Acquisition of English Tense-Aspect Morphology by Advanced French Instructed Learners

Dalila Ayoun

University of Arizona

M. Rafael Salaberry

University of Texas, Austin

The acquisition of English verbal morphology has been mostly tested as a second language (L2) in English-speaking settings (Bardovi-Harlig, 1992a, 1992b, 1992c, 1998; Bardovi-Harlig & Bergström, 1996; Bayley, 1991, 1994), more rarely as a foreign language (e.g., Robison, 1990, 1995), in only one cross-sectional study with native speakers of French in a foreign/L2 setting in Quebec (Collins, 2002), and never with French speakers living in France, who have much less exposure to English than their Francophone counterparts living in Quebec. The present cross-sectional study analyzes data from a group of 21 high school French speakers learning English in France to address two main research questions: (a) Do our learners exhibit nativelike performance in their use of the various past morphological forms across the lexical aspectual classes (e.g., Vendler, 1957/1967)? (b) Does their first language lead French speakers to overuse the English present perfect due to its morphological similarity with the *passé composé*? Our findings underscore the effect of lexical aspect on the use of past tense markers while highlighting a significant departure from the predicted developmental path of past tense marking: States are marked more consistently than telic events in the narrative task. Possible theoretical and methodological factors that might account for the present findings are discussed.

Keywords   tense and aspect; past tense morphology; aspect hypothesis; discourse hypothesis; English as a foreign language; French instructed learners; second/foreign language learning

Correspondence concerning this article should be addressed to Dalila Ayoun, Department of French & Italian, College of Humanities, University of Arizona, P. O. Box 21007, Tucson, AZ 85721-0067. Internet: ayoun@email.arizona.edu

Introduction

The expression of tense and aspect through morphological markers is a central issue in the development of the language competence of second language (L2) learners because it constitutes an important indication of their syntactic and semantic competence. The Aspect Hypothesis (AH) is one of the most well-researched claims among the theoretical frameworks used to investigate the L2 development of tense-aspect marking. The AH states that in the early stages of acquisition, verbal morphology encodes inherent semantic aspectual distinctions (i.e., it does not encode tense or grammatical aspect; Andersen, 1986, 1991; Andersen & Shirai, 1994; Robison, 1990). The AH has led to the generalization that the initial stages of development of tense and aspect marking are constrained by lexical aspectual classes: states, activities, accomplishments, and achievements to be defined and discussed in this article (Mourelatos, 1978; Vendler, 1957/1967). Subsequently, it is expected that L2 learners will become less dependent on prototypical selections of past tense marking (strict association between lexical aspect and grammatical aspect) and start using nonprototypical markings as well (e.g., states with the perfective form) as reflected in the distribution of past tense markings among native speakers (NSs; Andersen, 1994). A thorough review of the empirical studies that have been based on the AH with untutored and tutored learners of various source and target languages is presented in Bardovi-Harlig (2000), Li and Shirai (2000), and Salaberry (2000), whereas Ayoun and Salaberry (2005) offer a more recent collection of empirical studies targeting Romance languages. In spite of the theoretical and pedagogical importance of this finding, the acquisition of English verbal morphology has been mostly tested as an L2 in intensive instructed settings (e.g., Bardovi-Harlig, 1992a, 1992b, 1992c, 1998; Bardovi-Harlig & Bergström, 1996; Bardovi-Harlig & Reynolds, 1995; Bayley, 1991, 1994), more rarely as a foreign language (e.g., Robison, 1990, 1995), in only one cross-sectional study with NSs of French in a foreign/L2 setting in Quebec (Collins, 2002; partially replicated in Collins, 2004), and never with French NSs living in France, who have much less exposure to English than their Francophone counterparts living in Canada.

We distinguish between an L2 setting and a foreign language setting. The former is a setting in which English as the target language is the majority language. This is the case for learners studying English in the United States. In contrast, in a foreign language setting, the L2 is not the first language (L1) of any large group of citizens. This is the case for learners studying English in France. Incidentally, Quebec is classified as both a foreign and an L2 setting

because of its unique linguistic situation: English is the L1 of a large group of speakers in Quebec, as it is in the other Canadian provinces. This distinction is warranted by the comparative analysis of previous studies on the acquisition of temporality in L2 development, which have revealed a stark contrast in findings from more naturalistic learners (e.g., Dietrich, Klein & Noyau, 1995; Noyau, 1990; Véronique, 1987) compared with classroom learners (e.g., Ayoun, 2004; Salaberry, 1998, 1999; 2000; Slabakova & Montrul, 2002a, 2002b).

This cross-sectional study thus tests 21 French NSs learners of English as a foreign language (EFL) in their last year of senior high school (approximately 7 years of academic instruction) to address two main research questions: (a) Do our learners show nativelike performance in their use of the various past morphological forms across the lexical aspectual classes? (b) Does the L1 negatively influence the development of past tense marking in L2 English leading French NSs to overuse English present perfect due to its morphological similarity with the *passé composé*?

Tense-Aspect Systems in French and English

Time, Tense, and Aspect

In language, the concept of time is expressed with the categories of tense, a deictic category that "relates the time of the situation referred to some other time, usually to the moment of speaking" (Comrie, 1976, pp. 1–2), and aspect, which represents the "different ways of viewing the internal temporal constituency of a situation" (Comrie, 1976, p. 3). The purpose of tense is thus to order events along a time line—in other words, to situate events in reference to other events—whereas aspect reflects the speaker's internal perspective on a given situation. As indicated in Figure 1, aspect is divided into two distinct linguistic categories: grammatical aspect and lexical aspect. Grammatical aspect is not concerned with the external temporal points of reference of a given situation but with its internal temporal constituency, and it is expressed through morphological markers. The aspectual distinction between the perfective aspect and the imperfective aspect in French is thus realized through the inflectional morphology of the *passé composé* and the *imparfait*, respectively. The differences between the perfective and the imperfective aspects are explained in terms of the speaker's perspective (Smith, 1991/1997): The perfective aspect focuses on the beginning and end of a situation, whereas the imperfective aspect focuses on the situation from within, without definite or bounded temporal boundaries, as illustrated in (1a) and (1b).
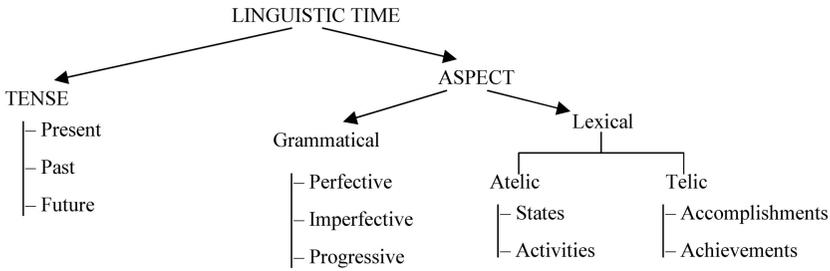
LINGUISTIC TIME

TENSE
– Present
– Past
– Future

ASPECT

Grammatical
– Perfective
– Imperfective
– Progressive

Lexical

Atelic
– States
– Activities

Telic
– Accomplishments
– Achievements

Figure 1 Grammatical and lexical aspects.

(1) a. *Marie a lu   le livre.*
         Mary read-PERF the book
         "Mary read the book"
     b. *Marie lisait   le livre.*
         Mary read-IMP the book
         "Mary was reading the book"

The examples in (1a) and (1b) illustrate two different past tense markings. The same predicate *lire* "to read" is encoded with the *passé composé* in (1a), where the action of reading the book is viewed as completed, whereas in (1b), the action of the predicate encoded with the *imparfait* is viewed as incomplete. Thus, Langacker (1982, p. 274) argues that "a perfective predicate describes the change of a configuration through time," whereas "an imperfective predicate describes the constancy of configuration through time." Furthermore, while discussing the functions of French *passé composé* and *imparfait*, Caudal and Roussarie (2005, pp. 267–268) assert that the perfective form focuses on changes of state, whereas the imperfective form focuses on the permanence of the state in the world.

Lexical aspect refers to the inherent semantic property of the verb phrase or predicate. Most of the literature on tense-aspect has adopted Andersen's (1991) description of the well-known Vendler-Mourelatos hierarchy (Mourelatos, 1978; Vendler, 1957/1967) to establish the following aspectual categories: (a) Prototypical states refer to situations that do not involve change over time, do not have salient end points or gaps, are nonvolitional, and do not require any input of energy (cf. Binnick, 1991; Comrie, 1985) (e.g., *to know something*); (b) activities are dynamic situations that involve change over time but lack a specific end point (e.g., *to sing*); (c) accomplishments are dynamic situations that have

Table 1 Semantic features of aspectual categories

	States	Activities	Accomplishments	Achievements
Punctual	−	−	−	+
Telic	−	−	+	+
Dynamic	−	+	+	+

duration and involve an end result (e.g., *to fix the car*); (d) achievements refer to dynamic situations that involve an instantaneous change (e.g., *to recognize something*).

Achievements and accomplishments are also said to be "telic" to indicate that they have an inherent outcome or end state, whereas states and activities are said to be "atelic" to indicate that they lack such an inherent outcome or end state. Two additional lexical aspectual distinctions oppose "stative" (states) to "dynamic" (activities), and "punctual" (achievements) to "durative" (accomplishments) (e.g., Andersen, 1991). The semantic features of these aspectual distinctions in association with lexical aspectual values are summarized in Table 1. Table 1 shows that a single semantic feature distinguishes several aspectual classes. States and activities are distinguished by the [dynamic] feature: States are [–dynamic], whereas activities are [+dynamic]. Activities and accomplishments are distinguished by the [telicity] feature: Activities are [–telic], whereas accomplishments are [+telic]. Finally, the subtle distinction between accomplishments and achievements is realized through the [punctual] feature: Accomplishments are [–punctual], whereas achievements are [+punctual].[1]

Tense and Aspect in French and English

In both French and English, temporality is expressed morphologically (tense marking), lexically (time adverbials in both languages and modals in English), and syntactically (periphrastic tenses). As illustrated with the examples (1a) and (1b), French distinguishes between the perfective aspect and the imperfective aspect as realized through the inflectional morphology of the *passé composé* and the *imparfait*, respectively. In contrast, English marks aspectual contrasts along the lines of progressivity, as realized through the inflectional morphology of the simple past and the periphrastic expression *to be + –ing*. Although this aspectual distinction exists in French as well, it is not expressed by grammatical means, but rather lexically with the idiomatic, periphrastic expression *être en train de* "to be in the middle of," as illustrated in (2).

(2)   a.   I was reading alone.
        b.   *J'étais en train   de lire seul(e).*
             I was   in the middle of read alone
        c.   *Je lisais seul(e).*
             I read-IMP alone

The progressive aspect is also expressed with *aller* "to go" followed by the present participle as exemplified in (3).

(3)   a.   *Le chômage va croissant.*
             The unemployment goes growing
             "Unemployment is rising"
        b.   *Les difficultés allaient grandissantes.*
             The difficulties went-IMP growing
             "Difficulties were increasing"

However, this structure is becoming increasingly rare.

English also distinguishes between the perfective and the imperfective aspects. However, contrary to French, it does not exhibit a strict correspondence between morphological forms and aspectual values. Thus, the simple past expresses not only the perfective aspect as in (4a) but also the nonprogressive aspect as in (4b), as well as the habitual aspect as in (4c).

(4)   a.   Mark read the entire book.
        b.   She drank wine.
        c.   They played/used to play tennis when they were children.

The habitual and the nonprogressive are both imperfective. Thus, in English, a single morphological form, the simple past, can express three different aspectual values encompassing the perfective and the imperfective. This contrast has led some researchers such as Giorgi and Pianesi (1997) to postulate that English eventive verbs are inherently [+perfective], in contrast to the Romance languages, in which verbs are determined to be either perfective or imperfective at the aspectual phrase level and not at the verbal predicate level. These main aspectual distinctions in French and English are summarized in Figure 2.

Another important difference between the two languages is that English distinguishes between indefinite past—expressed by the present perfect as in (5a)—and the definite past—expressed by the simple past as in (5b)—whereas French expresses both pasts with the *passé composé* as shown in (5c).[2]
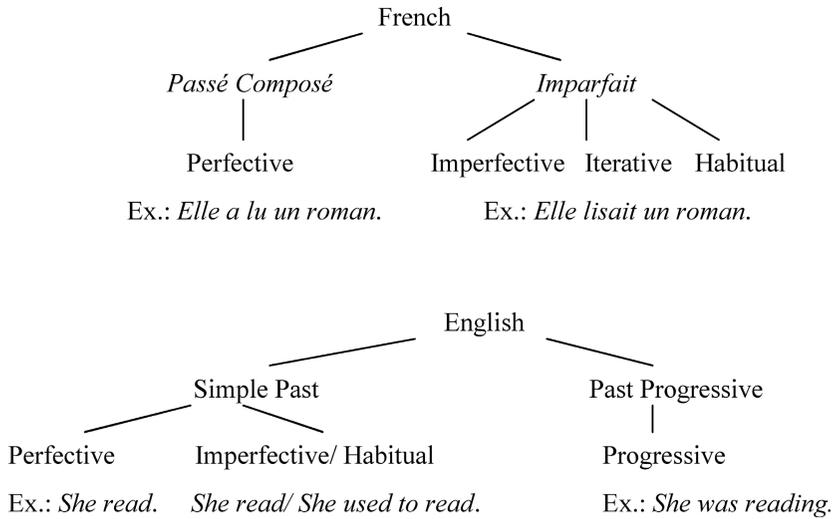
Figure 2 Aspectual distinctions in French and English.

(5)   a.   They have read these interviews.
      b.   They read these interviews yesterday.
      c.   *Ils ont lu ces entrevues/ils ont lu ces entrevues hier.*

   Moreover, along the lines of a typological analysis, the fact that the two languages share the same structure—auxiliary + past participle—might lead Francophone learners of EFL to overuse present perfect (i.e., to express both definite and indefinite pasts with present perfect instead of only for definite past cases).

   To sum up, adult French NSs possess a temporality system that includes both tense and aspect with rich morphological forms, along with semantic and pragmatic features. English also includes semantic and pragmatic features to convey meanings of temporality, but a poorer verbal morphology that nonetheless offers many irregular paradigms (e.g., *spoke, brought, took, did, sang*) along with *–ed* for the regular past form. In addition, the main aspectual distinction in L1 French is between the perfective (*passé composé*) and the imperfective (*imparfait*), whereas in English, it is between perfective (simple past) and progressive (-*ing*), which is lexicalized but not grammaticalized in French. English distinguishes between indefinite past (present perfect) and definite past (simple past), whereas French does not, but its perfective form (*passé composé*)

is structurally identical to the present perfect, which might lead to its overuse in contexts where the simple past would be required. We will first review the current literature before turning to the present methodology designed to answer the research questions listed above.

Previous Studies on the Acquisition of L2 English Past Tense

The majority of studies on the acquisition of L2 English past tense morphology have tested two major hypotheses: the Aspect Hypothesis (AH) and the Discourse Hypothesis (DH). A few have also looked at cognitive saliency (Bayley, 1994; Buck, in press; Salaberry, 2000), or the possible effect of strictly syntactic factors (Hawkins & Liszka, 2003). The investigation of the L2 development of the English past tense is, however, relatively unexplored given that most studies have analyzed data from learners enrolled in intensive English as a second language (ESL) programs (e.g., Bardovi-Harlig and her colleagues; Bayley, 1991, 1994; Hawkins & Liszka), or English as a foreign language (EFL) classes (e.g., Buck, in press; Housen, 2002; Lee, 2001; Salaberry, 2000). To the best of our knowledge, Collins (2002) is the only study that targeted EFL with French NSs in an L2 setting—albeit a particular setting because it was Quebec—and was partially duplicated in Collins (2004).

The AH has generated the largest body of empirical studies on the L2 acquisition of tense-aspect marking either directly or indirectly (i.e., studies testing other hypotheses also test the prediction of the AH). The AH predicts that the perfective form will be used first in association with telic events (achievements and accomplishments) and later spreading to atelic events and states, in that sequential order. In contrast, the imperfective form will first be used to mark states exclusively and later propagating toward the other end of the lexical aspectual continuum (activities, accomplishments, and achievements, in that order). Furthermore, it is expected that the imperfective form will appear after the perfective form has already entered the system of inflectional morphology of the L2 learner. An additional postulate of the AH is that in English the progressive will not be used with states.

Another hypothesis that has generated a significant number of empirical studies is the DH. The DH is based on the claim that narrative grounding (i.e., foreground and background) can inform the use of tense-aspect inflectional morphology and thus guide the development of the morphological marking of temporality in the L2. Bardovi-Harlig (2000, p. 279) explained that "the foreground relates events belonging to the skeletal structure of the discourse and consists of clauses that move time forward," whereas the background of the

story provides supportive material, such as elaborations or evaluations. Thus, the DH predicts that "learners use emerging verbal morphology to distinguish foreground from background in narratives" (Bardovi-Harlig, 1994, p. 43).

The predictions of the AH and the DH are difficult to distinguish because they "may be too fine-grained for a study of interlanguage" (Bardovi-Harlig, 1994, p. 286); that is, the criteria used to distinguish foreground versus background information overlap with some of the criteria that serve to classify verb phrases into different lexical aspectual classes. For instance, foregrounded events are determined by temporal criteria that include reference to punctuality and completeness. Given the obvious definitional overlap of the principled criteria to determine temporal information conveyed through lexical-discursive means, we will consider the findings from some studies testing the DH relevant to evaluate the predictions of the AH as well. In the remainder of this section, we will focus first on studies that largely provide empirical support for the AH and then turn to the results of studies that researchers have regarded as evidence for the effect of factors other than strictly lexical aspectual semantics on the use of past tense verbal morphology.

The Effect of Lexical Semantics
Among the first empirical studies to test an early version of the AH, Robison (1990) gathered data from informal conversations with a Spanish speaker learning English in a naturalistic setting. Robison analyzed two aspectual contrasts: the stative-dynamic distinction and the punctual-durative distinction. As predicted by the AH, the distribution of progressive morphological markers was not equal for all types of verbs. However, the data showed support for the AH regarding the punctual-durative distinction but not regarding the stative-dynamic distinction; that is, the L1 Spanish subject marked a higher proportion of stative verbs, rather than dynamic verbs, with the progressive marker *–ing*.

A large number of studies on the development of tense-aspect in L2 English have been conducted by Bardovi-Harlig and her students. In one of her earlier studies, Bardovi-Harlig (1992b) found that 15 out of 45 ESL learners comprising six different levels of proficiency marked lexical aspect redundantly. For instance, past progressive marked durativity, whereas simple past marked punctual verbs. Most of the participants' production was not targetlike. Similarly, Bardovi-Harlig (1992a) conducted a cross-sectional study with 135 ESL learners, representing 14 different L1s, who performed three tasks (cloze test, compositions, multiple-choice test). The analyses of the data indicated that development of forms precedes appropriate use in that there was a high formal accuracy but lower level of appropriate use of forms across all proficiency

levels. However, tense was consistently marked across lexical classes, and performance improved with the level of proficiency. The overall outcome (i.e., form precedes meaning, and tense is marked across lexical aspectual classes) has been corroborated in several studies, including studies carried out within a minimalist paradigm (e.g., Ayoun, 2005; Montrul, 2002).

In Bardovi-Harlig and Reynolds (1995), 182 ESL learners at six different levels of proficiency and with 15 different L1s were tested on 32 short passages. They were asked to provide the appropriate verbal morphology of predicates based on contextual information. The results of distributional analyses showed that lexical aspectual class influences the sequence of acquisition of past temporality and that learners go through three distinct stages in their acquisition of the simple past: First, telic verbs are favored over atelic verbs, then states start being used more than activities; and, finally, the use of simple past appears to be undergeneralized.

Bardovi-Harlig and Bergström (1996) collected written narratives from ESL learners (enrolled in the first five levels of an intensive program) and French as a foreign language (FFL) learners (enrolled in various college classes) with a film retell writing task. The analysis of the data showed no signs of the proposed spread of morphological markers according to lexical aspectual classes (from telic to state verbs). As Bardovi-Harlig and Bergström put it: "in English for Group 1, achievements and accomplishments show the same level of past marking, with 46.4% and 47.1% [. . .]" and "the use of simple past with states increases noticeably from Group 1 (15.0%) to Group 2 (56.9%) [. . .]" (pp. 317–318). Second, the most interesting results of the L2 English data are related to the use of the progressive with activities. The heavy use of present progressive or tenseless progressive (without auxiliaries) at stage 1 shifts toward past progressive at stage 2. Hence, the shift from nonpast to past tense marking with activities occurs at the same time that it happens with states.

Bardovi-Harlig (1998) asked 55 ESL learners at six different levels of proficiency and representing five L1 backgrounds to complete a film retell task (an 8-min excerpt from *Modern Times*). The participants' narratives were coded for discourse grounding (background/foreground) and verb phrases were coded for verbal morphology and lexical classes. The results indicated that achievements were inflected regardless of grounding, whereas accomplishments and activities were sensitive to both grounding and lexical aspect.

A few studies have also focused on L2 learners with the same L1. Lee (2001), for instance, analyzed longitudinal data from two adolescent Korean-speaking ESL learners. Oral data were elicited with story narration and translations, picture descriptions, and spontaneous conversations. Results showed

that one participant rarely used past morphology, whereas the other started to use it toward the end of the study. Instead, both participants used adverbials and discourse-pragmatic devices. The lexical aspect analysis revealed that telic predicates were marked with past tense more often than states and activities, whereas progressive appeared first with activities, supporting earlier findings.

Finally, there are two studies (i.e., Collins, 2002, 2004) that have explicitly focused on the analysis of the acquisition of L2 English past tense data among L1 French speakers. Collins (2002) conducted two studies with Francophone speakers enrolled in English intensive courses in Canada to test the predictions made by the AH and to establish the degree of L1 influence that would come from the inappropriate use of the present perfect, which has similar uses to the *passé composé*. The analyses of the data obtained from a 32-passage cloze task (from Bardovi-Harlig & Reynolds, 1995) looked at the use of the simple past and its alternative forms for the four aspectual classes. Results from the first study revealed a significant difference in past tense use across lexical classes but no interaction with proficiency level. Furthermore, the L1 effect in present perfect use seemed to be limited to higher proficiency learners. Overall, learners had the most difficulties with activities. Thus, these findings appear to be consistent with those of studies conducted with ESL learners from a variety of L1 backgrounds. The results of the 25-passage cloze task administered in the second study showed a significant difference in past tense use across lexical classes but no interaction between group and lexical aspect. It appeared that even advanced learners' use of past tense morphology was influenced by lexical aspect. Significant differences were also found between achievements and states, between achievements and activities, as well as between accomplishments and states. Past progressive was the second common form used—mostly with activities—followed by the present with states. The present perfect was the alternative form used the most often with telics, especially with increasing levels of proficiency, but it remained relatively low. In a second study, Collins (2004) tested 139 Japanese- and French-speaking ESL learners at different levels of proficiency to investigate the degree of L1 influence in their acquisition of past temporal reference. Participants completed a 25-passage cloze test (Collins, 2002). A significant effect was found for lexical aspect, but there was no interaction between lexical aspect and group, indicating that lexical aspect influenced the use of past tense morphology for French- and Japanese-speaking learners alike. Participants were more successful with telic predicates than with activities or states, as was found in Collins (2002). The Japanese learners actually produced more present perfect forms than the Francophone learners, but both groups produced an equal number of nonpast forms and progressive forms for activities.

Alternative Factors

Some empirical studies have raised questions about the validity of the AH. Housen (2002), for instance, using longitudinal data from a 9-year-old Dutch child showed that whereas the development of progressive marking supported the prediction of the AH, the development of past tense did not. First, states were marked for past tense beginning in the early stages of development much more than expected (although early states were mostly irregular verbs). Second, type analysis, as opposed to token analysis, did not support the proposed early association of past tense marking with achievements, because the frequent use of a few achievement verbs (i.e., *said* and *got*) inflated their token count. These findings led Housen to speculate that the AH for past tense might be valid for regular past only, whereas a different processing mechanism might be involved for irregular past, assumed to be more prone to rote learning than regular past (cf. Pinker, 1991). Rohde (2002) also focused on child L2 acquisition of English, building on an earlier study (Rohde, 1996), and discussed various types of nontargetlike uses of verbal morphology by four German children acquiring English in a naturalistic setting. Rohde suggested that the analysis of his data does not necessarily support the prediction of the AH. After discussing various possible factors such as L1 transfer and input, he argued that "aspectual effect," which can vary in strength, should be invoked rather than an aspect hypothesis that must be either supported or rejected. Especially problematic for the AH was the finding that state verbs had a very high past marking rate (80–100%) in obligatory past contexts. Although the state verbs in his data included *be* copula/auxiliary, the same tendency was observed by Housen, who arrived at a similar finding although he had excluded *be*. Rohde and Housen therefore both provided important counterexamples to the AH.

Other studies have specifically focused on the effect of cognitive saliency of specific verbal endings perceptually highlighted by morphological irregularities or frequency of use. Bayley (1994) analyzed 30 hr of speech obtained from two oral interviews conducted with 20 adult NSs of Mandarin living and learning English in California. Among the seven factors tested, both perceptual saliency and lexical aspect were found to be particularly significant. Bayley also concluded that perfectives are more likely than imperfectives to be marked for past tense, due to their prototypical meanings. Surprisingly, however, Tajika's (1999) study contradicts Bayley's findings. Tajika tested adolescent Japanese NSs learning English in an instructional setting by asking them to produce three oral past tense narratives that were then subjected to a VARBRUL analysis. Three factors were found to be significant—discourse type, grounding, and

sentence structure (e.g., matrix/independent clauses, subordinate clauses)—but neither lexical aspect nor the phonetic saliency of verbs turned out to be significant factors in the past tense marking rate of these learners.

Some studies have specifically linked the nature of saliency with the irregular nature of some verbal conjugations. Hawkins and Liszka (2003), for instance, investigated the effect of the regular-irregular morphology in the use of L2 English past tense marking among L1 speakers of Chinese, Japanese, and German. Japanese and German are similar to English in having functional projections for tense. For the purpose of our discussion, we will concentrate on the analysis of the data from the Chinese speakers. The L1 Chinese speakers (as well as the German and Japanese speakers) performed at an advanced level of L2 English proficiency as determined by a written test that assessed their use of past tense marking. Their use of past tense in two spontaneous oral narratives (a personal anecdote and the retelling of a movie excerpt), however, stands in contrast with the written data: The oral data revealed a much lower proficiency threshold than the written data; that is, the L1 Chinese speakers were more successful in using irregular past tense forms (approximately 84% correctly inflected) than regular past tense (approximately 63% correctly inflected). Hawkins and Liszka speculated that the irregular forms might be processed as independent lexical items that have a different morphological status than syntactically based regular forms. As for the regular forms, the authors conjectured that Chinese speakers might not treat the regular forms as the irregular ones due to their regularity as applied to many different verbs and their associated frequency in the input. What is puzzling, however, is the inconsistent use of regular past tense markers: About one third of verbs were not correctly inflected.

Turning now to the analysis of L2 English past tense use among NSs of a Romance language like French, Salaberry (2000) investigated the development of English past tense verbal morphology among 14 monolingual Spanish speakers who only had access to classroom instruction. The analysis of the 562 verb tokens collected with oral and written narratives of two excerpts from the silent film *Modern Times* led to four main findings. First, there was a planning time effect in that there was a more extended use of past tense in written narratives than in the oral narratives. Second, the lexical analysis revealed that 74–77% of tokens used in the oral and written narratives were telic predicates, whereas 12–15% corresponded to states. Third, all learners relied heavily on the use of irregular morphology to mark past tense in both types of narratives. In contrast, the use of regularized forms of the past tense lagged behind in the production of most learners. Finally, the potential effect of lexical aspectual

classes was not significant in the selection of past tense verbal endings (as reflected in the differential marking of verbal morphology according to lexical semantic categories) or it reflected the opposite trend of development predicted by previous hypotheses. In his final analysis, Salaberry concluded that irregular morphology correlated more strongly with lexical aspect than with past tense morphology.

Buck (2007, in press) took as a point of departure the findings from Salaberry (2000) as just described, but she argued against the claim that learners might be more successful using irregular than regular verbal morphology during the beginning stages of acquisition. Buck's findings are based on data from two groups of learners. Her analysis of data revealed that the use of simple past instead of base or present tense forms was more evident with irregular than with regular verbs. More importantly, the data showed that irregular verb tokens were much more frequent among the more advanced students, whereas the use of regular verbs showed little development. It appears that learners were not developing a rule-based system to use simple past morphology. Furthermore, Buck's data do not support Salaberry's claim that lexical aspect could play a more important role at later stages of learning. The participants in Buck's study represented two different stages of development, but her more advanced students showed minimal evidence of following the AH: Telics were used predominantly and increased with proficiency, whereas a greater number of states were used than activities regardless of proficiency levels. Cognitive saliency seems to have more influence than lexical aspect, at least regarding states, which were represented to a large degree by *was*.

Finally, Clachar (2004) set out to examine whether the acquisition of tense-aspect by 43 Creole-English speakers from the Caribbean is similar to that of ESL students. English is a second dialect for these speakers, not a second language. The 43 students (enrolled in the 9th and 10th grades) were classified along the basilectal-mesolectal-acrolectal continuum (Alleyne, 1980). They watched two short silent films on two separate occasions and completed a written retelling task for each film. Narratives were analyzed and coded for appropriate use of past tense and progressive morphology in obligatory contexts and for lexical class. Results showed that both the perfective and progressive morphemes were spread across all four lexical classes for the lower proficiency levels (basilectal- and mesolectal-speaking students), contrary to the predictions of the AH, whereas the results for the more advanced learners (mesolectal-acrolectal-speaking students) appeared to support them.

Methodology

Objective

The purpose of this study is to investigate the extent to which the expression of temporality through inflectional morphology among foreign language learners is determined by lexical semantics and L1 transfer effects. In contrast with previous studies, the present study focuses on the analysis of data from a foreign language (English) that is aspectually less complex than the participants' L1 (French). The study addresses two main research questions: (a) To what extent do our learners show nativelike performance in their use of the various past morphological forms across the various lexical aspectual classes (i.e., is there a lexical semantics distributional bias in the use of past tense morphology)? (b) Does the L1 influence the development of past tense marking in L2 English, leading French NSs to overuse English present perfect due to its morphological similarity with the *passé composé*?

Ultimately, we are interested in assessing whether foreign language learners can achieve a level of competence comparable to the competence of NSs. Whereas some studies have proposed that ultimate attainment in the area of past tense aspectual morphology is not possible (e.g., Coppieters, 1987, based on the analysis of L2 French data among L1 English speakers, but see also Birdsong, 1992), others have argued for the opposite conclusion (e.g., Slabakova & Montrul, 2000, 2003, based on the analysis of L2 Spanish data among L1 English speakers).[3] Given appropriate exposure over a sufficiently long period of time, L2 learners do eventually demonstrate nativelike use of the morphological encoding of tense and aspect (e.g., Ayoun, 2005; Schlyter, 1990; Slabakova & Montrul, 2000), even if the complexity of the morphosyntactic rules that govern aspectual distinctions might be subject to maturational constraints (e.g., Paradis, 1994), preventing learners from ever fully achieving near-nativeness (Montrul, 2002).

Participants

The participants (*n* = 21) were French NSs living in Nantes. They were all female students in *terminale*, the senior year in high school, and averaged 18.85 years of age (range: 16–20 years). They had been studying English for an average of 7.8 years (range: 6–12 years). Eleven participants (52.3%) had never been to an English-speaking country, whereas the others (10 [47.7%]) reported such brief stays that we can say that these participants were strictly instructed learners in the foreign language environment of a classroom.[4] Unfortunately, practical constraints did not allow us to administer a pretest to the participants,

who instead provided a self-assessment on their written and spoken proficiency skills in English. Only two participants rated themselves as "good," whereas most of them indicated that they were just "acceptable" or "average."[5] A group of English NSs ($n = 21$) served as controls. They were all adult NSs of American English living in a southwestern state, and although they were all college educated, they were linguistically naïve.

Elicitation Tasks

The participants completed two written elicitation tasks administered with questionnaires during a class session: a personal narrative and a cloze task. For the narrative, the learners were given the choice to either write a personal narrative (e.g., recounting a trip or a birthday) or a fairy tale (e.g., Snow White or Cinderella, or create their own) in an attempt to elicit their best writing. The rationale was that a personal choice would be more inspiring than an imposed one. In addition, participants were asked to use at least 15 different predicates and 4 different adverbs.[6]

To perform the cloze task, participants were instructed to read the entire story first and then to complete it by using the given base form of the predicates in the appropriate tense according to the context. In composing the fictional story, vocabulary was restricted to familiar lexical items and was checked with instructors for appropriateness.

The 59 predicates of the cloze task target mostly the simple past and are distributed across the three lexical aspectual categories as follows: 16 states, 11 activities, and 32 telic events (combining achievements and accomplishments). The token/type ratio for activities was 1.0; that is, there were as many types as there were tokens for the 11 predicates exemplifying activities. There were 10 types of states for 16 tokens, because there were 6 tokens of *be* and 2 tokens of *want*. For telic events, there were 32 tokens of 30 types (*decide* and *spend* were the only predicates used twice).

No attempt was made to balance the number of tokens for each aspectual category. Instead, preference was given to producing a natural text structure given the fictional story told by a NS. Obligatory contexts were determined by the responses of five other NSs who achieved a minimum of 80% consistency (these NSs were not part of the control group or the authors). The text structure also required the present for four predicates and the past progressive for seven predicates. Moreover, the potential effect of adverbs was tested with three different frequency adverbs on state and activity predicates (with three different manner adverbs on telics for balance). Again, the authenticity of the internal

cohesion of the text was deemed to be more important than an artificially balanced number of tokens per aspectual category.

Five experienced raters were used to classify the predicates into the Vendler-type aspectual classes as defined earlier. They worked independently and reached 80% agreement (4 out of 5) in the classification of more than 90% of the tokens (54 out of 59). They used the operational test from Shirai (1991), which consists in the following progressive steps:

Step 1: Is it a state?
        Ask: Does V have a habitual interpretation in simple present?
                If no $=>$ V is a state.
                If yes go to step 2.
        example: *to love running* (state) $\neq$ *to buy running clothes* (nonstate)
Step 2: Is it an activity?
        Ask: Does "X is V-*ing*" imply "X has V-*ed*" without an iterative/habitual meaning?
                If yes $=>$ V is an activity.
Step 3: Is it an accomplishment or an achievement?
        Ask: If "X V–*ed* in Y time", then "X was V–*ing* during that time"
                If yes $=>$ V is an accomplishment.
                If no $=>$ V is an achievement.
        example: *I ran a marathon in three hours* (accomplishment) $\neq$ *I entered a marathon* (achievement).

The five tokens that did not reach 80% agreement among the five raters achieved at least a majority of 60% agreement (three out of five raters). These tokens were included because in all five cases at least one of the raters in the minority explicitly stated that he or she was not entirely sure of his or her decision and because both authors felt strongly that the operational tests supported the opinion of the majority. We comment on each case so that the readers can assess our judgment.

Item 18 ("to look around") was ultimately classified as an activity, given that this process does not include an inherent end point: "to look around" stands in clear contrast with the culminating event of searching (i.e., "to find"). The latter is undoubtedly a telic event. Token 32 ("his limp, to prevent him from going very fast") was classified as a state, given that preventing cannot necessarily be equated with stopping (the latter more likely to be classified as a telic event). An experienced rater who was not part of the team of five raters, Bardovi-Harlig (personal communication, 2005) rightfully commented

that "in this case, preventing is not like stopping someone from starting to do something (as in *Francois prevented Jean from leaving*), but rather it refers to someone's ability to do or not to do some kind of action." In fact, one of the raters who did not ultimately classify this verb as stative did consider that option: "In my mind, this could almost be stative too because it is his limp that is preventing him, not a person." Item 34 ("to venture into") was finally classified as telic, given that following the operational test we must conclude that "either you venture into doing something or you do not." Its meaning is equivalent to "start to do something" (e.g., to start walking toward . . .). Item 43 ("not to hear anyone come behind me") was classified as a telic event as opposed to a state, given that there is a turning point (inherent end point for state 1 of a two-state event; see Klein, 1994) when we can notice that someone is coming from behind (compare "listening to"). Finally, item 48 ("you can tell") has both a literal and a metaphorical meaning. The literal meaning would make it a telic event, and, indeed, two reviewers classified it as such. The metaphorical meaning, however, is the most appropriate for our cloze text. The metaphorical connotation is probably equivalent to a verb like "'to think"; therefore, token 48 is more accurately classified as a state.

Results

Scoring Procedures and Data Analysis
A distributional analysis was performed with each item and lexical aspectual class for both elicitation tasks. The responses were tabulated to yield a usage score. Additional statistical analyses were conducted when necessary.

Results of the Personal Narratives
Most of the participants (12 out of 21; i.e., 57%) chose to write a fairy tale: Seven were modern fairy tales (e.g., a Cinderella story with a modern context such as a young woman aspiring to be a movie star) and five were traditional fairy tales such as Snow White. The other participants (9 out of 21; i.e., 43%) wrote personal narratives (e.g., trips, celebrations, love or friendship stories).

We found a wide range in the length of the narratives produced by the participants as measured by the number of words and sentences. Thus, the number of words ranged from 120 to 510 and averaged 282; the number of sentences ranged from 10 to 42 and averaged 19.38 (Table 2). The total number of tokens per category produced by all 21 learners is as follows: 397 states, 164 activity predicates, 63 accomplishments, and 147 achievements. Predicates were

Table 2 Word, predicate, and lexical class counts in narratives

		Predicates		STA		ACT		ACH		ACC	
Ss	Words	Token	Type	Token	Type	Token	Type	Token	Type	Token	Type
1	120	15	8	11	4	0	0	3	3	1	1
2	142	22	16	11	5	2	2	6	6	3	3
3	168	27	18	10	5	10	8	7	7	0	0
4	352	48	23	28	9	13	10	2	2	4	3
5	294	48	22	22	7	18	11	7	7	0	0
6	448	57	30	25	7	10	9	13	10	5	4
7	218	29	19	15	8	9	8	3	3	1	1
8	212	28	12	16	2	2	1	9	8	0	0
9	510	71	27	50	14	15	12	3	3	3	3
10	273	32	19	16	9	2	2	11	6	2	2
11	444	68	34	35	12	11	9	20	16	1	1
12	509	52	37	8	3	12	12	17	14	15	13
13	178	24	19	11	7	4	4	9	8	1	1
14	239	34	12	16	2	12	6	1	1	4	3
15	335	52	30	19	6	8	6	13	13	11	9
16	211	36	15	30	10	3	2	2	2	1	1
17	299	37	19	21	6	7	7	6	4	3	3
18	190	27	22	9	6	5	5	10	9	2	2
19	192	25	12	14	4	8	5	2	2	1	1
20	441	58	20	32	11	7	6	6	5	1	1
21	179	24	14	15	6	5	4	3	2	1	1
Total	5,954	814	428	414	143	163	129	153	131	60	53
Ratio		.525		.345		.791		.856		.883	

classified by the authors according to the same procedure as the one used for the cloze task. Both authors reached an agreement level of 80% in the classification of the tokens. Independent raters were consulted to arbitrate the discrepancies in classifications. The results show a clear preference for the use of states, reflecting a tendency to offer descriptions in the narratives. Furthermore, the type/token ratios for each of the lexical classes (Tables 2 and 3) reveal a clear contrast in the variety of verb types used with all three dynamic types of verbs (high ratio) versus states (low ratio), a finding that is in keeping with the data from other studies.

The results of a repeated measures ANOVA indicate that the differences between the lexical classes were significant, $F(3, 60) = 23.026$, $p < .0001$;

Table 3 Verb type/verb token ratio for personal narratives

	n	Mean	*SD*	Token range
ACH type/token ratio	21	0.910	0.12953	1–20
ACC type/token ratio	21	792	0.34832	0–15
ACT type/token ratio	21	0.775	0.24046	0–18
STA type/token ratio	21	373	0.14294	8–50

follow-up pairwise contrasts, $F(3, 60) = 22.99, p < .0001$, reveal that the learners' performance on states was significantly different from their performance on each of the other lexical classes. The differences between the other classes were not significant. We also ran Tukey and Bonferroni pairwise comparisons, which indicated that again states were different from all other classes, but no other comparisons were significant. In addition, the analysis of the personal narratives show that participants used a wide range of tense forms, as displayed in Table 4. Numbers with an asterisk indicated a nontargetlike use of a tense. Thus, for instance, 555 predicates were correctly encoded with simple past, whereas 6 were not. The first percentage indicates the percentage of tokens correctly encoded with a given tense; the second percentage indicates the overall percentage of tokens encoded with a given tense. As expected, most predicates were encoded with simple past (68.9% overall, 68.2% correctly), followed by present (10.3% overall, 8.1% correctly) and past perfect (5.8% overall, 4.5% correctly).

Let us consider more closely the use of the present perfect to address our second research question. The data show that the English present perfect is indeed used, but not overused. However, this finding is subject to individual variation, as opposed to being generalized to all the participants. Indeed, only 13 participants out of 21 produced a total of 35 predicates encoded with present perfect: 11 correctly and 24 incorrectly. Of the 24 incorrect uses of the present perfect, the appropriate tense was simple past in 20 cases and past perfect was the appropriate tense in the remaining 4 cases. Only two participants (#8 and #9) produced most of these predicates (four and six predicates, respectively), whereas the majority of the 11 other participants produced only one to three predicates erroneously encoded with present perfect; participant #19 encoded five predicates with present perfect, and only one of these uses was erroneous.

This quantitative analysis of the use of the present perfect does not allow us to completely rule out the effect of L1 transfer because some learners used nontargetlike periphrastic forms fairly systematically. For instance, in the

Table 4 Tense frequencies in personal narratives

	Total tokens	Simple past	Present perfect	Past perfect	Present	Past passive	Past modal	Present modal	Future	Past prog.	Cond. modal
1	15	10	1*	0	4	0	0	0	0	0	0
2	22	16	0	1*	1*	4	0	0	0	0	0
3	27	19	0	0	6*	0	2	0	0	0	0
4	48	23	2*	2	15 1*	3	0	1	1	1	0
5	48	35 1*	0	1*	9 1*	0	0	0	0	0	1
6	57	40	1	1	3	8	1	0	0	3	0
7	29	27	0	0	2	0	0	0	0	0	0
8	28	21	4*	0	2	0	0	0	1	0	0
9	71	49 2*	4 6*	2	5*	0	3	0	0	0	0
10	32	21	0	6 2*	1 2*	0	1	0	0	0	0
11	68	48 1*	1*	2	2 1*	0	7 1*	2*	0	2	1*
12	52	32	1 2*	2	1	7	1	2 4*	0	1	0
13	24	21	0	1	0	1	0	0	0	1	0
14	34	14	3*	12	1	2*	0	0	0	1 1*	0
15	52	38 1*	2*	4 2*	3	2	0	0	0	0	0
16	36	32	1*	3*	0	0	0	0	0	0	0
17	37	36	0	0	0	0	0	1*	0	0	0
18	27	25	0	1*	0	0	0	0	0	1	0
19	25	10	4 1*	3	3 1*	0	3	0	0	0	0
20	58	32 1*	1*	2 1*	6	2	0	1*	2 4*	4	2
21	24	6	1	0	14	0	0	0	1*	0	2
Total	814	555 6*	11 24*	37 11*	66 18*	19 2*	14 1*	4 8*	4 5*	14 1*	5 1*
Percentage correct		.682	.013	.045	.081	.023	.017	—	—	.017	—
Percentage overall		.689	.042	.058	.103	.025	.018	.014	.011	.018	—

extract below, participant #20 marks two telic verbs (indicated in italics) with periphrastic forms: *was started* and *have done*. The first periphrasis is not targetlike, whereas the second is functionally inappropriate. Moreover, the same excerpt shows a targetlike use of the only stative verb (underlined)—He <u>was</u> very tired.

> He *was started* to cry too now. He <u>was</u> very tired of the efforts he *have done* to tell me this sad fairytale, so . . .

The possible effect of L1 transfer of the periphrastic nature of *passé composé* is noticeable when participants mark verbs with a combination of a periphrastic present perfect and a simple past tense marking of the main predicate, as participant #9 does on the following excerpt:

> Then one year later, her uncle <u>has went back</u> to his wife.

At a more speculative level, it appears that the use of the nontargetlike periphrastic form with the auxiliary *to be* reflects the pattern of use for auxiliaries in French, as shown more clearly in the following example from participant #5:

> This teenage <u>was come</u> to me and <u>*asked*</u> me to talk with him in French because he <u>*wanted*</u> learn French

The other verbs in italics (which are normally marked in French past tense with the alternative auxiliary *avoir/have*) are correctly inflected with the English simple past tense.

Results of the Cloze Task
Group Results
The participants' responses to the cloze task were classified into one of the following five categories: (a) "incorrect," when a nontarget tense was used; (b) "correct," when the target tense was used with the appropriate morphological form and inflection; (c) "partially correct," when the target tense was used but with an inappropriate morphological form and/or inflection; (d) "correct alternative," when an appropriate alternative tense other than the target tense was used; (e) "missing," when no answer was provided. (See Table 5.) Five separate ANOVAs corresponding to the five different possible responses were run with follow-up post hoc tests. The results of the ANOVAs show a significant difference among states, activities, and telics for "incorrect," "alternative correct," and "correct." The follow-up analysis on the response "incorrect" shows that there is a significant difference between states and activities (mean difference $= -.100$, $t = -5.821$, $p < .0001$) as well as between activities and telics (mean

Table 5 Means collapsed across L2 learners on cloze task

Response	Statives	Activities	Telics	Sig.
Correct	86.2%	57.1%	76.0%	.001
Partially correct	3.9%	2.6%	4.0%	.996
Alternative correct	0.0%	13.4%	10.5%	.001
Incorrect	8.6%	25.5%	8.3%	.001
Missing	1.5%	1.4%	1.3%	.975

difference $= -.104$, $t = -6.073$, $p < .0001$). The follow-up analysis on the response "correct" shows that there is a significant difference between states and activities (mean difference $= -.289$, $t = -7.775$, $p < .0001$), states and telics (mean difference $= -.100$, $t = -1.701$, $p < .0001$), as well as activities and telics (mean difference $= -.189$, $t = -.252$, $p < .0001$).[7]

Thus, the L2 learners' decreasing order of performance in terms of accuracy is as follows: states, telics, activities. However, if we include the alternative correct answers, there is no discriminating effect between states and telics: 86.2% (86.2% plus 0%) versus 86.5% (76% plus 10.5%), respectively. Furthermore, the results for partially correct, incorrect, and missing items between states and telics are indistinguishable.

Analysis of Results by Lexical Class
As illustrated by Figure 3, there are differences in the distribution of lexical aspectual classes across subjects. There are also differences in tense marking according to specific predicates within each lexical aspectual class (see Appendix A).

Stative Predicates
As found in previous studies reviewed earlier, *be* is consistently encoded in the simple past by all L2 learners. The only NS who used present throughout the text brings down the NS group average to 91.25%. There are high consistency scores for prototypical stative predicates such as *want, believe, think*, or *understand*. The overall means are 86.61% for the L2 group (88.58% without tokens of *be*) and 91.25% for the NS group (89.42% without tokens of *be*). As noted earlier, however, one participant tends to produce present perfect forms instead of simple past forms. The participants' lowest average is on the last token, *remain*, which was targeted for present, not simple past. Approximately half of the learners used the simple past (47.6%), as did a minority of the NSs (33.3%). Thus, we cannot rule out a possible predicate effect as well as a
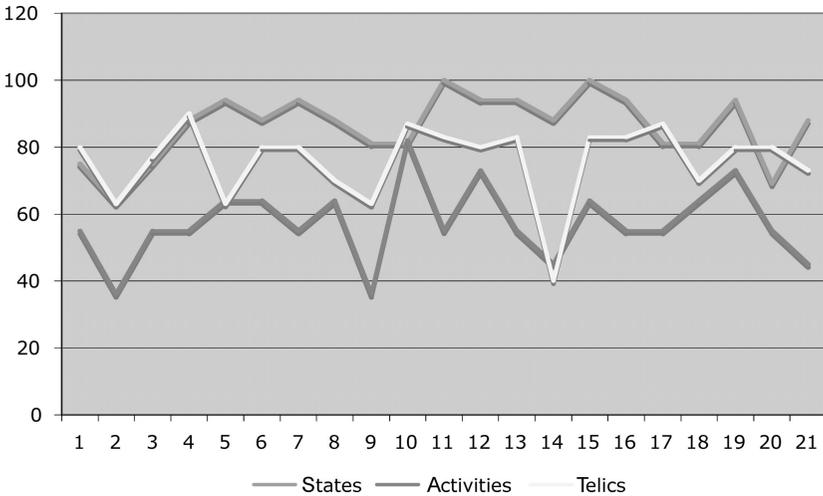
Figure 3 Individual cloze task results by predicate class: Percentage correct.

learner effect. Item 48 indicates that our L2 learners are also acquiring the expression of modality: 61.9% correctly produced *could tell*, 23.8% produced *can tell* instead, and one learner erroneously produced *could told*.

Activity Predicates
Findings clearly indicate a seesaw performance for both the L2 learners and the NSs on activity predicates, stressing a predicate effect rather than a learner effect. The average scores are low for both groups (46.72% for L2 learners and 68.16% for NSs). The L2 learners do well on only two predicates: (a) *begged* (66.7%)/*was begging* (19.0%), for which both simple past and past progressive were appropriate, and their percentages come close to those of the NSs (61.1% for *begged* and 33.3% for *was begging*) and (b) *stared* (90.5%).

Telic Predicates
Second language learners performed relatively well on telic predicates (obtaining from 90.5% to 100% on six predicates) if one combines the score for "correct" (76%) and "alternative correct" (10.5%), arriving at 86.5%. Two examples are *closed/was closing* and *put/was putting*. L2 learners and NSs preferred the simple past for *put* (81% and 77.8%, respectively), whereas more L2 learners than NSs selected *closed* (76.2% vs. 55.5%).

Two other predicates (*walk, watch*) show a split between pluperfect and past progressive, which is an important finding for the L2 learners. For instance, 38.0% of the L2 learners produced *was walking* (vs. 57.1% for *walked*); fewer

learners, 19.0%, produced *was watching* (vs. 66.7% for the NSs). The remaining predicates with low consistency among the participants within each group exhibit different word orders with the adverbs. Here, differences can be observed between the two groups. For instance, the L2 learners preferred *checked hastily* (85.7%) and were split between *usually shared* (38.1%) and *shared usually* (33.3%), whereas the NSs were split on *checked hastily* (38.0%) and *hastily checked* (55.5%) but not on *usually shared* (77.8%; the remaining 22.2% encoded *share* with present but maintained an Adv V word order). For *come*, the low consistency scores are explained by a combination of various tenses and word orders. Both groups preferred *often came* (52.4% and 61.1% for the L2 and NS groups, respectively), the second preference was for *came often* (9.5% and 22.2%), and the third preference was for present encoding with both word orders.

Of the three predicates that were intended to be encoded in the past progressive, only one, *do*, received that marker by the majority of the NSs (66.7%), who otherwise chose the simple past (16.7%); by contrast, 90.5% of the L2 learners encoded *do* with the simple past and never with the past progressive. They did a little better on *rain* (28.6% of the L2 learners and 33.3% of the NSs) and *sit* (19.0% of the L2 learners and 22.2% of the NSs).

The last three telic predicates were meant to be encoded in the present, and one could argue that this introduced an added difficulty in a text that was mostly contextualized in the past. The NSs' encoding varied with the predicate: *spend* (72.2%), *listen* (88.9%), and *stay up* (72.2%). The L2 learners used the present less often and less consistently: *spend* (42.9%) with word order variation, *listen* (23.8%), and *stay up* (42.8%) plus uninflected forms (19%) that could be present or base forms, but given the fact that learners consistently produced inflected forms in the narratives with base forms being practically nonexistent, it is reasonable to assume that the learners intended to encode these forms with present morphological inflections as well. As a matter of fact, some forms were redundantly inflected in both tasks, an important finding that was not obtained in earlier studies (e.g., *could told, was begged, mades, was falled*).

Discussion and Conclusion

A cloze task and a production task were administered to French NSs learning English as a foreign language in France to address two research questions. The first research question focused on the possible effect of a lexical semantic distributional bias in the use of past tense morphology, whereas the second research question focused on the possible transfer effect from the L1 represented

in the overuse of the English present perfect due to its morphological similarity with *passé composé*. With regard to the first research question, our findings reveal that, overall, the results of both elicitation tasks revealed a strong lexical class effect reflected in the distributional biases associated with the use of past tense markers in L2 English; that is, in keeping with the main claim of the AH, the lexical aspect is a strong predictor of the use of past tense markers. Thus, the analysis of the cloze task results revealed that learners obtained high consistency scores for prototypical stative predicates, with an overall mean of 86.61% (91.25% for the NS group). They were much less consistent with activity predicates (46.72% average), but so were the NSs (68.16% average), an indication of a predicate effect rather than a learner effect. Finally, L2 learners performed relatively well on telic predicates when the scores for "correct" (76%) and "alternative correct" (10.5%) are combined, yielding 86.5%. They rarely used past progressive, and they used present less often and less consistently than the NSs, presumably because NSs are better able than NNSs to use contextual information. Adverbs did not appear to have any effect on the selection of tense morphology, only yielding different word orders Adv V or V Adv.

On the other hand, the proposed argument in support of the AH as stated earlier needs to be qualified given that in at least one of the tasks (i.e., the narrative), states were consistently marked with past tense morphology more often than telic events (both accomplishments and achievements); that is, even though the analysis of the aggregate data from the cloze test shows no difference in the effect of lexical aspectual classes in the use of past tense, the data from the narrative task reveal that state verbs were marked with past tense morphology more consistently than telic verbs. This differential effect between states and telic events in at least one of the two tasks is theoretically relevant: In terms of the developmental stages predicted by the AH, we would have expected states to be the last verbs to be consistently marked for past tense. To account for this unexpected finding, we can speculate along two different lines. First, as an anonymous reviewer pointed out, it is possible that learners are reacting to a distributional bias in the input data that suggests to them that telic events are consistently marked with both simple past and progressive, whereas states tend to be marked consistently with simple past only (i.e., *I was happy* as opposed to **I was being happy*). Thus, in line with Andersen's (1989) one-to-one and multifunctional principles, we expect an unbalanced distribution of past tense markers in the L2 data by which the verb types with the most consistent marking of past tense will be incorporated into the developmental system first.

A second theoretical argument that can help us account for the differential outcome in the marking of states and telic events is related to possible

task effects. The reader might recall the findings from Collins (2002, 2004) reviewed earlier, given that her studies most closely resemble the L1-L2 pairing of languages used in the present study (i.e., Francophone learners of EFL). However, the participants in Collins's studies were different from ours to the extent that the former were studying English in Quebec's bilingual English-French environment, whereas the latter were studying English in a French-only speaking environment. Moreover, the data collected by Collins were based on a cloze test passage only, whereas the present study included both a cloze test and personal narratives. Collins's findings showed that students were more successful with telic predicates than with activities or states, thus supporting the AH. Our results from the cloze test are similar to Collins's, but the findings from the narrative reveal that states were the verb types most successfully marked for past tense (although they were closely followed by telic events). Even though our study is not a strict replication of Collins's work, we can only speculate that the distinct outcome in the narrative task might be associated with task effects (i.e., a cloze task might allow for the monitoring of language form); that is, narratives can tap more directly into the learners' competence (e.g., Skehan, 1998; Tarone, 1988).

In sum, the concurrent results from our cloze test and narratives seem to indicate that states are learned through a developmental process that is probably affected by the fact that states are not only few, frequent, and irregular (e.g., Bayley, 1994; Salaberry, 2000; Wolfram, 1985) but that they are also consistently marked only with the perfective form, reflecting a distributional bias in the input data. In contrast, telic events might constitute a more open-ended class of verbs that can be learned either through a generative developmental process, as proposed by Pinker (1991) and Skehan (1998), or according to the associative network model proposed by Bybee (1995). The developmental time required to acquire telic verbs later is likely to be more protracted given their overarching effects in the grammatical infrastructure being built by L2 learners. In further support of this argument, the analysis of nontargetlike uses of past tense morphology hints at a possible effect of irregular morphology on past tense marking. For instance, the following excerpt from one of the personal narratives shows that even though participant #3 seems to have a good command of past tense marking (verbs in italics are representative of the entire passage), she also appears to be confused by the use of irregular verbs such as *come* and *become*.

> But when she _started_ to leave with him, he _changed_ his attitudes, he _started_ to beat her and she **become** very sad, she cryed all the time. A long time later, the boy, the first, the ugly **come** back to her door

This passage seems to indicate that verbs that do not follow a regular pattern of past tense marking will be processed differently. In other words, it is possible that the use of the present tense form is simply reflective of the fact that the periphrastic present perfect form actually uses the present tense form of the predicate (*has come, has become*).[8]

With regard to the second research question posed by the present study, the results of both tasks allow us to conclude that the L1 did not have a pervasive negative influence on the learners' L2 in that (a) only slightly more than half of the learners marked predicates with present perfect, (b) among those who preferred the present perfect, they used it in very few instances (35 predicates among 13 learners), and (c) 24 out of these 35 uses were incorrect. On the other hand, the influence of the L1 cannot be completely discarded given that at least some learners systematically used the present perfect instead of the simple past. In order to further assess the potential effect of L1 transfer, we reproduce a selected passage from the narrative from participant #14. As noted earlier, participant #14 is one of 4 participants (out of 21) whose performance in past tense marking in the cloze test is below the group average.

> We **were returned** at home to get dressed in pyjamas! My mother <u>*had*</u> an horrible pyjamas and we **have very much laughed**. During the night it *was* really great. We **had danced**, **laughed**, **drunk**. At twelve o'clock we **were gone** at exterior to see fireworks. It *was* wonderful. In outside we *weren't* with pyjamas because there *was* snow!

In this passage, stative verbs in italics are correctly marked for past tense, whereas dynamic verbs in bold seem to be marked for past tense periphrastically (irrespective of whether this is standard in the L2). The analysis of this passage leads to three observations. First, there is a clear effect of the L1 in the way past tense is marked in L2 English. For instance, the use of "*we were returned*" is nonstandard in English while reflecting the periphrastic structure used in the learner's L1, which includes the choice of auxiliary *être/to be* (i.e., *nous sommes retournées*). Second, in contrast with the previous finding about the marking of dynamic verbs, the above passage also shows that the past tense marking of stative verbs tends to be targetlike (*had, was, were*). This outcome does not negate the first effect of L1 transfer mentioned earlier but rather reaffirms it, given that stative verbs in French are likely to be marked for past tense through inflectional morphology (e.g., *étais, avais, étions*) because statives are prototypically associated with *imparfait*. Thus, in this case, L1 transfer leads to a targetlike outcome. Third, the above transcribed passage is representative

of the entire narrative of participant #14; that is, the whole narrative is marked with past tense and not once is a present tense used. Overall, thus, participant #14 exhibits knowledge of tense marking, although the way past tense is marked is not necessarily targetlike but quite likely influenced by the way it is marked in the L1.

Overall, our results mirror Collins's results in that there was (a) an L1 effect in present perfect use albeit limited to some learners, (b) learners had the most difficulties with activities, (c) past progressive was the second most common form used—mostly with activities—followed by present with states, and (d) present perfect was the alternative form used the most often with telics, especially with increasing levels of proficiency (although it remained relatively low). Even though there is no clear effect of L1 transfer of the French periphrastic form in the aggregate data from either Collins's studies or the present one, all three studies used intact groups of learners; that is, it is possible that the individual differences that show up in the results of these three studies reflect the fact that there might be a more fine-grained distribution over proficiency levels that could be revealed with the use of more meticulous procedures to classify proficiency levels.

In conclusion, the present study analyzed empirical evidence to assess the relevance of lexical aspect and L1 effects on the marking of L2 English past tense verbal morphology. The present study contributes to our understanding of the development of tense-aspect marking to the extent that the empirical evidence was gathered among a population of learners hereto rarely investigated (L1 French speakers learning English in a non-English environment). The specific findings of the study underscore the effect of lexical aspect in the use of past tense morphology even among students with extensive academic training in the L2 (up to 7 years of instruction), thus expanding the distributional effect of lexical aspect to more advanced stages of learning as predicted earlier (cf. Robison, 1990). At the same time, the task effect (narrative vs. cloze task) might be a sign of a nonnative representational system of temporality that is unstable even among learners with a significant amount of experience in the L2. Furthermore, the limited effect of L1 transfer among L2 learners in general coupled with the systematic transfer effect of the periphrastic perfective French form among some learners might be revealing of more than one distinct stage of development among the group of learners selected for the present study.

Future studies will have to assess levels of proficiency more thoroughly so as to classify developmental stages in much finer detail, as has been done in the present and the majority of previous studies. In conclusion, the findings of

the present study (both expected and unexpected) provide a stronger empirical base for the design of subsequent studies that can inquire further into the use of past tense aspect in similar conditions.

<div align="right">Revised version accepted 5 September 2007</div>

Notes

1 Although Vendler's classification of four verb types continues to be the main reference point for research on lexical aspectual classes, some researchers distinguish more classes, whereas others recognize fewer. For instance, further combinations of semantic features lead to the inclusion of semelfactives (instantaneous and atelic) in the classification proposed by Smith (1991/1997). On the other hand, some researchers disregard the semantic feature of durativity as relevant for the classification, thus collapsing the categories of accomplishments and achievements into a single class (Dowty, 1986; Mourelatos, 1981; Ramsay, 1990; Salaberry, 1998, 2000).

2 However, with stative verbs, simple past in English is ambiguous or neutral as to the perfective/imperfective distinction depending on the situation:

      a.   Mary was (S. PAST) sick and she is still sick. (imperfective)

      b.   Mary was sick (S. PAST) but she is no longer sick. (perfective)

3 One factor that accounts for the discrepancy in the position of Coppieters and that of Slabakova and Montrul is that the latter regard any contextual effect on the selection of past tense morphology as outside the realm of analysis of aspectual contrasts, whereas the former argues for exactly the opposite (i.e., past tense aspect lies outside UG and belongs, instead, within the pragmatic-discursive realm).

4 Three days ($n = 1$); 1 week ($n = 4$); 10 days ($n = 1$); 2 weeks ($n = 1$); 2×1 week ($n = 1$); 2 months ($n = 1$); 2×2 weeks ($n = 1$)

5 The participants rated themselves as follows: weak-acceptable ($n = 2$), average ($n = 4$), average-acceptable ($n = 2$), average-good ($n = 4$), acceptable ($n = 5$), acceptable-good ($n = 1$), good ($n = 2$).

6 We estimated that time constraints would only allow the participants to produce about 15 predicates.

7 None of the other follow-up analyses are significant because the initial ANOVAs were not significant.

8 The previous argument about the possible effect of irregular and frequent morphology versus regular morphological processes to account for the present findings contradicts the argument proposed by Salaberry (2005) to explain the opposite result obtained with Spanish speakers learning Portuguese. On the other hand, the differences in L1 and L2 between Salaberry's and the present study are significant given that Romance language speakers learning another Romance language are likely to transfer their knowledge of tense-aspect marking more

directly than would be the case for the native and target languages represented in the present study.

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Appendix A

Cloze Task Results by Lexical Class

States	L2 learners ($n = 21$)		NSs ($n = 18$)	
2: be ($n = 5$)	was	21–100%	was	17–94.4%
			is	1–5.5%
3: want	just wanted	14–66.7%	just wanted	17–94.4%
	*have just wanted	3–14.3%	just want	1–5.5%
	*had just wanted	2–9.5%		
	justed want	1–4.7%		
	*wanted just	1–4.7%		
4: be ($n = 5$)	was—4	21–100%	was	17–94.4%
			is	1–5.5%
7: want	didn't want	19–90.5%	didn't want	17–94.4%
	*haven't want	1–4.7%	don't want	1–5.5%
	n/a	1–4.7%		
8: not believe	didn't believe	19–90.5%	didn't b.	17–94.4%
	*haven't believed	1–4.7%	don't b.	1–5.5%
	n/a	1–4.7%		
9: think	thought	19–90.5%	thought	17–94.4%
	thank	2–9.5%	think	1–5.5%
11: look	looked	20–95.2%	looked	17–94.4%
	was looking	1–4.7%	looks	1–5.5%
15: be	was	21–100%	was	17–94.4%
			is	1–5.5%
28: not understand	didn't understand	18–85.7%	didn't und.	17–88.9%
	hadn't understand	1–4.7%	don't und.	1–5.5%

States	L2 learners ($n = 21$)		NSs ($n = 18$)	
	haven't understand	1–4.7%	couldn't und.	1–5.5%
	n/a	1–4.7%		
31: be ($n = 5$)	was	20–95.2%	was	17–94.4%
	was being	1–4.7%	is	1–5.5%
32: prevent	prevented	21–100%	prevented	17–94.4%
			prevents	1–5.5%
38: be ($n = 5$)	was – 2	21–100%	was	17–94.4%
			is	1–5.5%
48: tell	could tell	13–61.9%	could tell	17–94.4%
	could told	1–4.7%	can tell	1–5.5%
	can tell	5–23.8%		
	were able to tell	1–4.7%		
	n/a	1–4.7%		
51: have	had	17–81.0%	had	14–77.8%
	have had	2–9.5%	have	4–22.2%
	have	1–4.7%		
	n/a	1–4.7%		
55: be	was	21–100%	was	17–94.4%
			is	1–5.5%
59: remain	remains	6–28.6%	remains	12–66.7%
	remained	10–47.6%	remained	6–33.3%
	remain	4–19.0%		
	was remaining	1–4.7%		
Activities	L2 learners ($n = 21$)		NSs ($n = 18$)	
1: walk	was walking	8–38.0%	was walking	8–44.4%
	walked	12–57.1%	walked	4–22.2%
	have walked	1–4.7%	went walking	2–11.1%
			went for a walk	3–16.7%
			am walking	1–5.5%
10: beg	begged	14–66.7%	begged	11–61.1%
	bug	1–4.7%	was begging	6–33.3%
	beg	1–4.7%	is begging	1–5.5%
	was begging	4–19.0%		
	was begged	1–4.7%		
18: look	looked	20–95.2%	looked	17–94.4%
	was looking	1–4.7%	looks	1–5.5%
26: watch	was watching	4–19.0%	was watching	12–66.7%
	watched	16–76.2%	watched	5–27.8%
	had watch	1–4.7%	watches	1–5.5%

Activities	L2 learners ($n = 21$)		NSs ($n = 18$)	
29: not wait	hadn't waited	4–19.0%	hadn't waited	2–11.1%
	didn't wait	13–61.9%	didn't wait	16–88.9%
	wasn't waiting	1–4.7%		
	haven't wait	1–4.7%		
	haven't waited	1–4.7%		
	n/a	1–4.7%		
36: rain	rained	15–71.4%	rained	8–44.4%
	was raining	6–28.6%	was raining	6–33.3%
			began/started to rain	3–16.7%
			rains	1–5.5%
40: do	did I do	19–90.5%	did I do	3–16.7%
	do	1–4.7%	was I doing	12–66.7%
	did done	1–4.7%	do I do	1–5.5%
			should I do	1–5.5%
			am I doing	1–5.5%
44: stare	stared	19–90.5%	stared	15–83.3%
	was staring	2–9.5%	was staring	2–11.1%
			stares	1–5.5%
47: sit	were sitting	2–9.5%	were sitting	4–22.2%
	was sitting	2–9.5%	sat	13–72.2%
	sitting	1–4.7%	sit	1–5.5%
	sat	11–52.4%		
	sitted	1–4.7%		
	were sat	3–14.3%		
	n/a	1–4.7%		
50: share usually	usually shared	8–38.1%	usually shared	14–77.8%
	shared usually	7–33.3%	usually share	4–22.2%
	have us. shared	2–9.5%		
	n/a	1–4.7%		
	share usually	2–9.5%		
	usually share	1–4.7%		
57: listen	attentively listen	4–19.0%	att. listen	5–27.8%
	have listened att.	1–4.7%	listen att.	11–61.1%
	listened att.	8–38.1%	att. listened	1–5.5%
	listen att.	5–23.8%	listened att.	1–5.5%
	att. listened	2–9.5%		
	have att. listen	1–4.7%		
6: ask	asked	19–90.5%	asked	17–94.4%
	has asked	1–4.7%	asks	1–5.5%

Telics	L2 learners (*n* = 21)		NSs (*n* = 18)	
	was asking	1–4.7%		
12: decide	decided	19–90.5%	decided	17–94.4%
	have decided	2–9.5%	decide	1–5.5%
13: go	went	17–81.0%	went	17–94.4%
	was going	1–4.7%	go	1–5.5%
	go	1–4.7%		
	have gone	1–4.7%		
	am going	1–4.7%		
14: prepare	prepared	19–90.5%	prepared	17–94.4%
	was preparing	1–4.7%	prepare	1–5.5%
	have prepared	1–4.7%		
16: bring	brought	15–71.4%	brought	17–94.4%
	brang	4–19.0%	bring	1–5.5%
	have brought	1–4.7%		
	n/a	1–4.7%		
17-disappear	had disappeared	10–47.6%	had disappeared	10–55.5%
	disappeared	7–33.3%	disappeared	7–38.9%
	was disappearing	1–4.7%	disappears	1–5.5%
	was disappeared	1–4.7%		
	had disappear	1–4.7%		
	has disappeared	1–4.7%		
19: not find	didn't find	17–81.0%	didn't find	7–38.9%
	*haven't find	3–14.3%	don't find	1–5.5%
	n/a	1–4.7%	couldn't find	10–55.5%
20: leave	left	19–90.5%	left	17–94.4%
	leaft	1–4.7%	leave	1–5.5%
	I'm left	1–4.7%		
21: return quickly	returned quickly	19–90.5%	returned q.	4–22.2%
	quickly returned	1–4.7%	q. returned	13–72.2%
	return quickly	1–4.7%	return q.	1–5.5%
22: close	was closing	3–14.3%	was closing	7–38.9%
	closed	16–76.2%	close	1–5.5%
	had closed	1–4.7%	closed	10–55.5%
	have closen	1–4.7%		
23: catch	caught	19–90.5%	caught	17–94.4%
	catched	1–4.7%	catches	1–5.5%
	n/a	1–4.7%		
24: put	put	17–81.0%	put	14–77.8%
	was putting	1–4.7%	was putting	1–5.5%

Telics	L2 learners ($n = 21$)		NSs ($n = 18$)	
	had put	2–9.5%	had put	2–11.1%
	puts	1–4.7%	puts	1–5.5%
25: check	checked hastily	18–85.7%	checked h.	7–38.9%
	check hastily	1–4.7%	h. checked	10–55.5%
	hastily checked	2–9.5%	checks h.	1–5.5%
27: run away	ran away	19–90.5%	ran away	17–94.4%
	run away	2–9.5%	runs away	1–5.5%
30: decide	decided	20–95.2%	decided	17–94.4%
	have decided	1–.7%	decide	1–5.5%
33: make	made	19–90.5%	made	17–94.4%
	have made	1–4.7%	makes	1–5.5%
	mades	1–4.7%		
34: never venture	never ventured	9–42.8%	n. ventured	8–44.4%
	have never ventured	6–28.6%	had n. ventured	5–27.8%
	had never ventured	3–14.3%	would n. venture	1–5.5%
	never venture	1–4.7%	never venture	3–16.7%
	didn't venture	1–4.7%	don't go	1–5.5%
	n/a	1–4.7%		
35: fall	was falling	7–33.3%	was falling	3–16.7%
	fell	11–52.4%	fell	13–72.2%
	had fell	1–4.7%	began to fall	1–5.5%
	was falled	1–4.7%	falls	1–5.5%
	falled	1–4.7%		
37: say	said	15–71.4%	said	18–100%
	sayed	1–4.7%		
	was saying	1–4.7%		
	saw	1–4.7%		
	say	2–9.5%		
	n/a	1–4.7%		
39: start	started	20–95.2%	started	17–94.4%
	had started	1–4.7%	starts	1–5.5%
41: scream	screamed suddenly	15–71.4%	screamed s.	15–83.3%
	have s. screamed	1–4.7%	s. screamed	3–16.7%
	s. screamed	3–14.3%		
	was screaming s.	1–4.7%		
	have screamed s.	1–4.7%		
42: grab	grabbed	18–85.7%	grabbed	17–94.4%
	was grabbing	1–4.7%	grabs	1–5.5%
	n/a	1–4.7%		

Telics	L2 learners ($n = 21$)		NSs ($n = 18$)	
	grab	1–4.7%		
43: not hear	hadn't heard	1–4.7%	didn't hear	12–66.7%
	didn't hear	16–76.2%	hadn't heard	6–33.3%
	haven't hear	1–4.7%		
	hadn't hear	1–4.7%		
	haven't heard	1–4.7%		
	n/a	1–4.7%		
45: tell	told	21–100%	told	17–94.4%
			tells	1–5.5%
46: take	took	21–100%	took	17–94.4%
			takes	1–5.5%
49: come often	came often	2–9.5%	came often	4–22.2%
	often came	11–52.4%	often came	11–61.1%
	have often come	2–9.5%	often come	2–11.1%
	n/a	1–4.7%	come often	1–5.5%
	come often	3–14.3%		
	often come	2–9.5%		
52: explain	explained	19–90.5%	explained	17–94.4%
	was explaining	1–4.7%	explains	1–5.5%
	explains	1–4.7%		
53: spend	spent	16–76.2%	always spent	15–83.3%
	had spent	1–4.7%	a. had spent	1–5.5%
	has spent	2–9.5%	have a. spent	1–5.5%
	spended	2–9.5%	spend	1–5.5%
54: welcome	welcomed	13–61.9%	welcomed	15–83.3%
	welcame	5–23.8%	had welcomed	1–5.5%
	have welcome	1–4.7%	have welcomed	1–5.5%
	were welcomed	2–9.5%	welcome	1–5.5%
56: always spend	spent always	4–19.0%	always spend	13–72.2%
	always spent	5–23.8%	have a. spent	1–5.5%
	have always spent	2–9.5%	always spent	4–22.2%
	spend always	3–14.3%		
	always spend	6–28.6%		
	have spent always	1–4.7%		
58: stay up	stay up	9–42.8%	stay up	13–72.2%
	stayed up	8–38.1%	stayed up	5–27.8%
	are stayed up	1–4.7%		
	stood up	1–4.7%		
	staid up	1–4.7%		
	n/a	1–4.7%		

Appendix B

Cloze Task

This is the story Kevin told me once: "I_____ (to walk) one night. It_____(to be) bitterly cold, around Christmas time. I _____(to just want) to clear my head. Suddenly, there _____ (to be) a man across the street from the main store. He _____ (to call out) to me. He _____ (to ask) for money to get something to eat. But I _____(not to want) to be bothered and I _____(not to believe) him anyway. I _____ (to think) that he _____ (to beg) the money to drink or smoke. But he _____ (to look) hungry, so I _____(to decide) to get him some food instead. I _____ (to go) upstairs and _____(to prepare) him a sandwich and some soup. When it _____ (to be) ready, I _____(to bring) it outside to him but he _____(to disappear). I _____(to look around) for a few seconds but I _____ (not to find) him. So I_____(to leave) everything outside and _____(to return quickly) home. A few minutes later, as I _____ (to close) the curtains from my living room window, I _____ (to catch) a glimpse of that old man: he _____ (to put) the food under his dirty long coat, he _____ (to check hastily) to make sure that no one _____(to watch) him and he _____(to run away), with a slight limp on his left leg. I _____(not to understand) why he _____ (not to wait) for me to return, so I _____ (to decide) to follow him. It _____ (to be) pretty easy, because his limp _____(to prevent) him from going very fast. He _____ (to make) several turns into narrow back streets I _____ (never to venture) into. The night _____ (to fall), it _____(to rain) and like I _____ (to say), it _____ (to be) extremely cold. An uneasy feeling _____ (to start) to penetrate me. What _____ I (to do) here? "No!" I _____ (to scream suddenly), jumping back when a hand _____ (to grab) my shoulder from behind. I _____ (not to hear) anyone come behind me. He _____ (to stare) at me with a smile and laughing eyes. He _____(to tell) me to follow him. He _____ (to take) me to an abandoned basement where several other homeless people _____ (to sit) on the floor around a fireplace. In spite of the cold, you _____ (to tell) that these people _____ (to come often) here, that they _____ (to share usually) whatever they _____ (to have). Kevin _____ (to explain) that he _____(to spend) the best Christmas eve with these homeless people who _____ (to welcome) him as if he _____ (to be) their long time friend. Since that night, we _____ (to spend always) Christmas eve with some homeless people. We _____ (to listen attentively) to their stories, we _____(to stay up) all night with them, and the feeling _____(to remain) the same: sadness but also joy.