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Variable future-time reference in French:
A comparison of learners in a study-abroad and a foreign-language context


#### Abstract

This study seeks to advance understanding of second-language (L2) acquisition of future-time reference in French, by comparing the developmental trajectories of learners living in and away from the target-language setting. Study abroad learners in France ( $n=45$ ), foreign-language learners living in the U.S. $(n=37)$, and native speakers of Hexagonal French $(n=30)$ participated in this study. They completed a written-contextualized task, a language-proficiency test and a background questionnaire. For each written-contextualized-task item, participants selected from among three responses that differed with respect to the form (inflectional future, periphrastic future, present). Items were designed to test for the influence of three factors on the form selected: presence/absence of a lexical temporal indicator, temporal distance, and (un)certainty. Additionally, two extra-linguistic factors were examined: learning context and proficiency level. The analyses of frequency and the multinomial logistic regressions suggest that, despite developmental similarities between learning contexts, acquisitional paths of study-abroad and foreign-language learners were not identical.


Keywords: L2 variation, future-time reference, French, learning context, L2 development

## Résumé

Cette étude cherche à faire avancer notre compréhension de l'acquisition de la référence temporelle au futur en français langue seconde, en comparant les trajectoires développementales d'apprenants vivant ou non dans le milieu de la langue-cible. Des apprenants participant à un séjour en France ( $n=45$ ), d'autres vivant aux États-Unis $(n=37)$ et des locuteurs natifs du français hexagonal ( $n=$ 30) ont participé à la présente étude. Ils ont réalisé une tâche d'écriture contextualisée, un test de compétence linguistique et un questionnaire de profil linguistique. Pour chaque item d'écriture contextualisée, les participants devaient choisir parmi trois réponses de forme différente (futur fléchi, futur périphrastique, présent). Les items étaient conçus pour tester l'influence de trois facteurs sur la forme choisie : la présence ou l'absence d'un indicateur temporel lexical, la distance temporelle et la certitude. Nous avons également examiné deux facteurs extralinguistiques : le contexte d'apprentissage et le niveau de compétence. Les analyses de fréquence et de régression multinomiale logistique suggèrent qu'en dépit de développements similaires entre les contextes d'apprentissage, la trajectoire acquisitionnelle des apprenants participant à un échange linguistique et celle des apprenants en contexte américain ne sont pas identiques.

Mot-clés: variation en langue seconde, référence temporelle au futur, français, contexte d'apprentissage, développement en langue seconde

Research on future-time reference (FTR) has shown that native speakers (NSs) of Canadian, Hexagonal, and Martinican French are variable in their use of verb forms in expressing future time, and that numerous linguistic and extra-linguistic factors impact this use (e.g., Poplack and Turpin 1999; Comeau 2011; Roberts 2012, 2013). Similarly, second-language (L2) learners of French in an immersion program, a foreign-language/at-home (FL) setting, and a study abroad (SA) context have been found to exhibit native and non-nativelike patterns of variability with future-time reference (e.g., Nadasdi et al. 2003, Howard 2012, Edmonds and Gudmestad 2015). Moreover, research from the more general field of second language acquisition (SLA) has indicated that the relationship between L2 acquisition and learning context is complex, a relationship that may be modulated by proficiency level in the L2 (e.g., Lafford and Collentine 2006). Taken together, previous research has laid the groundwork for an investigation that brings these various fields of study together in order to better understand the acquisitional path(s) taken by learners of different proficiency levels in differing learning contexts in their development of future-time reference (FTR). Thus, the aim of our study is to examine variable future-time expression in non-native French, as a function of L2 learning context and L2 proficiency level.

## 1. Background

In this section we examine previous research pertaining to FTR in French and the acquisition of variable structures by non-native speakers (NNSs).

### 1.1 Expression of FTR in French

When looking to express a future event, the speaker of French has a (conscious or unconscious) choice to make, as a variety of morphological means can be used to make reference to future time. Not only does French have two forms that are morphologically marked for the future-the
inflectional future (IF) and the periphrastic future (PF)-but other forms, such as the present indicative, the present subjunctive, and the conditional, can be found in FTR contexts (see Gudmestad et al. 2014). Previous research in both Canada (Poplack and Turpin, 1999) and in France (Gudmestad et al. 2014) has indicated that the three forms used most frequently in reference to future time are the IF, the PF, and the present. ${ }^{1}$ Examples of each, taken from the NS data in Gudmestad et al., are provided in (1):
a. IF ya Benoît et Pascal qui seront là aussi (F7, 37) 'there's Benoît and Pascal who will be there too'
b. PF la piscine va être gelée ( $\mathrm{F} 4,6$ ) 'the pool is going to be frozen over'
c. present il est à la retraite quand ? (F9, 46) 'he is retired when?'

The existence of several verbal forms used in FTR contexts did not escape the notice of grammarians of French, who, as shown by Poplack and Dion (2009), have in general gone to great lengths in order to attribute a single function to each of the three forms presented in (1). However, as clearly shown by these authors, the result of this pursuit was a large number of different propositions, without a clear consensus. In their review of 163 grammars published between the $16^{\text {th }}$ and the $20^{\text {th }}$ centuries, Poplack and Dion found that grammarians associated no fewer than 20 different functions with the IF, 19 with the PF, and 14 with the present. Their analysis revealed that not only were forms sometimes attributed contradictory functions, but certain functions were attributed to two or even to all three forms. For instance, IF, PF, and

[^0]present have all been attributed the function of expressing both future events expected to occur in the near future (proximal events), as well as those that will occur in a distant future (distal events) (p. 566). Most problematic for such accounts is the fact that more recent corpus-based research has not supported any of these one-to-one form-function propositions (see Poplack and Dion).

A more recent and nuanced approach to understanding the job-sharing among the different verbal forms in the expression of FTR comes out of variationist approaches to linguistics. Such approaches use statistical analyses that allow researchers to model the influence of multiple (linguistic and/or extralinguistic) factors on the selection of a given variable structure. Such an approach, which will be adopted in the current paper, has proven fruitful for the analysis of future-time expression in French (see Poplack and Turpin 1999), as well as in other Romance languages (e.g., Gudmestad and Geeslin 2013).

Existing analyses have investigated the modulating influence of a wide range of factors on the expression of future time in French (e.g., Poplack and Dion 2009; Poplack and Turpin 1999; Roberts 2012), including, but not limited to, sentential negation, temporal distance, the certainty that the future event will occur, and the presence of a temporal adverbial. Each of these factors is hypothesized to influence verb-form choice in future-time contexts. For the PF, it is thought that because this form is anchored in the present (insofar as aller 'to go' is conjugated in the present), it will not be particularly compatible with the hypothetical states evoked by sentential negation, with events that are set to occur in the distant future, or with events that are uncertain to occur. The IF, on the other hand, shows a break from the present, making it particularly congruent with the expression of hypothetical (e.g., negative), distal, and uncertain events. The final linguistic factor that we mention is the presence of a lexical temporal indicator
(LTI). LTIs include adverbs such as demain 'tomorrow' or adverbial expressions (à l'avenir 'in the future') and clearly anchor the temporal reference of the discourse as being in the future. Prescriptive and pedagogical grammars alike often state that the presence of an LTI is a prerequisite to the ability to use the present in future-time contexts (Poplack and Dion 2009: 565).

Variationist approaches have been applied to the study of FTR in several varieties of French. Overall, this body of research reveals a number of general patterns. On the one hand, most varieties of French (be they Canadian, ${ }^{2}$ Hexagonal, or Martinican) for which we have data show that PF is the preferred verb form for future-time expression, a preference that is particularly strong in Laurentian varieties (for Laurentian varities, see Emirkanian and Sankoff (1985), Poplack and Turpin (1999), Blondeau (2006), and Grimm and Nadasdi (2011); for Hexagonal varieties, see Roberts (2012), and Gudmestad et al. (2014); for Martinique, see Roberts (2013, this issue)). In terms of linguistic factors influencing verb-form selection, the strongest overall trends divide varieties of French into two groups: varieties for which sentential negation is the strongest factor, with the presence of negation strongly favoring the IF (Blondeau 2006, Deshaies and Laforge 1981, Grimm and Nadasdi 2011, Poplack and Dion 2009, Poplack and Turpin 1999), and varieties for which temporal distance is the strongest predictor, with the PF being preferred in proximal contexts (Comeau 2011, King and Nadasdi 2003, Roberts, 2013, Villeneuve and Comeau, this issue). Moreover, these two trends appear to correspond to geographical differences, with Laurentian varieties of French belonging to the first trend and Acadian and Martinican varieties belonging to the second. For the moment, the jury still appears to be out with respect to Hexagonal French, with Roberts (2012) reporting results that show

[^1]Hexagonal French to be in line with Laurentian varieties, whereas Gudmestad et al. (2014), Edmonds and Gudmestad (2015), and Villeneuve and Comeau (this issue) suggest that Hexagonal French may resemble Acadian and Martinican French more closely.

### 1.2 Acquisition of Variable Structures by NNSs

At its beginnings, the field of SLA was particularly concerned with the analysis of errors, either searching to explain them with reference to the learner's first language (L1), or comparing errors to the target language being learned. In both cases, variation in language was not part of the discussion, and acquisition was generally regarded as the process of learning categorical rules. This is, of course, an overly simplified way of looking at (the learning of) human language, and more recent research recognizes that "[v]ariation in the native speech community is a feature of what the learner must grasp" (Regan 1998: 62). That said, the acquisition of variable structures poses particular learning challenges for the L2 learner. In order to successfully "grasp" variation, the learner must not only learn how often different variants are used (e.g., PF $>\mathrm{IF}$, for the expression of future-time in Hexagonal French), but they must also develop sensitivity to the factors that influence the odds of choosing one form over another (e.g., temporal distance). Such aspects are rarely -if ever - taught, so learners must attend to and make use of the input they receive in order to acquire variable structures (Geeslin and Long 2014). In what follows, we will first examine the existing studies into the acquisition of variable FTR in French, before expanding our discussion to studies that have investigated the factor of learning context in the acquisition of variable structures.
1.2.1 Variable FTR in L2 French. Variationist investigations into FTR in L2 French have examined learners enrolled in an intensive French language course at a university in France (Edmonds and Gudmestad 2015), Canadian high school students in a French immersion program
in Ontario (Nadasdi et al. 2003), adult Anglophones having settled in France, who were not instructed learners at the time of data collection (Gudmestad et al. 2014), and Irish university students studying either in Ireland or having spent a year in France (Howard 2012). The first study employed a written contextualized task (WCT, see section 2.1.2 for details on data collection) in order to examine how the factors of temporal distance, (un)certainty, and LTI influence learners of French in an SA context at four levels of proficiency in their selection of verb-forms for the expression of future time. Learners came from a variety of L1 backgrounds and were all enrolled in either a language center or a degree program at a university in Southwestern France. Results showed that, like the NSs, verb-form selection was influenced by the factors of temporal distance and (un)certainty for all groups of learners, and that the greatest differences between the NSs and the learner groups concerns the selection of the present for future-time expression.

The final three studies were all based on oral corpora. Rates of use showed that the immersion students and the adult migrants clearly used more PF than IF. However, the Irish university students, regardless of whether they had studied abroad, used the IF more than the PF. In terms of factors influencing verb-form selection, once again a similarity was apparent between the immersion students and the adult Anglophones living in France: for instance, in both cases, the presence of an LTI influenced the verbal form used to express FTR. In addition, Gudmestad et al. (2014) reported that their adult Anglophones appeared to be sensitive to the factors of temporal distance and (un)certainty. These results, in which we see the two sets of learners with presumably the most exposure to input showing similarities in certain behaviors, suggest that learning context may play an important role in the acquisition of variable structures. This point will be explored in the following section.
1.2.2 Learning context and SLA. The importance of learning context in the acquisition of an L2 has been lost on neither laypeople (who may advocate SA as the only real way to learn a language), nor researchers. It seems clear that learners studying in an at-home FL context will have different opportunities for language contact and use than their peers who spend all or part of their language learning time in an SA context. More specifically, whereas both FL and SA learners may engage in language classes, SA learners should have the opportunity to use the language in authentic communicative contexts. Such contexts arise both inside the classroom (as the learners in SA programs generally do not share the same L1) and outside the classroom (in service encounters, interactions with host families, with NS friends, etc.). It stands to reason that this increase in input and in interaction may lead to greater learning gains (see Tarone (2010), for a discussion of the role such differences in social context may play in L2 acquisition), and since the 1990s, numerous studies have attempted to determine the impact of this experience on learner outcomes (e.g., Freed 1995). Research has examined gains with respect to a wide array of abilities, including grammar, lexicon, fluency, pragmatics, and sociolinguistic competence (see Collentine and Freed 2004).

On the whole, this body of research can be divided on the basis of the abilities examined: grammar and morphosyntax, on the one hand, and fluency, lexicon, pragmatics, and sociolinguistics, on the other. Lafford and Collentine (2006: 107) summarized the results with respect to grammatical development after an SA experience in the following manner: "the appreciable development of general grammatical abilities and morphosyntax is not robust, at least within the timeframe of a semester to a year abroad." Results for other abilities examined have shown the opposite pattern, with most available evidence pointing to the fact that an SA experience, as compared to a comparable at-home group, can lead to gains in fluency (Freed et
al. 2004), lexical growth (Milton and Meara 1995), pragmatic competence (Charkova and Halliday 2011), and sociolinguistic competence (Geeslin and Long 2014). Many of the studies into the influence of learning context on sociolinguistic competence have concerned the acquisition of variable structures, and it is to these studies that we now turn.
1.2.3 Learning context and variable structures. Several studies have concentrated on the acquisition of Spanish (e.g., Kanwit and Solon 2013, Whatley 2013) or French (e.g., Howard 2012), with overall results suggesting that "learners do exhibit sensitivity to local norms during a stay abroad and, over time, are able to incorporate those norms into their own developing grammars" (Geeslin and Long 2014: 210). That said, Geeslin and Long also suggest that there may be an important link between proficiency and improvement in sociolinguistic competence while abroad: "research on second language variation in general suggests that sociolinguistic competence is acquired only after a certain level of proficiency has been achieved" (p. 217).

Howard (2012) and Kanwit and Solon (2013) examined the acquisition of variable FTR in an SA setting in French and Spanish, respectively. Howard administered a sociolinguistic interview to three groups of university learners, one of whom had spent a year in France. Altogether, he identified 116 tokens of FTR, which were analyzed as a function of verbal form used (IF, PF or present). Results show that the group who had spent time abroad used the PF more than the other groups ( $31 \%$ of tokens), although the IF remained the most frequent form for this group. He suggests that the time abroad may have helped learners reduce their use of the IF and that, furthermore, "it may be that those learners [...] in a naturalistic environment are simply more sensitive to use of the informal variant, compared to their counterparts in the foreign language classroom." (p. 217). Kanwit and Solon investigated two groups of NNSs, one studying in Valencia, Spain, the other in Mérida, Mexico. In this study, development across the period of
a seven-week intensive SA course was examined (i.e., there was no at-home comparison group). Learners completed a WCT at the beginning and at the end of their stay abroad; NSs at each site also completed this task. Results showed that the NSs of the two varieties of Spanish showed different patterns in their selection of verb forms. The analysis of the evolution of selection patterns by the two groups of learners revealed
"movement toward the local norm for both of our learner groups (although both somewhat overshoot local NS targets), and the predictors of this selection generally indicate acquisition in the direction of the regional norm for both groups, especially in the case of the Valencia learners" (Kanwit and Solon 2013: 216)

From previous research into the acquisition of variable structures by NNSs, two findings stand out. First, learning context appears to play an important role, with learners participating in SA programs showing evidence of improvement both in terms of rate of selection among variants, as well as in terms of modulating factors. For FL learners, the results are less consistent. This is presumably due to the importance of native input for the development of sociolinguistic competence more generally: "Only a prolonged and regular contact with NS of the TL [target language] seems to have a noticeable effect on the learners' sociolinguistic competence" (Dewaele 2004: 314). The second finding concerns the role played by proficiency. If, on the one hand, many authors report that lower-level learners show the greatest gains from SA experiences (e.g., Regan 1998: 73), others have suggested that a certain level of proficiency is necessary for the learner to be able to truly take advantage of such experiences (Lafford and Collentine 2006). The current study was designed in order to address two research questions related to these findings: (a) How do learners in an FL and in an SA context compare in their selection of future-
time verb forms on a controlled elicitation task? and (b) What role does proficiency play in verbform selection for FTR on the same task?

## 2. The Current Study

In this section we describe the method of the current study and we present the results.

### 2.1 Method

In order to respond to our two research questions, we opted for the use of a WCT. This type of controlled elicitation task permitted us to focus on how different learning contexts and proficiency levels may influence both the rate of selection of verb-forms for future-time expression and the role of three linguistic factors shown in previous research to be important for Hexagonal French, namely LTI, temporal distance, and (un)certainty. While the WCT diverges from the traditional data collection procedures used in variationist studies (i.e., the sociolinguistic interview) and does not necessarily reflect language use, the verb-form choices we provided on the task were motivated by previous analyses of language use (e.g., Gudmestad, et al., 2014). Moreover, we agree with Geeslin (2010: 501) that "multiple means of elicitation are necessary to fully understand the acquisition of a given construct, with each elicitation task providing unique and essential information about learner language."
2.1.1 Participants. The NNSs were selected to represent two language learning contexts: FL and SA. At the outset of the project, data were collected from a total of 86 FL and 116 SA participants; a little under 50 percent of the total dataset was retained for analysis in the current paper. This decision was made in order to ensure that the main difference between the FL and SA groups would be learning context. For that reason, we first removed from our dataset all participants whose reported country of origin was other than the United States or Canada. Next, in order to ensure that the two groups differed in terms of language-learning context, we
removed from our FL group all participants who had spent more than two weeks in a Frenchspeaking country. Finally, we matched the resulting subset of participants in terms of proficiency. The results from our proficiency test (see Data Collection in section 2.1.2) showed that the full set of North Americans in the SA context scored higher than the North Americans in the FL context. For this reason, we removed from our sample any participants in the FL context scoring lower than the lowest SA participant, as well as any SA participants scoring higher than the highest scoring FL participant. In this way, we were able to compare the influence of context of learning on participants from a similar educational culture and with an identical range of proficiency.

Our resulting dataset included 37 FL participants affiliated with a university in the United States. They were enrolled in a fourth- or sixth-semester language course, a fourth-year literature course, or a fourth-year business course within the undergraduate French program (3 hours per week). They ranged in age from 18 to $26 ; 30$ were women and seven were men. The SA participants $(n=45)$ were associated with a university in the Southwest of France and participated in the study while they were abroad. At the time of data collection they had been living in France for three to nine months. ${ }^{3}$ They were enrolled in intensive French-language courses at the university language center (approximately 20 hours of French-language instruction per week). They were between 18 and 36 years of age; nine were men and 36 were women. The participants in the two contexts were further divided into proficiency levels on the basis of the score obtained on our proficiency measure (a c-test). Participants who scored between 16 and

[^2]29.5 were placed into the low-proficiency group ( $\mathrm{FL}=25, \mathrm{SA}=19$ ), and those who scored between 30 and 43.5 were classified into the high-proficiency group ( $\mathrm{FL}=12, \mathrm{SA}=26$ ). ${ }^{4}$

The final group of participants, 30 NSs of Hexagonal French, were native to
Southwestern France. The results for these participants were previously reported in Edmonds and Gudmestad (2015) but we include them again in this study as they serve as a benchmark for targetlike verb-form selection. They were students in undergraduate or Master's level courses on French as a foreign language at the same university as the SA participants. Three were men and 27 were women, and they ranged in age from 19 to $61 .{ }^{5}$

We conducted a one-way analysis of variance (ANOVA) to determine if the low and high proficiency groups were different from each other and if the NNS groups and NSs were different from each other in terms of scores obtained on the proficiency measure. The ANOVA revealed significant differences $(F(4,121)=243.2, p<0.001)$, and a Post Hoc Scheffé showed that neither the SA and FL low-proficiency groups, nor the SA and FL high-proficiency groups were significantly different from each other. The comparisons of all other groups revealed significant differences. In other words, each L2 group scored significantly lower on the c-test than the NSs and each high-proficiency group scored significantly higher on the test than each low-proficiency group. The mean and standard deviation on the c-test for each group are shown in Table 1.

Table 1. C-test Results

| Participant group | Mean | St. dev. |
| :--- | :---: | :---: |
| FL low | 22.40 | 4.01 |

[^3]| SA low | 23.47 | 4.13 |
| :--- | :--- | :--- |
| FL high | 36.04 | 4.55 |
| SA high | 36.96 | 3.81 |
| NSs | 47.95 | 1.14 |

2.1.2 Data collection. Each participant completed three tasks. The data on FTR came from a WCT, which was the same task employed in Edmonds and Gudmestad (2015) and was modeled after a WCT that investigated FTR in Spanish (Gudmestad and Geeslin 2013). This task consisted of 30 contextualized items that served as dialogue in a short story. Following every paragraph-length context, the participants were asked to contribute to the story by selecting one of three sentences expressing a future action or state that differed in verb form only (i.e., IF, PF, or present). The first item of the task is given in Figure 1; the English translation is provided here but was not included in the task when it was administered.

## [Insert Figure 1.]

The 30 items constituted all combinations of the categories of the three independent linguistic factors analyzed (see section 2.1.3). We controlled for other factors that have been found to be related to FTR. In this way, sentences in the dialogue contained a first-person singular verb and there was no subordination or negation. The second task was a c-test (see Renaud 2010), which we used to categorize the NNSs into low and high proficiency groups. This test consisted of incomplete words that were contextualized in paragraphs. The second half of some words were replaced with a blank and participants were asked to complete the partial words. The third instrument was a background questionnaire, in which participants provided demographic information and reported on their education and language experiences.
2.1.3 Data coding. The dependent variable was the verb form selected to express futurity on the WCT (IF, PF, or present). Although other verb forms may be used in future-time contexts, we chose to target these three variants because Gudmestad et al. (2014) found that they were the
forms used most frequently to convey futurity in a dataset gathered from a group of NSs in France. We designed the WCT to investigate the influence that three independent linguistic factors (LTI, temporal distance, and (un)certainty markers) had on verb-form selection in contexts of FTR. As mentioned previously, we chose these factors because Gudmestad et al. (2014) demonstrated that these independent variables were related to verb-form use for NSs of Hexagonal French. ${ }^{6}$

In examining LTI, we note that half of all items included a lexical expression conveying information about FTR within the sentence that functioned as dialogue, whereas the other half did not. LTIs were located in the sentence-final position when they were present; LTIs included in the task were tout de suite 'right away', demain 'tomorrow', ce soir 'tonight', à 21 h 'at 9pm', après le déjeuner 'after lunch', mercredi 'Wednesday', bientôt 'soon', dans trois jours 'in three days', la semaine prochaine 'next week', dans deux semaines 'in two weeks', dans 2/8/10 ans 'in $2 / 8 / 10$ years'. Temporal distance identified the distance of the future event from the moment of speaking. We began with five categories: immediate, today, less than a week, less than a month, and greater than a year. For our statistical analysis, this variable was recoded into two categories: ${ }^{7}$ proximal (one week or less from the moment of speaking) and distal (more than a week from the moment of speaking). It is important to note that regardless of whether or not the

[^4]target sentence contained a LTI, details on temporal distance were available in the context that preceded the sentence. Three categories made up the factor of (un)certainty: presence of an uncertainty marker (peut-être 'maybe', probablement pas 'probably not' and éventuellement 'possibly'), presence of a certainty marker (évidemment 'of course', certainement 'certainly', probablement 'probably', sûrement 'surely', and sans (aucun) doute 'without a doubt (whatsoever)'), and no marker. An (un)certainty marker, when present, was located between the finite and infinite verbs of the PF and immediately after a IF or present verb.

In addition to the linguistic factors, we examined two independent extra-linguistic variables: learning context and proficiency. The categories for learning context were FL and SA, and we separated each learning-context group into two proficiency levels (low and high) based on the c-test results (see Participants in section 2.1.1).
2.1.4 Data analysis. We conducted a quantitative analysis in two phases. First, we performed cross-tabulations to examine the rates of verb-form selection for each participant group. Second, we conducted a multinomial logistic regression for each participant group, in order to analyze the impact of each linguistic factor on verb-form selection. For this analysis, we compared each of two categories of the dependent variable individually (IF and present) against another (base) category (PF) and the three independent linguistic variables in a single statistical model.

### 2.2 Results

We begin by presenting the results for frequency of verb-form selection, followed by the findings from the multinomial logistic regressions.
2.2.1 Frequency. To begin the analysis we conducted cross-tabulations that show the frequency of selection of the PF, IF, and present (see Table 2). Looking at the data from the 30
contexts together, we see that the NSs chose the PF most often (44.0\%), followed by the IF (38.1\%), and, lastly, the present (17.9\%). SA low and FL high were the L2 groups whose hierarchy of frequency of verb-form selection most closely resembled that of the NSs. Both groups selected the PF most frequently (SA low: 42.1\%, FL high: 46.7\%), followed by the IF (SA low: 36.1\%, FL high: 35.6\%) and the present (SA low: 21.8\%, FL high: 17.8\%). While FL low and SA high also selected the present the least often (FL low: 19.6\%, SA high: 26.2\%), these L2 groups chose the IF (FL low: 41.5\%, SA high: 39.4\%) more often than the PF (FL low: $38.9 \%$, SA high: $34.4 \%$ ) on the WCT.

Table 2. Frequency of Verb-Form Use in Contexts of FTR

|  | PF |  | IF |  | Present |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participant Group | $\#$ | $\%$ | $\#$ | $\%$ | $\#$ | $\%$ | Total |
| FL low | 291 | 38.9 | 311 | 41.5 | 147 | 19.6 | 749 |
| SA low | 239 | 42.1 | 205 | 36.1 | 124 | 21.8 | 568 |
| FL high | 168 | 46.7 | 128 | 35.6 | 64 | 17.8 | 360 |
| SA high | 268 | 34.4 | 307 | 39.4 | 204 | 26.2 | 779 |
| NSs | 396 | 44.0 | 343 | 38.1 | 161 | 17.9 | 900 |

2.2.2 Multinomial regressions. In the next stage of the analysis, we performed a
multinomial logistic regression on the dataset for each participant group separately. We began each multinomial logistic regression by including all three independent linguistic factors in the analysis. However, when a model revealed that a certain variable was not significant, we ran the model again without that variable (e.g., LTI was not significant for SA low, FL low, and the NSs). A single multinomial logistic regression compares one category of the dependent variable (present) against a base category (PF) and then compares the third category (IF) against the same base. Similarly, each independent variable is evaluated by comparing a base category of that variable to the other categories. The base categories of the independent factors were present for LTI, proximal for temporal distance, and the presence of an uncertainty marker for (un)certainty. Three possible findings resulted from these comparisons, as shown in Table 3. For example, as
shown in the comparison of IF selection versus PF selection (Table 4), the SA high group was more likely $(>)$ to select the IF (as compared to the PF) when the future event was set to occur in the distant future, but they were less likely $(<)$ to select the IF when the event was certain to occur (or when the certainty was not specified), as compared to when the event was uncertain to occur. Finally, for this same group, the odds of choosing the IF or the PF in the presence or absence of an LTI were not significantly different.

Table 3. Interpreting the Results from a Multinomial Regression Model

| Rank | Interpretation |
| :--- | :--- |
| Equal $(=)$ | the selection of the dependent variable (IF or present) was not <br> significantly different from the base category (PF) |
| Leater than one $(>)$ | the odds of choosing a category other than the base (IF or <br> present) were significantly greater than the odds of choosing the <br> base category (PF) <br> the odds of selecting IF or present were significantly less than the <br> odds of selecting PF |

An initial examination of the results for the five multinomial regressions (Tables 4 and 5) reveals three observations (see Appendix for more details). First, the predictive models for FL low and SA low were identical in terms of the predictive factors and their overall effect on the model; temporal distance and (un)certainty conditioned verb-form selection in the same way and LTI was not a significant influential factor. Second, FL high and SA high exhibited similarities and differences to each other in the ways that the three independent factors impacted their verbform selection. Third, no L2 group was identical to the NS group. We examine each factor individually.

Table 4. Results for the Multinomial Logistic Regression: IF vs. PF

| Participant | LTI |  | Temp. Dist. |  | (Un)certainty |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group | Present | Absent | Proximal | Distal | None | Certainty | Uncertainty |
| FL low | Base | NA | Base | $>$ | $<$ | $<$ | Base |
| SA low | Base | NA | Base | $>$ | $<$ | $<$ | Base |
| FL high | Base | $=$ | Base | $>$ | $<$ | $=$ | Base |
| SA high | Base | $=$ | Base | $>$ | $<$ | $<$ | Base |

NSs Base NA Base $\gg \ll \quad$ Base

Note. ' $<$ ' denotes odds of choosing IF over PF are lower. ' $>$ ' denotes odds are higher. ' $=$ ' denotes odds are not different. 'NA' denotes a variable that is not significant.

Table 5. Results for the Multinomial Logistic Regression: Present vs. PF

| Participant | LTI |  | Temp. Dist. |  | (Un)certainty |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group | Present | Absent | Proximal | Distal | None | Certainty | Uncertainty |
| FL low | Base | NA | Base | $=$ | $=$ | $=$ | Base |
| SA low | Base | NA | Base | $=$ | $=$ | $=$ | Base |
| FL high | Base | $>$ | Base | $<$ | $=$ | $>$ | Base |
| SA high | Base | $<$ | Base | $<$ | $=$ | $>$ | Base |
| NSs | Base | NA | Base | $=$ | $>$ | $>$ | Base |

Note. ' $<$ ' denotes odds of choosing present over PF are lower. ' $>$ ' denotes odds are higher. ' $=$ ' denotes odds are not different. 'NA' denotes a variable that is not significant.

Beginning with the linguistic factor of LTI, this factor was not a significant predictor of verb-form selection for FL low, SA low, or the NSs but it was an influential factor for the two high-proficiency groups. Whereas the results for the two high-proficiency groups on this factor were identical when comparing IF selection over PF selection (equal odds), the two groups diverged when present selection was compared to PF selection. For the FL high group, the odds of choosing the present over the PF were greater when an LTI was absent, compared to when it was present. For the SA group, the odds of choosing the present instead of the PF were lower when an LTI was absent instead of present.

Next, for temporal distance, we see that each participant group showed identical patterns with regard to temporal distance and the IF-PF comparison in the multinomial logistic regression (Table 4). The odds of choosing the IF over the PF were greater in distal compared to proximal contexts. However, two patterns emerged from the present and PF comparison for this same factor. On the one hand, the two low-proficiency groups and the NSs exhibited equal odds of selecting either form in distal compared to proximal contexts, whereas, on the other, the two
high-proficiency groups showed lower odds of selecting the present instead of the PF when the future event was to occur more than a week away (distal) compared to within the week (proximal).

Finally, with regard to (un)certainty and the IF versus PF comparison, all participant groups were less likely to select the IF (compared to the PF) when the certainty of the event was not specified as compared to when an uncertainty marker was present. The odds of choosing the IF instead of the PF were lower when a future event was certain to occur as compared to when a future event was uncertain to occur for every participant group except for the FL high participants, for whom the odds were equal. The results for the present and PF comparison were less uniform than the IF and PF comparison. The NSs showed greater odds of selecting the present (versus the PF) in the presence of a certainty marker or when no marker (of certainty or uncertainty) was present, when compared to rates of selection in the presence of an uncertainty marker. No L2 group showed this same pattern. Both low-proficiency groups exhibited equal odds of selecting the present and the PF with respect to this factor. Like the low-proficiency groups, both high-proficiency groups showed equal odds of selecting the present and the PF in the absence of an (un)certainty marker versus when a future event was unsure to happen. However, both high-proficiency groups showed change in the direction of the NS pattern on the comparison between certain versus uncertain future events: FL high, SA high, and NSs all showed greater odds of choosing the present when a future event was certain to occur.

## 3. Discussion

The principal aim of this study was to examine how NNSs' verb-form selection in FTR differs as a function of two extra-linguistic variables, namely learning context (FL vs. SA) and proficiency level (low vs. high). Thus, after first reviewing the results of our study with respect to rates of
selection and the role played by the factors of LTI, temporal distance, and (un)certainty, we will turn our attention to a reflection on the role of learning context as a function of proficiency for verb-form selection in FTR contexts, focusing on those findings that can be connected to previous research.

### 3.1 Overview of the Current Results

Looking first at rate of selection, we note that the NSs selected the PF slightly more than the IF, in keeping with most accounts of FTR in Hexagonal French (e.g., Söll 1983, Roberts 2012, Gudmestad et al. 2014), and that the present was selected least frequently. This same pattern was found in the data from the FL high and SA low groups, whereas the FL low and SA high groups selected the IF more frequently than the PF.

As for the three linguistic factors tested, the first notable result is that the presence or absence of an LTI did not significantly determine verb-form selection for the NSs or for either of the low-proficiency groups. This finding goes against the expectation that the present must be accompanied by an LTI in order to be able to make reference to future time (see Edmonds and Gudmestad (2015) for further discussion of this point). Interestingly, this factor became significant for the two high-proficiency groups, but in different ways. Whereas the highproficiency FL learners tended to select the present more frequently when there was no temporal adverbial, the high-proficiency SA learners demonstrated the pattern often described in the literature and substantiated in studies of Canadian French by Poplack and Turpin (1999) and Nadasdi et al. (2003), namely the selection of the present in the presence of an LTI.

Moving now to temporal distance, all participant groups showed identical patterns in the PF versus IF comparison, with IF being preferred over PF for distal events. This finding closely follows what has been found for Acadian varieties of French (e.g., Comeau 2011, King and

Nadasdi 2003), suggesting, as mentioned in the background section, that Hexagonal French may more closely resemble Acadian varieties with respect to linguistic factors influencing future-time expression (see Edmonds and Gudmestad 2015 and Villeneuve and Comeau, this issue). Our L2 results for this factor show that learners at two proficiency levels and in two learning contexts have succeeded in grasping the importance of this factor for PF versus IF selection. The PF-IF comparison is not, however, the entire picture, as we also looked at the present-for-future, a form that was not included in the models presented by King and Nadasdi or Comeau. Here we found differences among our groups, with once again the low-proficiency learners patterning with the NSs: For these groups, there was no significant difference between PF and present selection in proximal versus distal contexts. Both groups of high-proficiency learners, however, showed lower odds of choosing the present (versus the PF) in distal contexts, suggesting a temporal interpretation of each of the three forms for these high-proficiency learners. Although not a variationist study, Moses (2002) also remarked that the higher-proficiency learners in his investigation, who were studying French at an American university, developed a strong temporal interpretation of verbal forms used for FTR (present and PF preferred for proximal events, IF preferred for distal ones), a pattern that was not found in his lower-proficiency learners. He, however, claimed that this pattern was non-nativelike, whereas our data suggest that although the high-proficiency learners may overshoot the NS patterns, FTR in native Hexagonal French does indeed seem to be influenced by the temporal distance of the future event.

Finally, we come to the results for the factor of (un)certainty. It is for this factor that the most differences among groups were revealed. Looking first at the NSs, the IF was most strongly associated with uncertain contexts (cf. King and Nadasdi 2003, who found that the PF was more likely to be used in certain contexts), whereas the present was more likely to be selected (as
compared to the PF ) in contexts with a certainty marker or without any marker (as compared to those with an uncertainty marker). If most of the L2 groups showed the same pattern on the PF versus IF comparison (with the exception of the FL high group), the results from the present versus PF analysis showed clear development from the low to the high-proficiency groups.

Taken together, the results from our WCT show the importance of the factors of temporal distance and (un)certainty in the selection of verb-forms for FTR in our NS data, patterns that most closely match what has been reported for Acadian varieties of French. Our four L2 groups show various patterns, which we will now explore as a function of the two extra-linguistic factors of interest in this study: learning context and proficiency level.

### 3.2 The Importance of Learning Context as a Function of Proficiency Level

The results concerning the rates of selection and the importance of three linguistic factors suggest that the observed patterns can, at least in part, be explained with reference to the interaction between the two extra-linguistic factors of learning context and proficiency level. As mentioned previously, with respect to the influence of the factors of LTI, temporal distance, and (un)certainty, no difference is noted between the two low-proficiency groups, and this despite the fact that the members of the SA group are studying in France at time of testing, and have just spent between three and nine months abroad. These learners were receiving close to seven times as much formal French language instruction as their FL peers (approximately 20 hours per week for the SA learners versus an average of three hours for the FL learners), and they also had more opportunities for authentic communicative interactions in the target language. As already mentioned, the two low-proficiency groups show no differences in terms of the influence of linguistic factors. However, it is of interest to note that the profiles found show that learners at this level - regardless of learning context - are not clearly differentiating between PF and present
as a function of LTI (which was not significant) or temporal distance and (un)certainty (both of which received equal odds). This contrasts with what was found for the IF versus PF comparison, and suggests that developmentally speaking, it may be the IF/PF comparison that is first differentiated, a finding which holds across learning contexts. Although no differences are seen in terms of the influence of linguistic factors, the two low-proficiency groups do differ in their selection rates: whereas the SA low group selected the PF most frequently (like the NSs), the FL low group opted most often for IF. These patterns match closely the data reported by Howard (2012), who found an over-reliance on the IF among his learners who have not been abroad, whereas those who have just spent a year in France use the PF at higher rates.

The most important divergences in our data are not at the level of our low-proficiency learners, but rather are seen in our high-proficiency groups. Like the low-proficiency learners, these two groups are comprised of individuals from a similar educational culture and with a similar proficiency level in French, differing only in terms of their learning context at time of testing. However, unlike the low-proficiency learners, we see clear differences between the highproficiency groups as a function of learning context, both in terms of rate of selection and in terms of modulating factors. For overall selection rates, the FL high group selects PF more than any other form, whereas the SA high group shows a preference for the IF. The latter group also shows the highest selection rate of the present-for-future, at more than 26 percent of total responses. As concerns modulating factors, the two high groups differ in two respects. First, the FL high group exhibited equal odds of choosing the PF and the IF in contexts with a certainty marker compared to contexts with an uncertainty marker. In the same linguistic contexts, the SA high group showed lower odds of selecting the IF over the PF (which matches the NS pattern). Second, concerning the contexts in which an LTI was absent versus present, the FL high group
showed higher odds and the SA high group showed lower odds of selecting the present instead of the PF.

The similarities between the low-proficiency groups and the differences between the high-proficiency groups allow us to suggest two conclusions concerning the influence of the extra-linguistic variables of proficiency and learning context. On the one hand, it is noteworthy that both low-proficiency groups essentially exhibited no difference between the PF and present, but that they did show differences in the odds of selecting the IF over the PF. The highproficiency groups, however, exhibited differences between both the IF versus PF and the present versus PF. The first conclusion is then that it appears that the distinctions between verb forms with respect to the three linguistic factors investigated here begins with the IF and PF and then spreads to the present and PF as learners become more proficient. This finding appears to hold across the two learning contexts investigated. Second, our findings appear to indicate that learning context plays a greater role in the development of future-time expression in French as proficiency level increases. In other words, the impact that learning context has on L2 acquisition may be modulated by proficiency, such that the effect of SA on the development of variable FTR in French gets stronger as proficiency increases. More specifically, frequency of verb-form selection may be sensitive to learning context at low proficiency levels, whereas a higher level of proficiency may be needed before learning context impacts the linguistic predictors under investigation.

These results can be related to a hypothesis developed by Lafford and Collentine (2006: 117) in order to account for findings from the literature on Spanish SA that show that intermediate-level SA learners do not show superior gains (over a FL group) for grammatical competence, whereas at least one study (Isabelli and Nishida 2005, cited p. 117) has shown that
advanced learners in an SA context do indeed improve more than their at-home counterparts. They write
[t]hus we could tentatively propose a kind of 'threshold hypothesis' for students studying abroad: those students with a well-developed cognitive, lexical, and grammatical base will be more able to process and produce grammatical forms more accurately after their experience in a SA context. (Lafford and Collentine 2006: 117)

The crux of this hypothesis is that learners must have already attained a certain level of general linguistic (i.e., cognitive, lexical, and grammatical) competence before they are able to free up resources for the processing of (often communicatively redundant) grammatical features. Although this hypothesis was not originally formulated to account for the acquisition of aspects of sociolinguistic competence, statements by linguists such as Geeslin and Long (2014) show parallels with Lafford and Collentine's observations, insofar as they state that learners must have a relatively high level of general proficiency before being able to acquire sociolinguistic competence. Given that variable future-time expression lies at the crossroads of morphosyntactic and sociolinguistic competence, it may very well be the case that learners must reach a certain threshold before being able to attend to such features of language, thus providing a potential explanation for the lack of differences with respect to linguistic predictors for the lowproficiency learners in different learning contexts as compared to the high-proficiency learners.

What this hypothesis does not explain, however, is why the low-proficiency learners resembled the NSs more than the high-proficiency learners with respect to the analysis of linguistic factors. Although this result may appear somewhat surprising against the backdrop of studies showing clear development towards nativelike norms for learners in a SA context (but see Whatley (2013), for a pattern similar to our own), it bears note that there is evidence as to the
non-linear nature of the L2 acquisition of sociolinguistic variation (e.g., Gudmestad 2014; Gudmestad and Geeslin 2013). In other words, various studies have shown that acquisition of variable learning targets shows movement towards and away from NS patterns across proficiency levels, as opposed to a linear march toward the NS norm. This is particularly evident in Edmonds and Gudmestad (2015), in which the full data set ( $N=116$ ) of SA learners studied in the current analysis was examined. In this analysis, there were four proficiency levels, one of which obtained scores above the high-proficiency group of the current study. Using the factor of LTI as a case in point, we found that this factor was neither significant for the two lowest proficiency levels, nor for the highest proficiency level and the NSs. For Level 3, however, this variable was significant, and the learners at this level selected the present more frequently than the PF when an LTI was present (the same results as were found for the SA high group in the current study). These findings suggest a move from a nativelike non-influence of a given factor, towards a non-nativelike influence of that same factor, before moving back to the original profile. Such non-linear movements across proficiency levels may be due to many factors, including the overshooting of the NS norm (Kanwit and Solon 2013).

In addition to the non-linear nature of SLA, it is important to understand these results against the backdrop of what is known about variable future-time expression in Hexagonal French more generally. In a previous study based on oral conversation data, Gudmestad et al. (2014) found that the PF was indeed the most frequent form used for future-time expression at 43.8 percent of all tokens. However, the second most frequent form was the present-for-future (accounting for fully 33.5 percent of all tokens), whereas the IF was used in only 18.4 percent of all future-time contexts. Given this information, we may argue that the SA high-proficiency
group, whose selection of the present ( $26.2 \%$ ) was higher than any group in the current study, demonstrates a certain sensitivity to the input. No such trend is observed for either FL group.

A final issue is that, in this study, we have treated FL and SA contexts as different on the basis of total contact hours and the possibility for authentic interaction in the target language. However, we know that the SA experience can be radically different from one learner to another (see Wilkinson 2002). Whereas some learners attempt to take advantage of the specificities of the SA experience, others spend little time in the target language outside of the language classroom. A recent study by Gautier and Chevrot (2015) followed seven Americans studying in France over a period of nine months. Learners participated in two semi-directed interviews at months 6 and 9 of their stay abroad, and the data were coded for the use of two sociolinguistic variables: variable ne deletion and optional liaison. The learners also kept contact diaries over one week near the end of their stay, information which allowed the researchers to determine what type of social networks the learners were engaged in (both in terms of languages used and in terms of density). They found, among other things, that the two Americans who had developed networks involving English and French speakers also showed changes in their use of the two variable structures examined in the direction of NS norms. Such findings highlight the importance of more detailed information concerning language contact and social networks in order to address the influence of learning context on SLA.

## 4. Conclusion

Although most studies on variable FTR have focused on the PF and IF, the current study has offered additional evidence supporting the importance of including the present-for-future in such investigations. Our analysis suggests that the PF versus present comparison is where most of the differences between proficiency level and learning context occur for L2 learners. This is also
where the NNSs differ most clearly from the NSs. The independent linguistic factors under investigation have also shed light on the presumed developmental trajectory of FTR in L2 French. We saw that temporal distance and (un)certainty were significant factors in explaining the NS patterns, whereas temporal distance, (un)certainty, as well as LTI provided new details about how FL and SA learners vary their verb-form selection in future-time contexts during the acquisitional process. Thus, subsequent studies on variable FTR in L2 Hexagonal French should not only include the present verb form but also the linguistic factors of LTI, temporal distance, and (un)certainty.

The current study has also demonstrated that the selection of verb forms in future-time contexts in nonnative French varied as a function of learning context and L2 proficiency level. Our results suggest that the impact of learning context on L2 acquisition becomes stronger as proficiency level increases, and that the developmental trajectory for variable future-time expression - and perhaps for variable morphosyntactic structures in general - is non-linear regardless of learning context. The comparisons of proficiency levels and learning contexts were possible largely because we were able to control for certain characteristics of our L2 participant population through an external measure of proficiency. Additionally, by analyzing only those participants whose place of origin was North America, the shared educational background of the L2 participants differed only in terms of time spent in a target language environment. Moreover, similar to other studies (e.g., Charkova and Halliday 2011; Howard 2012), the present investigation responded to a call in the literature for the inclusion of FL learners as a control group in studies that examine the influence of SA on L2 acquisition. The importance of a FL control group is highlighted by Lafford and Collentine (2006: 112), who note that "for those studies lacking an AH [at home] control group it is difficult to contribute [sic] any observable
gains (or lack thereof) to the learning condition(s) of the SA experience itself." In this vein, the design of the current study enabled us to observe whether changes in the developing future-time expression system as proficiency level improved seemed to take place regardless of learning context or whether SA appeared to be a modulating factor. The response appears to be affirmative in both cases: development was seen across proficiency regardless of learning context, although learning context did modulate this development, particularly at the higher proficiency level.

Future studies that investigate the role of learning context on the acquisition of sociolinguistic competence should continue to include both SA and FL groups, because this research design enables us to isolate linguistic behavior that may be common among L2 learners from that which may be dependent on experience. These studies should also seek to obtain information about participants' social networks and their daily language experiences in the L2. Longitudinal studies and cross-sectional studies that examine learners from more than two proficiency levels are also needed in order to provide more comprehensive information about the acquisitional path. Together these investigations are in a position to offer important details about how a developmental trajectory may be influenced by social context (cf. Tarone 2010).

## Appendix

What follows are three tables that offer more details regarding the multinomial regression models presented in section 2.2. The first two tables provide information on the $95 \%$ confidence intervals. If the upper and lower limits of the $95 \%$ confidence interval for $\operatorname{Exp}(b)$ contained the value of 1 , the selection of the dependent variable (IF or present) was not significantly different from the base category $(\mathrm{PF})$. If the values for the upper and lower limits were greater than one, the odds of choosing a category other than the base (IF or present) were significantly greater than the odds of choosing the base category (PF), and if the values for the upper and lower limits were less than one, the odds of selecting IF or present were significantly less than the odds of selecting PF

95\% Confidence Intervals for the Multinomial Logistic Regression: IF vs. PF

| Independent | LTI |  | Temporal distance |  |  | (Un)certainty |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| variable | Present | Absent | Proximal | Distal | Uncert. | Cert. | N/A |


| $95 \%$ |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| confidence <br> interval | Base | Lo. Up. | Base | Lo. | Up. | Base | Lo. | Up. | Lo. | Up. |  |
| FL low |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| SL low | Base | NA | NA | NA | Base | 1.44 | 2.81 | Base | 0.41 | 0.92 | 0.29 |
| FL high | Base | 0.97 | 2.54 | Base | 1.67 | 3.57 | 4.07 | Base | 0.23 | 0.60 | 0.17 |
| SL high | Base | 0.68 | 1.35 | Base | 1.62 | 3.24 | Base | 0.45 |  |  |  |
| NSs | Base | NA | NA | Base | 5.63 | 13.29 | Base | 0.32 | 0.92 | 0.72 | 0.21 |

95\% Confidence Intervals for the Multinomial Logistic Regression: PF vs. Present

| Independent | LTI |  | Temporal distance |  |  | (Un)certainty |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| variable | Present | Absent | Proximal | Distal | Uncert. | Cert. | N/A |


| $95 \%$ <br> confidence <br> interval | Base Lo. Up. Base Lo. Up. Base Lo. Up. Lo. Up. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| FL low | Base | NA | NA | Base | 0.54 | 1.28 | Base | 0.68 | 1.83 | 0.4 | 1.09 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| SL low | Base | NA | NA | Base | 0.55 | 1.42 | Base | 0.92 | 2.85 | 0.5 | 1.61 |
| FL high | Base | 1.17 | 3.92 | Base | 0.15 | 0.69 | Base | 1.43 | 6.72 | 0.58 | 2.88 |
| SL high | Base | 0.34 | 0.73 | Base | 0.31 | 0.73 | Base | 1.35 | 3.58 | 0.52 | 1.38 |
| NSs | Base | NA | NA | Base | 0.19 | 1.02 | Base | 4.036 | 13.94 | 1.56 | 5.56 |

Details of the Multinomial Logistic Regressions

| Participant <br> group | -2 Log <br> Likelihood | Chi-square | $d f$ | p value |
| :--- | :---: | :---: | :---: | :---: |
| FL low | 61.55 | 45.73 | 6 | $<0.001$ |
| SL low | 67.29 | 72.09 | 6 | $<0.001$ |
| FL high | 92.50 | 61.48 | 8 | $<0.001$ |
| SL high | 118.98 | 134.59 | 8 | $<0.001$ |
| NSs | 65 | 268.81 | 6 | $<0.001$ |

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## Figures

1. André et Sarah sont étudiants en France. Un dimanche avant le début des cours du deuxième semestre, ils déjeunent au restaurant. André regarde le menu et dit :
A. Je vais peut-être prendre la soupe à l'oignon et une salade. $\qquad$ Je préfère la phrase A.
B. Je prendrai peut-être la soupe à l'oignon et une salade. $\qquad$ Je préfère la phrase B.
C. Je prends peut-être la soupe à l'oignon et une salade. $\qquad$ Je préfère la phrase C .
2. André and Sarah are students in France. One Sunday before the beginning of second semester classes, they have lunch together at a restaurant. André looks at the menu and says:
A. I am maybe going to have the onion soup and a salad. $\qquad$ I prefer phrase A.
B. I will have the onion soup and a salad. $\qquad$ I prefer phrase B.
C. I have maybe the onion soup and a salad. I prefer phrase C.
Figure 1. First Item from WCT

[^0]:    ${ }^{1}$ Those studies that have looked at the present-for-future generally refer to the present indicative (although many such forms are identical to subjunctive ones). In the current study, we also concentrate on present forms in traditional indicative contexts, all the while acknowledging the need, in future research, to examine all verb forms used in future-time contexts.

[^1]:    ${ }^{2}$ Research on future-time reference in Canadian French has focused on the Laurentian and Acadian regions.

[^2]:    ${ }^{3}$ Given the size of our two SA groups, we are unable to subdivide them further by time spent abroad. We recognize that this factor is worthy of study and leave it to future research.

[^3]:    ${ }^{4}$ We do not have extensive information on personal characteristics of the NNSs, such as living arrangements or extracurricular activities. We recognize that this is a limitation of the study that opens the door for future research.
    ${ }^{5}$ We analyzed all of the NSs together for three reasons. First, examining language change among NSs is not a goal of the present investigation. Second, the group size is relatively small, and breaking it up into even smaller groups leads to challenges with the statistical analysis. Third, the purpose of our NS group was to have an indirect means of representing the input that learners may receive. Since learners likely interact with NSs of different ages, we believe that this NS group serves as an appropriate comparison group for targetlike use.

[^4]:    ${ }^{6}$ We recognize that other factors may influence learners' selection of verb forms in future-time contexts, including those that may be unique to interlanguage. We leave the exploration of additional independent variables to future research.
    ${ }^{7}$ If there are cells with low or zero token counts in a regression analysis, the statistical model is faced with challenges of reliability. Because some of our regressions exhibited multiple cells with low or zero tokens, we collapsed the initial five categories of temporal distance into two categories. This decision increased cell size and improved the reliability of the models.

