagonal French, just as the current study does. He found that sentential polarity was the sole factor that predicted use of PF and IF

³ Given our focus on the futurate present, rather than the PF-IF contrast, we refer readers to these studies for specific results. Moreover, we limit our overview to linguistic factors and spontaneous speech because these characteristics are in line with the current study. We recognize, however, that extralinguistic factors such as age (e.g., Poplack and Turpin 1999) and socio-economic class (Grimm and Nadasdi 2011), and other types of data (e.g., Edmonds and Gudmestad 2015; Blondeau and Labeau 2016) have been investigated.

in an interview, such that the PF was favored over the IF in affirmative phrases and disfavored compared to the IF in negative ones. In the next section we see that the same linguistic factors that have been investigated for the IF-PF contrast have also been examined with the futurate present.

2.2 Futurate present in French

We now turn to the present-for-future and to the two variationist studies that conducted quantitative analyses that included the futurate present in their investigation of FTR in French, both of which examined Laurentian Canadian French. In their quantitative analyses, Poplack and Turpin (1999) and Grimm (2015) examined the futurate present, contrasting it to a collapsed category of the PF and IF. ⁴ Poplack and Turpin (1999) were the first to study the futurate present in a predictive model of FTR. They analyzed FTR reference in the Ottawa-Hull corpus, finding that futurate present forms accounted for seven percent of total verb forms in future-time contexts. Their statistical model revealed that temporal distance, adverbial specification, and imminence ("a state of affairs at speech [or reference] time preparatory of the future eventuality", p. 152) predicted use of the futurate present, but contingency, grammatical person, and sentential negation did not. ⁵

⁴ Poplack and Dion (2009) added diachronic data to the corpus examined in Poplack and Turpin (1999). Because the results for the futurate present did not differ between the two analyses, they were not reported in the 2009 study. It is for this reason that our presentation is limited to Poplack and Turpin.

⁵ Contingency distinguishes between an event that depends on something else occurring and assumed events that are expected to happen together.

presence of non-specific adverbials, distal events, and non-imminent actions favored this verb form as well, though less strongly than specific adverbs. Proximal events, the absence of a temporal adverbial, and imminent actions disfavored the use of the futurate present. Overall, the authors argued that the effects uncovered in terms of temporal distance and imminence were in fact secondary to the main effect of adverbial specification.

Grimm (2015) investigated corpora from 1978 and 2005 in order to gain a diachronic perspective of FTR. He identified several speaker groups in these corpora who differed by their use of French. We limit our reporting of his findings to the unrestricted⁶ group in the 1978 corpus, the Hawkesbury speakers in the 2005 corpus, and the unrestricted speakers in Cornwall and North Bay in the 2005 corpus, since they resemble more closely the language behavior of our speakers, for whom French is both the native and dominant language, than the other speakers in these corpora. He analyzed three factors – polarity, adverbial specification, and temporal distance – and found different results for each statistical model reported here. Concerning the unrestricted speakers in the 1978 corpus, Grimm's results for adverbial specification and sentential negation were similar to those of Poplack and Turpin, but, unlike the previous study, he did not find temporal distance to predict the futurate present. Turning to the 2005 corpus, the Hawkesbury speakers and the unrestricted speakers in Cornwall and North Bay favored the futurate present with specific adverbials and disfavored the form with non-specific adverbials and the absence of a

⁶ Unrestricted speakers are those "who use French in most situations of communication" (Grimm, 2015, p. 38).

temporal adverbial. Hawkesbury speakers slightly favored the futurate present with proximal events and neither favored nor disfavored the form for distal events. This factor was not significant for the unrestricted speakers in Cornwall and North Bay. Polarity could not be analyzed in the regression model for either group because these speakers did not use the futurate present with sentential negation. This categorical behavior results in knockouts in Goldvarb. These studies serve as a starting point for identifying the linguistic factors that may predict the use of the futurate present in FTR in Hexagonal French.

In addition to details about the linguistic factors that are related to FTR, three general claims about the futurate present have been voiced both in the abundant literature on Canadian varieties of French and in the smaller literature on Hexagonal and Martinican French. First, researchers have consistently found that futurate present forms are used infrequently to express futurity (e.g., Comeau 2011; Grimm and Nadasdi 2011; Roberts 2012, 2013; cf. Grimm 2015). Second, it has been claimed that futurate present forms and the PF occur in many of the same contexts. For example, in her analysis of Hexagonal French, Jeanjean (1988) writes, "[s]ouvent, à la place du futur en va, on pourrait avoir un présent, sans que cela change beaucoup le sens de l'énoncé" 'The periphrastic future could often be replaced with a present form, without the meaning changing very much' (p. 241). Third, it has been observed that the futurate present must occur with a lexical temporal indicator (LTI) in future-time contexts. Blondeau (2006), for instance, states, "[à] cet égard, nous avons noté dans nos propres données que la forme verbale du présent ne véhicule jamais à elle seule la référence temporelle au futur. En effet, elle doit toujours être associée à un autre élément, une indication temporelle non équivoque" 'In this respect, in our own data we have remarked that the present never conveys future temporal reference on its own. Indeed, it must always be associated with another element with an unequivocal temporal indication' (p. 74). Roberts (2012: 97) finds that in his corpus of Hexagonal French, instances of the futurate present show "almost categorical cooccurrence with future adverbials." In the current investigation, we examine how a group of NSs of Hexagonal French, engaged in informal conversation, make reference to future time, and we find that the results do not support these three claims concerning the use of the futurate present.

2.3 Edmonds et al. (in press)

In Edmonds et al. (in press) we began the examination of the verb forms that speakers of Hexagonal French use to express futurity in informal conversations. More specifically, we adopted a concept-oriented (functionalist) approach, meaning that we first isolated discourse contexts that referenced future-time and then identified all finite verb forms used in these contexts (cf. Aaron 2010; Kanwit 2017; Poplack and Dion 2009; Poplack and Turpin 1999; von Stutterheim and Klein 1988). This approach is in contrast to a form-oriented approach, in which researchers make a priori decisions about which verb forms can express futurity and isolate only these forms in a dataset (see the *Data Coding and Analysis* section for further details). Our concept-oriented analysis showed that a group of speakers used 13 different verb forms in future-time contexts, with the PF, IF and present-for-future forms occurring most frequently.⁷ In light of this finding, we argued that our

⁷ This verb inventory consisted of the PF, PI, present subjunctive, present ambiguous, IF, IF-conditional, lexical future, lexical future conditional, lexical future IF-conditional, *futur antérieur* IF, *futur antérieur* IFconditional, conditional, and periphrastic subjunctive (see the Edmonds et al. (in press) for details on these

concept-oriented analysis was an essential precursor to a quantitative variationist investigation because it enabled us to adhere to the Principle of Accountability (e.g., Labov 1969, 1972), which requires linguists to consider all possible variants in order to account for the status of any variable form in the linguistic system. Tagliamonte (2012) writes,

Accountability requires that all the relevant forms in the subsystem of grammar that you have targeted for investigation, not simply the variant of interest, are included in the analysis. The idea is that the analyst cannot gain access to how a variant functions in the grammar without considering it in the context of the subsystem of which it is a part. (pp. 9-10).

The results of our concept-oriented analysis indicated that the futurate present constituted a larger portion of future-time verb forms than had been reported in previous studies, regardless of the variety of French (cf. Grimm 2015). This finding suggests that a statistical model that restricted to the IF and PF would offer limited knowledge about variable FTR among the speakers in our dataset because other forms – and most notably the futurate present – are also at play (cf. Aaron 2010). Thus, the current investigation aims to build on Edmonds et al. (in press) by adopting a variationist approach to examine variable FTR in Hexagonal French. Specifically, we conduct a quantitative analysis that examines the ways in which the futurate PI is in variation with the IF and PF. To our knowledge, the present study is the first to analyze three separate forms in one single

forms). Importantly, we note that a goal of this previous study was to document the full repertoire of verb forms that speakers used in future-time contexts. We did not seek to assess which of these forms were in variation with one another. Thus, we make no claims about the envelope of variation in our previous work.

statistical model (contrary to the approach taken by Grimm 2015, and Poplack and Turpin 1999). We then expand on these findings by analyzing the instances of the futurate PI used without an immediate LTI, with a focus on discourse characteristics licensing the use of a present form in future-time contexts.

3. The Current Study

In the present investigation, we probe three claims that have emerged from previous research on different varieties of French concerning the use of the futurate present in FTR.⁸ We examine these claims using a group of Hexagonal French speakers as a test case.

(2) a. The futurate present is used infrequently in future-time contexts (Comeau 2011;Grimm and Nadasdi 2011; Roberts 2012, 2013);

b. The futurate present and the PF are used in similar contexts (Jeanjean 1988); and c. The futurate present cannot express the future on its own and must be accompanied by a future-looking temporal indicator (e.g., Blondeau 2006; Roberts 2012).

In order to address each claim, three research questions were formulated:

(3) a. With what frequency do speakers of Hexagonal French use the IF, PF, and PI to express future-time reference in a spontaneous, informal conversation?

⁸ We note that each of these claims finds support in previous work on Hexagonal French and, in the case of claims (1) and (3), from research on other varieties of French. We do not intend to claim, however, that every study on FTR in French has asserted all three of these claims. Instead, we make observations about commonalities that have emerged across some investigations.

b. Which linguistic factors predict use of the IF, PF, and PI in spontaneous, informal conversation?

c. Can the PI be used without an immediate LTI and, if so, how is its future-time use licensed?

4. Method

In this section we offer details about the corpus, participants, data coding and analysis.

4.1 Participants and Corpus

The data for our study come from a corpus of 12 dyadic conversations between a native speaker and a near-native speaker (NNS) of French (whose first language is English).⁹ The interlocutors knew each other well; they were spouses, friends, or close acquaintances. One reason for collecting conversation data from people who knew each other was to elicit a casual register. The conversations were recorded in a casual setting, such as one of the speaker's homes. Each native speaker and his or her NNS interlocutor were free to discuss any topic, and the researcher was not present. Previous analyses of this corpus demonstrate that the data reflect informal speech, as evidenced by features like *ne* deletion, non-standard interrogative forms, lexical truncation, slang and/or informal vocabulary, /l/ deletion in subject pronouns, among others (e.g., Donaldson 2011a). Each conversation lasted

⁹ Several studies have documented statistically indistinguishable behavior between the two groups, which suggests that the native speaker and NNS groups are behaving similarly with regard to various linguistic phenomena. Additionally, there is also no evidence that the native speakers are accommodating to the NNSs or vice versa (Donaldson 2011a, 2011b, 2012, 2016, 2017).

between 45 and 58 minutes. The corpus consists of 94,000 words (excluding, for example, hesitations and non-lexical backchannels) and is balanced quantitatively between native speaker and NNS talk. An important characteristic of the current dataset is the genre; whereas much of the existing research on FTR in French is based on data from oral interviews, the current study expands knowledge about this variable morphosyntactic structure by analyzing a different type of data, namely informal conversation data.

The participants were recruited through means such as personal networking and advertisements in Paris and the Southwest of France. The native speakers (n = 12) were all first-language speakers of Hexagonal French, representing a variety of regions within mainland France.¹⁰ Nine were female and three were male, and they ranged in age from 31 to 65 (M = 46.8 years). All but one was university-educated; the remaining participant had a high school education. Though not the focus of the current investigation, the NNSs were aged 26 to 71 (M = 45.5 years), all had earned a university education, and they had been living in France for at least four years. Ten were female, and two were male.

4.2 Data Coding and Analysis

After the third author transcribed the 12 conversations, a native speaker of French with advanced linguistic training verified the accuracy of the transcripts. Two researchers independently coded each transcript for future-time contexts in order to ensure consistency and accuracy in data coding. Any disagreements in coding were discussed with a third

¹⁰ We recognize that there may be regional differences in FTR among these participants. Our intention is not to treat Hexagonal French as a monolithic variety but rather to provide a snapshot of the ways in which Hexagonal French speakers vary their use of the PF, PI, and IF in future-time contexts.

researcher in order to reach a resolution. A future-time context was operationalized as any finite verb whose temporal reference was clearly posterior to the moment of speaking (cf. Blondeau, Dion, and Ziliak 2014). It is important to note that the use of a morphologically marked future form (IF or PF) was insufficient for the identification of a future-time context. ¹¹ Instead, contextual information, such as the discourse context, temporal expressions, and apparent shared knowledge between the participants, was used to identify the temporal reference of the finite verbs.

To illustrate our data coding, an excerpt from a conversation between native speaker 5 (NS5) and his spouse (NNS5) containing eight future-time contexts is provided in (4). This excerpt comes from a larger stretch of discourse about plans on how to modify their garden.

(4) NNS5: oui j'ai pas pu le faire là parce que j'ai fait la cuisine [oui] tu tu as fait tes cours cet après-midi j'ai j'ai préparé un petit peu pour les jours à venir

'yes I wasn't able to do it then because I cooked [yes] while you you ran the errands this afternoon I I prepared a little bit for the days to come'¹²

NS5: je vais les 'fin finir de de nettoyer euh là-bas devant demain demain c'est très bien parce que demain je n'ai(e) que deux heures demain matin l'école de X sont en je crois que c'est une répétition de la fête de l'école donc je

¹¹ Following researchers such as Poplack and Turpin (1999), the use of the PF or IF to convey functions such as habitual actions or hypotheticality were not included in this dataset.

¹² In the transcriptions, [bracketed material] indicates an interjection from the interlocutor.

termine à dix heures et demie donc ça sera très bien je pourrai(s) faire ça je pourrai(s) faire ça demain matin et donc demain après-midi quand tu reviens on peut aller chez le pépiniériste pour chercher des fleurs pour euh mettre dans le jardin quoi [oui] parce qu'ils commencent à

'I am going to well finish cleaning them uh over there in front of tomorrow tomorrow that's very good because tomorrow I only have two hours tomorrow morning the X school is on I think that it's a rehearsal of the school play so I finish at 10:30 so that will be very good I {will be able to/could} do that I {will be able to/could} do that tomorrow morning and so tomorrow afternoon when you come back we can go to the garden center to look for some flowers to uh put in the garden so [yes] because they're starting to'

NNS5: et il me faut ou des surfinias pour la fontaine [oui] parce que je pense que =

'and I need either some surfinias for the fountain [yes] because I think that ='

NS5: =non mais c'est c'qu'il faut

'=no but it's what is needed'

In her first turn, NNS5 enumerates what she did that day. In the following turn, her spouse changes the temporal reference, establishing it as future-looking with the temporal adverbial *demain* 'tomorrow'. This temporal reference is repeated several times, and allows the hearer (and reader) to understand that the PF form *je vais les finir* 'I am going to finish

them' and futurate present *je n'ai(e) que* 'I only have' are both set to occur the next day. Temporal reference moves to the present for the following two present forms – *je crois* 'I believe' and *c'est* 'it is' –, both of which represent present states. They are followed by a futurate present – *je termine* 'I finish' – whose future temporal reference is unambiguous thanks to the accompanying temporal adverbial (*à dix heures et demie* 'at 10:30'). The future-time frame is maintained for the two following finite verbs, both of which are IF forms: *ça sera* 'that will be' and *je pourrai(s) faire* 'I {will be able to/could} do'. The native speaker then repeats the final predicate, this time adding a specific temporal adverbial (*demain matin* 'tomorrow morning'). The future temporal frame for the two final future-time contexts is redefined, moving from *demain matin* 'tomorrow morning' to *demain après-midi* 'tomorrow afternoon'. Thus, the futurate PI form *tu reviens* 'you come back' and the lexical future¹³ on **peut aller** 'we can go' are both described as occurring the following afternoon.

As mentioned in the *Background* section, we identified 13 different verb forms used in future-time contexts in our original concept-oriented analysis of this dataset (Edmonds et al. in press); only the three most frequent forms – the PF, IF, and PI – will be the focus

¹³ Lexical futures, which are often modal, are expressions of desire, obligation, ability, or attempt that make reference to a present state about a future action (Bardovi-Harlig 2005; Bybee, Perkins, and Pagliuca 1994). The finite verb makes reference to the present (e.g., *peut*), while the infinitive references the future (e.g., *aller*).

in the current study.¹⁴ We selected these forms for two reasons. First, these three forms occur often enough in the dataset to undergo a statistical analysis. Second, previous research has suggested that not only the PF and IF, but also the PI, are in variation with each other in future-time contexts in French (e.g., Grimm 2015; Poplack and Turpin 1999). It is important to note that our decision to focus the analysis on these three forms does not mean that we have definitively circumscribed the envelope of variation. As Tagliamonte (2012) writes, "delimiting a subsystem of grammar is often not an easy task" (p. 10). Our objective here to learn more about the ways in which the PI varies with the PF and IF in future-time contexts so that we can contribute new knowledge about the variable context for FTR in Hexagonal French and, therefore, move a step closer in fully delineating the envelope of variation. With respect to the passage cited in (4), this means that four of the eight future-time contexts highlighted will not be included for this analysis: lexical futures (on peut aller), IF-Conditional (IF-Cond) forms (je pourrai(s)), and present ambiguous forms (j'ai(e)). Although we leave these forms and the question as to their possible place in the envelope of variation for FTR in Hexagonal French for subsequent research,¹⁵ we

¹⁴ In Edmonds et al. (in press) we analyzed 10 dyads between a native speaker and NNS of French. In the current study, we examine the same 10 native speakers in addition to two others, who also participated in an informal conversation with a NNS.

¹⁵ The low degree of frequency of many of these forms suggests that they have a very specialized role and may not form part of the envelope of variation, which means that they may not be competing directly with the IF, PF, and PI.

will discuss the coding of the final two categories in some detail, as they have been treated differently from study to study (see Edmonds et al. (in press) for further details).

Beginning with the IF, in Hexagonal French, it is common for the final syllables of first-person singular forms of the IF (*je pourrai*) and the conditional (*je pourrais*) to be pronounced identically with a mid-close variant [e] in informal speech, even though the forms maintain a spelling distinction and historically were distinguished phonetically from each other (Gueunier, Genouvrier, and Khomsi 1978; Hansen 2016). This means that it is not possible to objectively differentiate the IF from the conditional in the first-person singular form in oral production for most speakers. Thus, we created a separate category for these cases (IF-Cond, cf. Fleury and Branca-Rosoff 2010). In the current analysis, we have not included IF-Cond forms, as it is unclear what proportion are IF forms versus conditional forms. For this reason, our study of the IF covers all grammatical persons other than the first-person singular (i.e., only those instances that can be empirically identified as the IF). Because of this coding decision, we did not examine grammatical person as an independent variable in our quantitative analysis.¹⁶

Turning to the futurate present forms, we note that the verb form alone rarely provides information concerning the mood of the verb. Although some present-tense verb forms in French are unambiguously indicative (*je reviens*) and others unambiguously

¹⁶ We included first-person-singular forms of the PI and PF in order to provide the most comprehensive view of future-time reference as possible. We note, however, that a follow-up analysis (not reported in detail in the present investigation) of this dataset with all first-person-singular forms removed reveals the same significant effects as those found in the regression model reported here (see Tables 2a and 2b).

subjunctive (*je revienne*), a great many verb forms are homophonous in the subjunctive and the indicative (je termine). While some of these homophonous forms exhibit orthographic distinctions (e.g., j'ai 'I have-IND' vs. j'aie 'I have-SUBJ'), many do not (e.g., je termine could be the indicative or subjunctive), and in neither case can the mood of such verb forms be identified in speech. Thus, the aural form of many present-tense verbs cannot be unambiguously identified as indicative or subjunctive. Moreover, research on mood distinction in French has demonstrated that it is a variable phenomenon (e.g., Gudmestad and Edmonds 2015; Blanche-Benveniste 2010; Poplack et al. 2013) and that this variation occurs in dependent clauses (e.g., O'Connor DiVito 1997). In other words, although prescriptive grammars speak of subjunctive triggers (vouloir que 'want that') and indicative triggers (savoir que 'know that'), real-world language use does not mirror normative rules (Poplack et al. 2013). Therefore, futurate present forms were coded differently depending on whether they were found in independent or dependent clauses. In independent clauses, where no mood variation has been reported, forms were coded as either indicative or subjunctive. In dependent clauses, and in light of the reported variation between subjunctive and indicative, verb forms were coded into three categories: present indicative, present subjunctive, and present ambiguous. This coding scheme also means that we differentiate the terms *futurate present* and *futurate PI*. The former is common in previous research, and, if we rely on examples cited in previous publications, generally appears to consist of PI and present ambiguous forms used in traditional indicative contexts. The latter is the present form that we focus on in the current study (i.e., present forms whose phonetic realization allows us to unambiguously identify them as indicative in subordinate clauses - *tu reviens* - or any present indicative or ambiguous form in an independent clause – *elle chante*).¹⁷

For the first part of the analysis, we conducted a cross-tabulation to examine the frequency of use of the IF, PF, and PI in future-time contexts by these speakers. This analysis enabled us to address the first claim and the first research question.

Next, we coded each verb in a future-time context for four independent linguistic variables: temporal distance, (un)certainty, LTI, and sentential negation. Temporal distance investigated the distance between the moment of speaking and the future event. The categories were today, less than a week but not today, less than a month but greater than a week, greater than one month, and ambiguous. (Un)certainty deals with whether the speaker explicitly signals a feeling about how definite the occurrence of the future event is with a marker of (un)certainty. The marker occurred either in the same clause as the verb or the immediately previous one. The categories of this factor were: presence of an uncertainty marker (e.g., peut-être 'maybe', je sais pas 'I don't know'), presence of a certainty marker (e.g., savoir que 'to know that', sûrement 'surely'), and the absence of a marker. LTI identifies whether a temporal marker that establishes a future temporal frame for the event is present in the same clause as the verb form in question. The three categories were the presence of a time-specific LTI (e.g., demain 'tomorrow', la semaine prochaine 'next week'), the presence of a non-specific (with regard to time) LTI (e.g., bientôt 'soon', un jour 'one day'), and the absence of a LTI. The fourth independent variable was

¹⁷ The operationalization of present ambiguous has been revised since Edmonds et al. (in press).

sentential negation. The categories were the presence or absence of a negator (e.g., *pas*). Given the size of the participant pool, we were unable to examine social factors.

For the second phase of the analysis, we examined these data with the statistical software R. Although most variationist research on future-time reference in French has been conducted in Goldvarb, there is a distinct advantage to developing a regression model in R instead. As Johnson (2009) notes, R is used more broadly in fields outside of sociolinguistics, making its results more immediately comprehensible to researchers in other fields. Within R it is possible to build a non-binary logistic regression model, in the form of a multinomial regression. This type of model compares one category of the dependent variable (the reference point) with the other categories individually and examines the effects of multiple independent variables in one regression model.¹⁸ In the present investigation, this consists of comparing the futurate PI, IF, and PF, with the four aforementioned linguistic factors as independent variables. To consider these three verb forms, previous analyses (Grimm 2015; Poplack and Turpin 1999) completed a series of

¹⁸ Like Goldvarb, R offers the possibility of generating mixed effects models, whereby random effects may be included in the model alongside fixed effects. Inclusion of random effects like participant and lexical item in statistical models of language variation allows the researcher to make more generalized inferences about the importance of certain predictors beyond their effects on the dataset being used to generate the model (cf. Roberts 2012). That said, multinomial models in R do not currently support mixed effects, so we were not able to include random effects in our model, though we did compare our results to a series of Bonferronicorrected binary regression models including participant as a random effect. These models produced similar results to the multinomial models, reinforcing our confidence that the findings we report in this paper may generalize beyond our dataset.

binary regressions, rather than generating a single model with the three separate forms as the dependent variable. Thus, our approach is noteworthy, insofar as all three forms of the dependent variable – IF, PF, and futurate PI – were analyzed together in a single model, allowing us to provide detailed information about three forms in variation with each other. Given that our focus is on the use of the futurate PI, this form was selected as the reference point, allowing us to pinpoint the linguistic contexts in which this form is in variation with the two more studied forms.

To our knowledge, the current study is the first to include three separate forms in a single statistical model of variable future-time reference in French oral production (see Edmonds and Gudmestad (2015) and Gudmestad and Edmonds (2016) for written data). We argue that, unless the futurate present occurs marginally in a given dataset, an analysis that includes just two of these forms results in an incomplete understanding of variable FTR. Likewise, an analysis that collapses two forms together without evidence that they function identically has the potential of skewing observations about the factors that predict use.

In terms of our research questions and the claims about the futurate present, the regression model provides a response to the second research question. Additionally, this analysis not only allows us to test the second claim about the futurate present and PF occurring in the same contexts but it also enables us to identify empirically the linguistic contexts in which the PI is more or less likely to occur than the IF. Moreover, the results for the LTI factor that emerge from this statistical analysis provide the first part of the

response to the third research question, thus addressing the third claim about the need for the futurate present to be accompanied by a LTI.

Whereas the first two parts of the analysis allowed us to examine the frequency of the futurate PI and the linguistic factors that favor or disfavor its use, in the final part, we continued with the third research question and the claim that this form must be accompanied by a LTI. More specifically, we explored how individual speakers and discourse context licenses the use of the futurate PI in the absence of an immediate LTI. First, in order to learn whether the use of the futurate PI according to the LTI factor was characteristic of most speakers, we conducted an additional cross-tabulation to examine individual speakers' use. Furthermore, given the fact that the PI is a form that carries no future-time marking in its morphology, we hypothesized that the presence of an overt marker of futurity (OMF) in the same discourse context has the potential to license its use. To this end, our goal was to identify other OMFs that appeared before the futurate PI in the same discourse context, when no LTI accompanied the form in the same clause. We operationalized an OMF as a non-immediate LTI or a morphologically marked future-time verb form (IF or PF) in the same discourse context. We defined a discourse context as a theme that extends more than one clause and provides continuity to a part of the conversation (cf. Givón 1983; Lambrecht 1994; Reinhart 1981). Thus, in order to learn what licenses the use of the futurate PI when the verb is not immediately accompanied by a LTI in the same clause, we conducted cross-tabulations to identify how many uses of the PI were preceded by a non-immediate LTI, a morphologically marked future-time verb

form, and more than one type of OMF. We also measured the distance between the nearest OMF and the futurate PI in clauses.

5. Results

In this section we present the findings for the three parts of the analysis. We begin with the frequency of use of the three verb forms under investigation. Then we provide the results for the multinomial regression models for each participant group. Finally, we offer findings on the use of the futurate PI when a LTI does not accompany the verb form in the same clause.

5.1 Frequency

Beginning with the frequency of verb forms in future-time contexts, we analyze the three most frequent verb forms found in Edmonds et al. (in press) whose categorization in spoken discourse is unambiguous: PF, IF, and PI.¹⁹ Table 1 illustrates these results. The participants used the PF most often (51.0% or 173/339 cases), followed by the PI (25.7% or 173/339 cases), and lastly the IF (23.3% or 79/339 cases). Notably, the PI accounts for a quarter of the data and is slightly more frequent than the IF. This result shows that the PI is a common means for conveying futurity in informal conversation for these NSs. It also suggests that the PI is frequent enough in future-time contexts to warrant its examination alongside the PF and IF.

Table 1. Frequency of Verb Forms in Future-Time Context		
Verb form	#	%
PF	173	51.0
IF	79	23.3

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¹⁹ For frequency counts on all forms see Edmonds et al. (in press).

PI	87	25.7
Total	311	100

5.2 Multinomial Regression Model

Next, in order to identify the linguistic contexts that predict the use of these forms, we generated a multinomial regression model for the data. To establish the best predictors for verb form, we conducted a step-up analysis by which independent variables were added to the model one by one. Then a model comparison was completed using an ANOVA, the results of which indicated whether adding a given predictor significantly improved the predictive value of the model. In this case, three independent variables significantly improved the model's ability to account for the variation observed. Only (un)certainty was not included in the final model. This is because (un)certainty markers were used infrequently with the IF, PF, and futurate PI. Of the 339 contexts in this dataset, 302 (89.1%) occurred without a marker of certainty or uncertainty. These speakers used 25 (7.4% of the cases) certainty and 12 uncertainty (3.5% of the cases) markers. The paucity of (un)certainty markers resulted in empty cells, which impacts the reliability of the statistical model. Therefore, we were not able to include this factor in the regression analysis. In terms of general trends, however, all forms occurred most often without an (un)certainty marker (PI: 95.4%, PF: 86.1%, IF: 88.6%). Certainty markers with each form (PI: 4.6%, PF: 8.7%, IF: 7.6%) were more common than uncertainty markers (PI: 0%, PF: 5.2%, IF: 3.8%). Notably, perhaps, the PI did not occur at all with uncertainty markers.

It will be recalled that a multinomial regression consists of a single statistical model in which two categories of the dependent variable (IF and PF) are compared with a reference point (PI) in order to identify how the factors of interest (independent variables) predicted use. Within these factors, the model similarly compares a reference point for each factor against each of the other categories for that factor. For example, the reference point for LTI was the absence of a LTI, and this reference point was compared against the other two categories individually (the presence of a non-specific LTI and the presence of a specific LTI). Tables 2a and 2b illustrate the results of this statistical model, with significant predictors indicated in bold. A positive coefficient denotes a greater likelihood of using the IF or PF compared to the PI and a negative coefficient indicates a lower likelihood of using the IF (Table 2a) or PF (Table 2b) versus the PI, in co-occurrence with the application value of the independent variable in question. It is important to note that, even though the IF-PI comparison (Table 2a) and the PF-PI comparison (Table 2b) are presented in separate tables for ease of interpretation, the results come from one multinomial regression analysis. We review the results for each independent variable in turn.

Variable	Coefficient	Standard error	p value
TEMPORAL DISTANCE			
(reference point: greater than a			
month)			
less than a month	-1.050	0.662	0.113
less than a week	-0.161	0.517	0.756
Today	-0.777	0.677	0.251
Ambiguous	-0.077	0.489	0.875
LTI			
(reference point: no LTI)			
non-specific	-0.485	0.537	0.366
specific	-1.412	0.430	<0.0001

 Table 2a. Results for the IF-PI Multinomial Regression Model

NEGATION			
(reference point: absence of negator)			
negator	1.142	0.562	0.0422

Notes. PI is the reference point. Significant predictors are in bold.

Table 2b. Results for the PF-PI Multi	nomial Regress	ion Model	
Variable	Coefficient	Standard error	p value
TEMPORAL DISTANCE			
(reference point: greater than a			
month)			
less than a month	-1.501	0.594	0.012
less than a week	-1.069	0.474	0.024
today	-0.638	0.532	0.231
ambiguous	-0.029	0.428	0.946
LTI			
(reference point: no LTI)			
non-specific	-2.228	0.632	<0.0001
specific	-1.646	0.367	<0.0001
NEGATION			
(reference point: absence of negator)			
negator	0.269	0.560	0.6314

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Notes. PI is the reference point. Significant predictors are in **bold**.

Negation, temporal distance, and LTI were significant predictors of FTR in the multinomial regression model. In the presence of a negator, participants were more likely to opt for the IF over the PI. Regarding temporal distance, the participants were less likely to use the PF than the PI in less-than-a-month and less-than-a-week contexts (compared to those greater than a month from the moment of speaking). The model did not identify any significant results for the IF-PI comparison for temporal distance nor for the PF-PI comparison for negation. However, there were significant effects for both the IF-PI and PF-PI comparisons for LTI. For the IF-PI comparison (Table 2a), the IF was less likely to occur than the PI when a specific LTI was present (compared to the absence of a LTI).

There was no statistical difference between the IF and PI when non-specific LTIs were compared to the absence of a LTI. The PF-PI comparison (Table 2b) revealed that the PF was less likely to occur than the PI when a non-specific or a specific LTI accompanied the verb form (compared to the absence of a LTI).

Restating the results of this multinomial regression model with a focus on the futurate PI, we observed that this group of Hexagonal French speakers was more likely to use the PI over the PF in contexts that were less than a month and less than a week away, from the moment of speaking (but not today). They were also less likely to use the PI compared to the IF with the presence of a verbal negator. Furthermore, the presence of a specific LTI favored the use of the PI over the IF, and the presence of a specific LTI favored the use of the PI over the PF. Thus, with the exception of non-specific LTIs in the IF-PI comparison, this statistical model revealed the presence of a lexical marker of futurity in the same clause as the verb form impacts variable use, such that the PI is more likely to occur than the morphologically marked forms. This statistical analysis seems to suggest that there are more differences between the PF and futurate PI than the IF and the futurate PI for these speakers.

5.3 Use of the Futurate PI

Even though the multinomial regression model indicated that the futurate PI was favored in the presence of temporal markers, this result also indicates that the occurrence of an immediate LTI with the futurate PI was not categorical, counter to claims made in some prior research (e.g., Roberts 2012). In other words, the futurate PI was not always accompanied by a LTI in the same clause. We note that of the 87 uses of the PI in futuretime contexts in this dataset, 39 (44.8%) occurred without a LTI in the same clause (compared with 86.1% for PF and 74.4% for IF). Thus, we turn now to those futurate PI forms that this group of speakers used in the *absence* of an immediate LTI, in order to explore how FTR is licensed in such instances (research question 3). In the final part of our analysis, we began by identifying the number of individual speakers who used the futurate PI with and without an immediate LTI. Then we sought to determine how FTR was established for the instances of the futurate PI that were not accompanied by an immediate LTI in the same clause, given the fact that the morphology of the verb form does not convey futurity. Specifically, we examined whether there were OMFs (non-immediate LTIs, futurate PF, futurate IF) that preceded the verb form in the same discourse context. Examples of OMFs found in this dataset were *demain soir* 'tomorrow night' (non-immediate LTI), *elle va passer* 'she is going to spend' (futurate PF), and *on verra* 'we will see' (futurate IF). Focusing on the nearest OMFs, we also identified the distance in the number of clauses between the futurate PI and the nearest OMF.

The use of futurate PI without an immediate LTI is widespread in terms of the individuals in this corpus: All but one participant used the PI in contexts of future-time reference both with and without a LTI. This participant only used the PI in the absence of an immediate LTI. In other words, the fact that the futurate PI occurs with and without a LTI is a characteristic of speech of most participants in this dataset, and the use of the futurate PI without an immediate LTI is not restricted to an anomalous speaker.

Next, we examined whether the 39 cases of the futurate PI that were not accompanied by an immediate LTI were preceded by an OMF in the same discourse context. The results, which are summarized in Table 3, indicate that at least one OMF was used before 32 of the 39 cases (82.1%) of the futurate PI.

Table 3. Use of the Futurate PI with an OMF				
OMF		#	%	
LTI & verb		25	64.1	
	LTI closest	11	44.0	
	Verb closest	13	52.0	
	Same clause	1	4.0	
Verb only		6	15.4	
LTI only		1	2.6	
No OMF		7	17.9	
Total		39	100	

Note. Italicized rows are subcategories of the row above it. 'Verb' signifies a morphologically marked future-time verb and 'LTI' represents a non-immediate LTI.

Most of these cases were preceded by both a non-immediate LTI and a morphologically marked future-time verb (25/39 cases or 64.1%). Among these 25 uses of the futurate PI, 11 were preceded most closely by a non-immediate LTI, with a distance of one to five clauses (M = 2 clauses); the morphologically marked future-time verb was farther away in the discourse context. For another 13 cases of the futurate PI, the morphologically marked future-time verb was the closest OMF with a distance of one to 13 clauses (M = 4 clauses), with a LTI preceding the use of the IF or PF. The excerpt in (5) below exemplifies the use of two different OMFs in separate clauses. In this example from our corpus, the participants are discussing weekend plans, specifically whether Laurent (a friend) is free. NNS3 uses a LTI five clauses and a PF two clauses before her native-speaker interlocutor uses a futurate PI. This observation suggests that the licensing of futurate PI is not contingent on the same speaker producing the futurate PI and the OMF.

(5) NNS3: =<u>samedi</u> lui il est libre?

'=<u>Saturday</u> he's free ?'

NS3: oui

'yes'

- NNS3: mais j'étais étonnée parce qu'il joue pas ah mais <u>il va pas jouer</u>? 'but I was surprised because he's not playing ah but he<u>'s not going to play</u>?'
- NS3: mais comme il a perdu il: il **part** à Bordeaux je crois je crois qu'il a dit qu'il avait pas envie d'y aller ou un truc comme ça

'but as he lost he he **is going to** Bordeaux I believe I believe that he said that he didn't want to go or something like that'

Continuing with the instances in which the futurate PI was preceded by both types of OMF, in one case presented in (6), the LTI and the morphologically marked future-time verb were in the same clause, one clause before the futurate PI. In this example, the participants are talking about the future plans of NNS1's daughter and the clause that immediately precedes NS1's futurate PI (in bold) contained a LTI and the use of the PF (both underlined). We note that the native speaker's interlocutor contributed the OMFs. Once again we see that the nearest overt markers of futurity were produced by the interlocutor, rather than the speaker who used the futurate PI. As we will discuss subsequently, this behavior points to a discourse-level phenomenon.

(6) NNS1: elle a fini elle attend les résultats [ouais] et puis en fonction de ses résultats je {bruit} si elle <u>va passer l'année prochaine</u> à Toulouse.²⁰

'she finished she's waiting for the results [yeah] and then depending on

²⁰ In this example, the bracketed {noise} indicates a short inaudible sequence obscured by noise.

her results, I {noise} if she is going to spend next year in Toulouse.

NS1: ou à Grenoble parce que elle part à Grenoble

'or in Grenoble because she is leaving for Grenoble'

Six of the remaining uses of the futurate PI that were preceded by an OMF occurred after a morphologically marked future-time verb only. These OMFs were used between one and 20 clauses before the futurate PI (M = 5.5 clauses). A non-immediate LTI was not used in these discourse contexts. This result seems to indicate that a preceding PF or IF is enough to license the use of the futurate PI, even if it is as many as 20 clauses away in the same discourse context. Furthermore, there was only one example in our corpus of a speaker using the futurate PI with a LTI in the same discourse context in a previous clause other than the immediate one *without* an accompanying PF or IF verb (four clauses before the verb). This finding suggests that, when a LTI occurs in a different clause than the futurate PI, the LTI alone does not usually suffice to license futurate PI.

Although in general we found that most instances of the futurate PI that lacked an immediate LTI were preceded by an OMF in the same discourse context, this was not always the case. In seven cases, the futurate PI was not preceded by an OMF in the same discourse context (17.9% of the PI tokens that were produced without an immediate LTI). In these cases, the futurate PI was the first verb found in a future-time context in its discourse context. Either apparent shared knowledge allowed the use of the PI as a future-time verb or the future-time reference was established in a clause that closely followed the verb. Example (7) illustrates shared knowledge licensing the PI. In this example, NS2 passes abruptly from the previous discourse topic (a friend's drinking problem) to the

upcoming arrival of a group of Scottish school children. However, this change in topic is not signaled by any overt FTR. The native speaker says that she has the schedule for the visit, and then uses three futurate present forms (only the last two are coded as futurate PI, as the first occurs in a subordinate clause): j'ai(e) 'I have', *ils partent* 'they leave', and *ils font* 'they do'; it is only six turns later that we learn that these students will arrive the 18^{th} of July (several weeks after the recording of the conversation).²¹ The discourse context makes it very clear that these are activities that will occur in the future. We focus here on the verbs in bold, though other future-time verbs are available in this example.

(7) NS2: j'ai vu son cousin à Intermarché son cousin qui a bientôt soixante-dix ans et je mais je il me demandait si j'avais vu José j'ai dit oui j'avais ramené Benoît il m'a offert l'apéritif et i m' dit il l'a bu? parce qu'i m'a dit toi je sais que tu bois pas j'ai dit non mais j'ai pris de l'eau et je lui ai dit oui du vin blanc i dit t'es fou i m' dit mais pourquoi il boit? et là il est passé mercredi deux Ricards

> 'I saw his cousin in Intermarché his cousin who is soon 70 and I but I he was asking me if I had seen José I said yes I had dropped off Benoît he invited me in for an aperitif and he says to me he drank it? Because he told me you know that you don't drink I said no but I had some water and I told

²¹ The discourse context makes it very clear that these are activities that will occur in the future. We know from extended discourse not available here due to space constraints that the students will arrive several weeks after the recording of the conversation and that the events will take place during their stay in France.

him yes some white wine and he says you're crazy he tells me but why is he drinking? And then he stopped by Wednesday two Ricards'

NNS2: ah oui il accepte pas la situation

'ah yes he doesn't accept the situation'

NS2: hier apéro à la piscine y avait la réunion tu sais pour les Écossais [ah] j'ai le planning [ah bon] super y a plein de jours où j'ai(e) des élèves à la maison 'fin l'matin ils **partent** l'après-midi et des jours ils **font** activités de plage donc là c'est bon ou à l'église/ ça c'est super alors les autres fois l'après-midi courses d'orientation shopping

'yesterday aperitifs at the pool there was the meeting you know for the Scottish [ah] I have the schedule [really] super there are lots of days when I have students at the house or the morning they **leave** in the afternoon and some days they **do** beach activities so that's good or at the church that's super so the other times in the afternoon orienteering activities shopping'

Thus, the analysis of non-immediate OMFs and the futurate PI demonstrated that examining the discourse context is crucial for understanding variable FTR in French for two reasons. First, the findings indicated that an OMF (generally, either a stand-alone morphologically marked future-time verb form or one that is accompanied by a nonimmediate LTI) can license the use of the futurate PI when used in the same discourse context, even if it precedes the futurate PI by several clauses. Second, it showed that OMFs are not necessary in the discourse context because future-time reference is specified soon after the use of the futurate PI or because shared knowledge can license the futurate PI. We conclude that the future reference is licensed and understood in this case through knowledge of the upcoming event shared by both speakers.

6. Discussion

We now turn to answering the current study's research questions and to addressing the three primary claims regarding the present-for-future in French identified in the literature review (see the *Futurate Present in French* section). This part of the Discussion focuses on the contributions that our investigation makes to FTR in French and specifically to Hexagonal French. Finally, we end with an examination of the overarching contributions that our findings make to sociolinguistics more generally.

FTR in French

In discussions of FTR in various varieties of French, the futurate present has been characterized as infrequent, as potentially similar to the PF in terms of use, and as needing an accompanying LTI to make future reference: "P [present] remains unaffected by most of the factors that constrain the choice between the inflected and periphrastic variants. This variant, though rarely selected [...], is encroaching on the future temporal reference sector via contexts modified by specific adverbials" (Poplack and Turpin 1999: 158). However, the current study's findings have offered evidence indicating that these observations do not hold for Hexagonal French. Our first research question examined the frequency of use of the PF, IF, and PI in future-time contexts. These speakers of Hexagonal French used the PF more than half the time in spontaneous, informal conversation. This result is similar to that of Fleury and Branca-Rosoff (2010) and Roberts (2012) who also found that the PF

was the most frequent FTR form in Hexagonal French. Continuing with our findings, the futurate PI occurred a quarter of the time and the IF was used a little less often than the futurate PI. With the futurate PI constituting almost 26 percent of the dataset, our analysis of the frequency of this form provides empirical evidence that counters the claim made both by grammarians (see discussion in Poplack and Dion 2009) and linguists (e.g., Roberts 2012) that speakers of French use the present-for-future infrequently. The one exception to the low rates of present-for-future in French is Grimm's (2015) analysis of the 2005 Laurentian Canadian French corpus, which appears to be the only study that has found rates of use of present-for-future forms similar to those reported here. Direct comparisons of frequency, though, are difficult given differences in the two datasets. Unlike our participants, for whom French is the sole or clearly dominant language in a largely monolingual community, the speakers in Grimm (2015) who produced the futurate present most often were restricted (22% futurate present) and semi-restricted (19% futurate present) speakers whose use of French was more limited due to their use of English in daily life. In summary, the results for the futurate PI found in the current study differ from previous research on Canadian, Hexagonal, and Martinican varieties of French, which has primarily reported rates of less than 10 percent for the futurate present.

The second research question focused on the linguistic factors that predicted the use of the futurate PI versus the IF and versus the PF in a single multinomial regression model. This analysis offers new information about Hexagonal French because it is the first variationist study to include the PI in a statistical model (cf. Roberts 2012; Villeneuve and Comeau 2016). We were unable to include the (un)certainty factor in the statistical model,

given the fact that the participants used (un)certainty markers infrequently. However, we found that temporal distance and LTI showed significant effects in the PF-PI comparison and that negation and LTI exhibited significant effects for the IF-PI comparison. In particular, the futurate PI was favored over the PF when a specific or non-specific LTI was present and in contexts where the future action was less than a month or less than a week away. The futurate PI was also favored over the IF when a specific LTI was present and disfavored when the verb was negated. The current investigation is the first to identify differences between the PI and both the PF and IF in variable future-time contexts in French, and, thus, offers new details on the ways in which these three verb forms are in variation with one another, in Hexagonal French in particular. This analysis enables us to contribute to the discussion on another claim that has been made about the futurate present in Hexagonal French – that the futurate present occurs in largely the same contexts as the PF (e.g., Jeanjean 1988). Our statistical analysis identified linguistic contexts in which the use of the PI and PF differ. Moreover, if we compare the IF-PI and PF-PI portions of the multinomial regression model, we see evidence suggesting that there are more differences between the ways in which this group of speakers uses the PF and PI than differences between the IF and PI.

The findings from the multinomial regression model suggest that LTI was the most influential linguistic factor on variable FTR for these speakers. This variable serves as a point of comparison with previous studies. It will be recalled that Poplack and Turpin (1999) and Grimm (2015), who examined Laurentian varieties of French, conducted regression analyses using a binary dependent variable, in which they investigated the factors that predicted the use of the present-for-future over a collapsed category of the PF and IF. The differences not only in the dependent variable but also in the coding of the independent variables and the type of data (both previous studies analyzed interviews) between their investigations and the current one do not allow us to synthesize results from these three studies into generalizable findings. Nevertheless, results with respect to LTI reveal clear similarity between varieties of French, as all three studies report that the futurate present tends to be favored when a lexical marker of futurity accompanies it. The exceptions are that the Cornwall and North Bay speakers in Grimm (2005) disfavored the futurate present with non-specific adverbials and that our participants exhibited no difference in their use of the IF and futurate PI when non-specific LTIs were present. The results with respect to LTI bring us to the third research question and claim.

Although the regression model demonstrated that the futurate PI was generally more likely to occur when a LTI (specific or non-specific) was available in the same clause, this result represented a trend in the data and was not categorical. In other words, this group of participants also used the PI in future-time contexts without an immediate LTI, which is in contrast to claims made about the categorical nature of LTIs with the futurate present (cf. Roberts, 2012). In order to better understand these instances, we began our follow-up analysis by examining individual speakers. We found that a majority of the speakers in our corpus used the futurate PI both with and without a LTI, which suggested that the lack of an immediate LTI with the use of the futurate PI was not a result of idiosyncratic linguistic behavior.

Next, the size of our dataset enabled us to closely examine each of the 39 instances of the futurate PI occurring without an immediate LTI. Our findings indicated that most instances of the futurate PI were preceded by an OMF in the same discourse context, either the use of the IF or PF, or both a morphologically marked future-time verb form and a non-immediate LTI. A portion of futurate-PI forms (7/39 or 17.9%), however, was not preceded by any explicit mention of futurity. In these cases, it was apparent shared knowledge between the speakers that licensed the use of the PI, or future-time reference was established in a clause closely following the futurate-PI form. The fact that the data analyzed here were informal conversations between people who knew each other well may help to explain the use the futurate PI that is licensed by shared knowledge, which may be less likely to occur in interviews between an interviewer and a participant who are not acquainted.

Therefore, in response to the claim that the PI must be accompanied by a lexical indicator of future time (Blondeau 2006; Roberts 2012), the current investigation found that, while the futurate PI tends to be favored in the presence of an immediate LTI, it is not required. OMFs that come before the futurate PI in a different clause, but in the same discourse context, can license the use of the futurate PI, as can shared knowledge between speakers. These observations are in line with Le Goffic and Lab (2001) who argued that a precise marker of futurity is unnecessary if an understanding of futurity is available in the context (p. 77). In general, this analysis helped to explain the strong presence of the futurate PI in the FTR of these participants by demonstrating that futurity can be established by means other than a LTI that accompanies the futurate PI in the same clause. In other words,

a complete understanding of this variable phenomenon necessitates an empirical examination that goes beyond the clause level.

6.1 Overarching Contributions

While our findings on the futurate present have clear relevance for FTR research in French, we argue that they also have implications for sociolinguistics more generally. Specifically, the current investigation is an example of research that aims to foster advancements in sociolinguistics by advocating for methodological improvements at various stages of the research process. Foremost, the current investigation has provided a concrete example of the Principle of Accountability (e.g., Labov 1969). It has demonstrated that a variationist investigation of a morphosyntactic phenomenon such as FTR can gain from beginning with a concept-oriented analysis (cf. Edmonds et al. in press), because this approach enables sociolinguists to adhere to a principle that is fundamental in ensuring that all possible variants are identified. Research that passes over this step could be excluding variants from the analysis and, consequently, could lead to in an incomplete understanding of the envelope of variation. Second, the current study illustrates that the validity of the observations we make about language is directly connected to the objectivity and precision of our data coding. For example, the fact that there are instances of homophony in the French verb paradigm leads to challenges in classifying some verb forms into distinct tense-mood-aspect categories. Rather than turning to prescriptive expectations of language—since it is well established that they do not reflect real-world language use—we argue that a coding scheme needs to reflect the ambiguity that exists in language use. In other words, a scientific study of language should be just that – one that relies as much as

possible on objective observation. Lastly, the present study is important because it shows that, as the field of sociolinguistics advances with the statistical tools it employs to analyze data, the more specific, accurate, and comprehensive our understanding of variation can become. This notion is evidenced by the current investigation's move beyond a binary dependent variable (e.g., PF vs IF) to examine a multinomial dependent variable that includes the futurate PI. In short, our hope is that this sociolinguistic analysis of FTR in Hexagonal French has served as a test case for ways in which research method, and subsequently theory, in variationism can move forward.

7. Conclusion

The current study is the first to our knowledge to investigate the IF, PF, and futurate PI as separate verb forms in one statistical model of language use in French, building on previous research that has tended to concentrate on the IF and PF. By first adopting a concept-oriented perspective in our examination of morphosyntactic variation, it has become clear that futurate-present forms are a major player in future-time expression for this group of speakers. Our analysis suggests that to more fully capture the variation that exists in spontaneous speech, the futurate PI should be included in models of variable use, if the frequency of this form is sufficiently high. This is especially true because our results show that neither the PI and PF nor the PI and IF show identical patterns of use and, though common, OMFs in the discourse are not required for PI to convey future-time reference. Instead, shared knowledge between speakers can be sufficient. Thus, it is important for future studies, especially those that examine corpora that are larger than the current corpus,

to adhere to the Principle of Accountability by beginning with a concept-oriented analysis and to continue to examine the role that present forms, in addition to other verb forms, may play in variable future-time expression. Applying this approach to other varieties of French will enable researchers to advance knowledge of possible dialectal differences. Finally, it is necessary to expand the types of data used to investigate FTR in French (e.g., informal conversations like the ones examined here) in order to broaden the understanding of this morphosyntactic phenomenon beyond observations made from interview data (cf. Blondeau and Labeau 2016). In particular, data-elicitation methods that allow speakers to frame their own discourse and that are not guided by the interventions of interviewers may be especially fruitful since the current study suggests that FTR in French should be examined at the discourse level, rather than a smaller (e.g., sentential) level. In sum, the current study has laid a foundation for large-scale studies of Hexagonal French that seek to contribute generalizable results for this variety of French and it has demonstrated the need for variationist investigations of morphosyntax to be preceded by concept-oriented analyses.

8. References

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