

**Marking Time: The Acquisition of Tense and Grammatical Aspect
by French-Speaking Learners of English**

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ABSTRACT

Marking Time: The Acquisition of Tense and Grammatical Aspect by French-Speaking Learners of English

**Laura Collins, PhD in Humanities
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The two cross-sectional studies reported on here ($N = 70$; $N = 91$) were designed to explore the relative influences of lexical aspect and first language (L1) knowledge on the second language (L2) acquisition of verb morphology. The participants were adult French-speaking learners of English who represented a wide range of proficiency in their knowledge of simple past. The analyses examined the degree to which the learners' appropriate and inappropriate use of tense/aspect markers in past contexts supported the predictions of the aspect hypothesis (Andersen and Shirai, 1994; Bardovi-Harlig, 1994), and the degree to which it showed influence from French, their L1.

The findings showed that both factors played a role. French-speaking learners were significantly more successful in using past morphology with telics (accomplishments and achievements) and had the most difficulty with statives. Lexical aspect also appeared to influence the forms that competed for simple past: there was greater use of progressive with activities, and simple present with statives. These findings are consistent with the predictions of the aspect hypothesis, and partially consistent with previous research with L2 learners of English from other L1 backgrounds. Francophones also showed evidence of L1 influence in their inappropriate use of perfect (a French-influenced form) with telics, a finding that has not been reported in previous research. The interpretation of the findings takes into account individual variation and developmental constraints. The thesis concludes with some discussion of the potential implications of the findings for second language pedagogy.

DEDICATION

To all the players in the *Tale of Two Cities*:

it was indeed the very best of times

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At a conference a few years ago Diane Larsen-Freeman introduced me to the man who was sitting beside her. As I was standing there trying to think of something intelligent to say to William Rutherford, he promptly asked me a question I couldn't quite find the words to answer. At the time, all I could do was smile. I now realize that this was the right, and indeed the only answer I will ever be able to give to that question: a huge grin, full of gratitude, awe, and affection. That is the answer you will get if you ever ask me what it was like having Patsy Lightbown as a thesis supervisor. And I do look forward to being asked.

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CHAPTER 1 - INTRODUCTION

When I first began teaching English as a second language in Toronto, many of the adult students in my twice a week evening class spoke Vietnamese or Chinese as first languages (and some of them spoke both). Tense is not grammaticalized in either of these languages, nor are there word-final consonant clusters. For a novice teacher, helping these students understand and use the past tense appropriately in English seemed quite challenging. How, I wondered at the time, does one convey the notion of a grammaticalized past and promote noticing of the often difficult to perceive (and to pronounce) forms used to express it? It was clear that the teaching activities needed to contain contextualized, salient examples, and that learners needed ample and varied opportunities to manipulate the system, but it was not clear exactly how to go about doing this. Creating the activities, enhancing the input, and providing the production opportunities remained a pedagogical preoccupation throughout that first teaching experience.

When I met my first group of francophone adult learners in Quebec City later on in that same year, I thought that my task had just been made so much easier. The students' first language (L1) afforded them the notion of tense and grammatical aspect, thus providing them with a framework onto which they "merely" needed to map new forms and meanings. There was some overlap between the tense/aspect forms and functions in the two languages. There was also the added advantage of my familiarity with their first language, allowing for the use of L1/L2 comparisons when both differences and apparent similarities between French and English resulted in incorrect learner hypotheses about how tense and aspect worked in the second language.

Several years and several hundred examples later of *I am here since 6 months, I have arrived last January*, I was not so sure that the teaching (or the

learning) task was really easier. Francophone learners - even those who had become fairly proficient in English - also struggled with tense and aspect in their second language. They too needed contextualized, salient input and meaningful production practice. After years of experience teaching francophone students at virtually every level of proficiency, developing effective and appropriate instructional activities promoting the acquisition of the English tense and aspect system continued to be a challenge. Part of the challenge was simply insufficient knowledge about what the learners were actually doing with tense and aspect in English at the various stages of their learning - beyond making errors. The errors had become somewhat familiar - even predictable, to a certain degree. But understanding how tense and grammatical aspect (or any other language feature) develop in a population of second language learners includes an awareness of not only what they get wrong, but also, and perhaps more importantly, what they get right, when they get it right, and, ideally, why. To gain that awareness, one has to do something language teachers rarely, if ever, have the luxury of doing: step back from the classroom and go beyond the identification and provision of feedback on learners' errors to look for patterns of development associated with the acquisition of a problematic feature of the second language.

Acquiring Tense and Aspect in a Second Language

'Before I came here I was knowing all the English language tense(s)...present tense...past tense...present perfect tense...perfect tense...future tense...future in the past...everything...I was knowing...I am knowing now...[]... I jus(t) asked...er...one day the boss...I...[]... said t(o)(h)im...[]...How you knowing this tense?"...for example...'go'...How can you use this word?...past tense?...present tense?...the other tense?...he jus(t)

looked me like that...he told me..."I don't know, Cengiz"...This is Australian people...I am Turkish people...I am knowing, he doesn('t) know...can you explain this?' (Cengiz [GENGHIS] K) (Johnston, 1987, p. 91)¹

One does not have to spend very long in a language classroom or in casual conversation with an L2 learner to obtain anecdotal evidence of non-target like uses of tense and aspect. Considerable empirical evidence also exists. A number of studies of both tutored and untutored learners have found that interlanguages at various stages of development may be characterized by inappropriate use and incomplete knowledge of the grammatical devices that exist in the L2 for situating events in time (tense) and expressing perspectives on how situations develop (aspect).²

In the early stages of L2 acquisition learners may in fact make extremely limited use of the inflectional morphology that encodes temporal meanings. Instead, they develop effective pragmatic, lexical, and syntactic strategies for rendering these meanings in their L2 (Dietrich, Klein, & Noyau, 1995; Housen, 1995; Meisel, 1987; Schumann, 1987). These strategies can be so successful for oral communication that learners may not make productive use of grammatical morphology for some time. In fact, some learners seem to stay at this stage indefinitely, their interlanguages appearing to fossilize at what Klein (1995) has called the "basic variety" (p. 36) (an elaboration of Schumann's, 1987, *basilang*): an L2 system in which verbal morphology plays little or no role, but which nevertheless allows learners to express a variety of meanings and functions.

¹ Nunan (1995) also cites this piece of learner data, but the original work by Johnston is incorrectly referenced in Nunan's article.

² These definitions of tense and grammatical aspect are paraphrased from Comrie (1976, 1985), and will be further elaborated in chapter 2.

Klein, Dietrich, and Noyau have characterized effective users of "basic variety" as learners who have become "masters in playing the one-string guitar" (p. 279).

Whether learners move beyond this stage and the length of time it may take for them to do so seems to depend upon a variety of inter-related factors, not the least of which is the type of contact they have with the L2. An extended if not "permanent" stage of limited use of inflectional morphology has been observed most frequently among untutored adults, notably the learners who participated in the ZISA (*Zweitspracherwerb spanischer, italienischer und portugiesischer Arbeiter*) (Meisel, 1987) and ESF (European Science Foundation) projects (Bhardwaj, Dietrich, & Noyau, 1988; Dietrich, Klein, & Noyau, 1995; Perdue, 1993; but see also Schumann, 1987; von Stutterheim, 1991).

One needs to be cautious, however, when making claims about apparent differences in acquisitional patterns in tutored and untutored learners. There has not been sufficient research in which learners in both settings have been matched for other variables such as level of education (including literacy)³, age, access/prior exposure to the L2, and continued contact with L1. As Bardovi-Harlig (in press)⁴ points out, the type of input learners receive in both natural and instructed settings can actually vary a great deal. Many of the untutored learners that have been studied had limited contact with the target language (Berretta, 1990; Dietrich, 1995; Giacalone Ramat & Banfi, 1990; Perdue, 1993). Others received some vocational training through the medium of their second language, which allowed for classroom exposure to the L2, even though the focus

³ For example, all but one of the learners Klein (1993) identified as having "basic variety" interlanguage systems for expressing temporality (Santo, Angelina, Mahmat, Zahra, Rauni) (p. 109) also had not had much formal education in their own language (see Perdue, 1993, vol 1; Dietrich, Klein, & Noyau, 1995).

⁴ Bardovi-Harlig's state of the art article, which is to appear in *Studies in Second Language Acquisition*, covers elements in the literature that are related to my own research. A draft version of the manuscript was made available to me by the author after I had completed the research reported on here. The independent review of the literature presented in this dissertation is in many respects consistent with the perspective taken in the pre-publication document.

of instruction was not language learning per se. When learners do receive language instruction, it may take place in a wide range of instructional environments. In some classrooms, little or no attention is paid to language forms, while in others the instruction may consist of an exclusive focus on the structures of the language. Courses may be designed to enable learners to pass university entrance exams or citizenship tests, or simply to learn enough basic language to survive in a new culture. The duration and intensity of the instruction also vary.

At some point, however, many L2 learners, tutored and untutored, do begin using the verb morphology of the target language to express temporality. Although some may become quite proficient in the L2, their understanding and productive use of tense and grammatical aspect may still deviate from native speaker norms (Bardovi-Harlig & Bofman, 1989; Birdsong, 1992; Coppieters, 1987; Larsen-Freeman, 1983). One particularly well-documented example is the situation of students in the Canadian French immersion programs. Many of these L2 learners continue to have difficulty with the *imparfait* / *passé composé* distinction in French, despite having achieved impressive levels of fluency and comprehension in their L2 (Harley, 1989; Harley & Swain, 1978; Swain, 1998).

It is not surprising, therefore, to find that tense and aspect figure among the grammatical targets of the growing body of classroom-based research in which the effectiveness of providing focused instruction on recognized problematic features of various second languages is investigated. Much of this research falls under the rubric of "focus on form", an approach to L2 pedagogy in which instruction on a feature (or features) of the language is integrated into an otherwise meaning-based approach (in contrast with more traditional grammar-based instruction in which the forms of the language were the main, if not

exclusive focus of the pedagogy).⁵ Studies in this area typically consist of the identification of a problem with a sub-set of the tense and aspect system (based on observation of and familiarity with the learners), and a pedagogical treatment appropriate for the age and situation of the learners. So, for example, L2 university learners of Spanish have received explicit input processing instruction on the use of the past (Cadierno, 1995); L2 elementary school learners of French have engaged in thematically-based oral and written activities targeting the *imparfait* / *passé composé* distinction (Harley, 1989; Swain, 1998), and the conditional⁶ (Day & Shapson, 1991); and ESL (English as a second language) middle-school students have received oral and written feedback on their use of past in science reports (Doughty & Varela, 1998).

The results of these studies have been mixed, in terms of long term effects on interlanguage change. While there are a number of explanations for this (see Spada, 1997, for a review), one possibility is that in identifying problematic tense and aspect features for a given population of learners, insufficient attention has been paid to the overall characteristics of the learners' interlanguage systems at the time of the instructional intervention. Is it that students are having trouble with an entire tense / aspect sub-system of the L2, or is it that certain functions of these target forms, or certain contexts for their use are more problematic than others? In other words, how are learners actually using the forms - both appropriately and inappropriately? To what extent are observed patterns consistent with universal acquisition processes, and to what extent do they show L1 influence? To answer these questions (or at least to begin to answer them) one

⁵ For further discussion on how focus on form differs from the more traditional grammar-based instruction ("focus on formS"), see Doughty and Williams (1998); Lightbown and Spada (1999); and Long (1988, 1991) .

⁶ The conditional is a mood but it does function as part of the tense system (Celce-Murcia & Larsen-Freeman, 1983; Trask, 1993), and in pedagogical grammars is sometimes referred to as the conditional tense (Thomson & Martinet, 1980).

ideally needs recourse to a developmental profile of interlanguage tense and aspect, both within and across populations of L2 learners. Without it, one runs the risk in pedagogical intervention studies of providing learners with input, production opportunities, and feedback that may not in fact be sufficiently "focused" for the learners in question. An understanding of the acquisitional patterns is not a blueprint for pedagogy, of course, but it does have the potential to inform hypotheses concerning the what, when, and how issues of focus on form research (see the contributions to Doughty & Williams, 1998, for perspectives on these issues).

The Aspect Hypothesis

One approach to understanding the acquisition of tense/aspect morphology has been based on the hypothesis that lexical aspect influences the way learners develop knowledge and use of grammatical tense and aspect. Although there has also been some work that has investigated the influences of narrative structure and phonological environment on the interlanguage use of tense and aspect markers, thus far the work on lexical aspect has yielded the most robust data, cross-linguistically. It has been argued that the findings from this research constitute evidence of language learning universals (Robison, 1995; Andersen & Shirai, 1996; Shirai & Kurono, 1998). It has been further suggested that the findings have consequences for L2 pedagogy, and some work in this area has been done with adult L2 learners of English (Bardovi-Harlig, 1995b; Bardovi-Harlig & Reynolds, 1995).

In its current formulation, the aspect hypothesis predicts that patterns in the emergence and development of tense and grammatical aspect will reflect associations made by learners between the verb morphology of the target language and the inherent situational aspect of the verb or predicate (Andersen

& Shirai, 1994; Bardovi-Harlig, 1994, in press). The aspect hypothesis further predicts the direction in which the use of inflections will spread as learners acquire mental representations of the grammatical forms that are consistent with a wider range of meaning (Andersen, 1991; Andersen & Shirai, 1996; Andersen, 1999). Although there is cross-linguistic evidence from both first and second language acquisition research which supports the first prediction, the evidence for the direction of development is less consistent, cross-linguistically. This is partly due to the difficulty of comparing tense/aspect systems across languages, but also because of methodological issues, notably the elicitation procedures and the size and proficiency range of the samples that have been used. In addition, although much of the focus on form research on tense and aspect in SLA (second language acquisition) has assumed L1 influence as an important contributing factor to interlanguage behaviour, very little published research has systematically investigated how L1 interacts with lexical aspect as learners acquire the L2 verb morphology.

Dissertation Outline

The research described in the following chapters examines the acquisition of tense and grammatical aspect among adult francophone learners of English. Two complementary cross-sectional studies evaluate the roles of both lexical aspect and L1 influence on the acquisition of tense and aspect by this population. Chapter 2 gives the background to the two studies, and includes an overview of tense and aspect (grammatical and lexical) with specific reference to English, and a review of the research on the relationship between lexical aspect and the acquisition of tense and grammatical aspect, by both first and second language learners. Particular emphasis is given to research done by Bardovi-Harlig and her colleagues, since the present research has built on that body of work. Chapter 3

explains the methodology of the first study, a partial replication of Bardovi-Harlig and Reynolds (1995). The results and a discussion of the issues raised by the findings that led to the second study are presented in chapter 4. Chapter 5 explains the methodology of the second study, which consisted of a revised version of the elicitation instrument used in the first study, and an additional task. The analyses and results for the two tasks in the second study are presented in chapters 6 and 7. The interpretation of the findings from the second study and a discussion of the results from both studies are found in chapter 8. In the final chapter, the findings of these studies are summarized, the limitations of the research are acknowledged, and directions for future research are suggested. There is also a discussion of the potential implications of the findings for second language pedagogy.

An investigation of the acquisition of tense and aspect by francophone learners of English allows for discussion of both the universal and the particular in this area of SLA, as it is possible to compare the findings of the present research with previous studies of learners of English from different L1 backgrounds, as well as with studies of learners of other second languages.

CHAPTER 2 - LITERATURE REVIEW

Whoever has read in one book that English has three tenses, in another that it has two, and in yet a third that it has sixteen; or has been told by one authority that the French *imparfait* represents an incomplete or habitual action in the past, by a second that it is used of an action simultaneous with another action, and by a third that it is used for circumstances and background description; or has read in one text that the perfective tenses of Russian are just like the perfect tenses of English, but in another that they are totally different; ... may be pardoned for some confusion and some skepticism as to the claim of linguistic scholars to know a great deal about tense... (Binnick, 1991, p. vii)

It would be very convenient to have an unambiguous term for referring to any single one of the tense-aspect-mood distinctions made in a single language, but no such term appears to exist (Trask, 1993, p. 277).

Tense and Grammatical Aspect

In reviewing what is known about the acquisition of grammatical tense and aspect in general, and by L2 learners of English in particular, the obvious first step is to offer a description of what it is that the learners are expected to acquire - that is, what is meant by "tense" and "aspect". Given the comments of Trask and Binnick cited above (comments echoed by numerous others), attempting to define tense and aspect would appear to be a rather ambitious undertaking. It has indeed proven difficult for linguistic scholars to come up with comprehensive explanations of the formal, functional, and semantic characteristics that distinguish (and often blur) tense and aspect. There are problems finding definitions for both terms that apply cross-linguistically, especially (although not exclusively) when English is used as the point of

reference, as it so often is. English does not grammatically mark one of the aspectual contrasts (perfective/imperfective) that has been found in many languages of the world (Bybee, 1985; Dahl, 1985), and the two aspects it is usually described as marking (the perfect¹ and the progressive) have rather unusual properties in English. Some argue the perfect functions more like a tense or a relative tense (Comrie, 1976, 1985; Dahl, 1985; Declerck, 1991; Reichenbach, 1947/1974; see also Binnick, 1991) or indeed belongs in a separate category altogether (see Brinton, 1988, for a review), while the progressive has uses in English not normally found in languages with progressive aspect (Bland, 1988; Brinton; Comrie, 1976; Smith, 1983). In addition, there has been considerable confusion in the use and understanding of the terms grammatical aspect, lexical/inherent aspect, and the related *Aktionsarten* (modes of action) in discussions of Indo-European languages. The confusion over the terms has its origins in the historical attempts to apply insights from Slavic languages in which aspect is realized through a productive system of both inflectional and derivational morphology (aspect is in fact a translation of the Russian *вид*, meaning view), to Greek, Germanic, and Romance languages in which the formal equivalents of Slavic aspect are considerably less systematic and often not productive (see Brinton and Binnick for further discussion). It is, in the minds of some grammarians, somewhat akin to trying to put square Slavic pegs into round Greek, Germanic, and Romance holes (e.g., Jespersen, 1924; Zandvoort, 1962).²

¹ Most current treatments of tense and aspect distinguish between perfective and perfect aspect, formally and semantically. Note, however, that at least one recent work does not: in *Explaining English Grammar*, a handbook destined for language teachers, Yule (1998) attributes the semantics of what most grammarians would label perfective to the English perfect.

² The metaphor is mine, although Jespersen does refer to the need for 7 different "pigeonholes" to describe the various aspectual properties discussed in the literature at that time (p. 287). The problem is further complicated by the fact that the line between inflectional and derivational morphology in Slavic languages can be hard to draw, as Dahl (1985) points out. See also Binnick (1991).

Somewhat surprisingly, there is some consistency in the use of the terms in SLA research. This is because so much of the published research on tense and aspect, especially that which has investigated the aspect hypothesis, has adopted a version of Comrie's (1976, 1985) basic definitions of the two terms. Although his seminal work on tense and aspect has been criticized for being unnecessarily obtuse and informed by a very selective overview of the world's languages (Macaulay, 1978), Comrie's contribution to our understanding of the terms is generally acknowledged (Binnick, 1991) and his basic definitions of the terms continue to be widely used and cited in the language acquisition literature.

I shall follow this convention, since Comrie appears to have captured enough of the distinction for the purposes of this research project, with the caveat that in doing so the thorny problem of how to characterize/treat the perfect remains unresolved. Comrie (1976) readily admits that neither "tense" nor "aspect" gives a satisfactory description of the perfect. His decision to treat it as an aspect was motivated by convention: "since the perfect is very often referred to as an aspect, discussion of it has been included in the present book"(p. 6).

The following examples illustrate the basic contrasts between tense and aspect found in English :

1. She's in really good shape because *she plays soccer*.
2. He was quite active in high school. *He played soccer* and was involved in theatre, too.
3. I saw your daughter at the park last night. She *was playing soccer*.
4. You don't need to explain the rules to him. He *has played soccer*.

The difference between 1 and 2 is one of tense, present and past respectively. Tense is the "grammaticalized expression of location in time" (Comrie, 1985, p. 9); that is, it serves to place a situation in time, indicating when

it happens with respect to another reference time, which is often the time of speech. Thus, in 1, the reference to playing soccer and the actual situation of playing soccer occur during the same general time frame (present); whereas in 2, the soccer playing occurred before the moment of speech and is therefore past. In most traditional form-oriented accounts, grammaticalized tense is defined as a system of obligatory, bound, morphological markers; according to this definition, English has two tenses, present and past.

Grammatical aspect, although part of temporal expression, describes how the situation unfolds as opposed to when it is situated in time. It allows a speaker to express a perspective on the situation being described, hence Smith's designation of grammatical aspect as "viewpoint aspect" (1983). English marks two aspectual distinctions, grammatically: the progressive and the perfect. Habitual aspect also exists in English (*He used to play soccer*), but unlike the perfect and the progressive it is not a productive element: its use is restricted to past, and is not obligatory, since habitual meaning can be expressed by simple past alone (Comrie, 1976). It is often treated as part of the modal system in English, due to its formal properties (e.g., Greenbaum & Quirk, 1990; Celce-Murcia & Freeman, 1983).

Thus the difference between 2 and 3 is not one of tense, as both describe situations that existed before the time of speech; both are in the past tense. However they do not take the same perspective on how the playing of soccer unfolded; that is, they offer different views on the "internal temporal constituency" of the situation (Comrie, 1976, p. 3). This oft-quoted description of aspect is in fact, Comrie's translation and paraphrase of Holt (1943), who described aspect as "les manières de concevoir l'écoulement du procès même" (p. 6) (cited in Comrie, 1976, p. 3). The progressive aspect expressed through *playing soccer* in 3 has been described as giving a view of the situation from the

inside, or describing a phase of the situation, whereas the simple aspect of *played soccer* looks at the situation as a whole, from the outside, taking an external view.³

The context provided in 4 illustrates the difficulty of teasing apart the tense / aspect / other characteristics of the perfect in English. While the playing of soccer occurred before the time of speech (and indeed may have occurred several times before), there is also a connection with the present that is not necessarily captured by the use of a simple past form.⁴ In saying *he has played soccer*, the speaker communicates that the person knows how to play soccer; thus the prior situation is relevant to the present and in some sense can be seen to be part of it. The inclusion of past with the present, which McCoard (1978) described as "extended now", is particularly apparent in a phrase such as *He has played soccer since he was a child*.

In addition to this tense-like property, there is also an aspectual characteristic to the perfect which comes from its potential to allow the speaker to establish the current relevance of a prior situation (Curme, 1935; Inoue, 1979; McCoard, 1978; see also Binnick, 1991), thereby expressing a perspective or viewpoint on the situation. The following examples illustrate the different perspectives afforded by a speaker's choice of simple past or present perfect:

³ This is also the standard account of the difference between imperfective and perfective aspect, a morphologically and obligatorily marked opposition in Slavic languages, for example, but not in English. Although there is semantic and functional overlap between progressive and imperfective aspects, they are not equivalent. Comrie (1976) treats the progressive as a type of imperfective.

⁴ In some American dialects of English the connection with the present is established by combining the simple past with adverbials such as "before, already, just" in situations where other dialects of English would normally require the present perfect (*You don't need to explain that rule to him. I already/have already explained it to him*). Gathercole (1986) argues the collapsing of this distinction between perfect and simple past in American speech may explain why, in her study of the acquisition of the perfect by child L1 learners, the American children acquired it later than the Scottish children did. The latter live in speech communities where the distinction is maintained, and Gathercole also found that in the input provided by the caretakers to the children, the use of the perfect was much more frequent among the Scottish participants (see also Fletcher, 1981; and, for possible counter-evidence, Johnson, 1985).

5a The soccer game has been cancelled.

5b The soccer game was cancelled.

In 5a, the perfect allows us to imagine someone hanging up the phone and telling everyone to stop racing through supper because there is no longer any need to finish in time to get to the game: it has been cancelled. The cancellation of the game has an impact on the present situation (notably the potential for improved digestion). The use of the past in 5b does not allow for such a perspective; there is more distance between the prior event and subsequent events. Supper is over, and the speaker is leaning over the fence explaining to a neighbour why there are so many pairs of wet soccer shorts on the clothes line: "the soccer game was cancelled so we invited the team over for a swim instead".

It should be noted, however, that relating the "extended now" and "current relevance" characteristics of the perfect to tense and aspect respectively, while consistent with Comrie's (1976; 1985) (albeit ambiguous!) position, is far from the definitive word on the perfect. Binnick (1991), for example, argues that the difference between the extended now and current relevance theories of perfect is really a distinction between meaning and use, with the "extended now" interpretation describing the semantics of the perfect, "current relevance" the pragmatics (p. 103). There are also accounts of the perfect that offer a finer-grained perspective on the different functions of the form. One that has been particularly influential in both linguistic and pedagogical grammars is McCawley's (1971) four-way classification: universal, existential, stative, and hot news perfects (5a would be an example of the latter). Comrie (1976) also proposes a similar division, labelled persistent situation, experiential, resultative, and recent past perfects (but see Binnick for a discussion of the overlap of categories in both schemes). In addition, there is the issue of whether the past perfect (pluperfect) and future perfect should be treated as separate categories from the

present perfect due to their tense properties (Comrie, 1985; Dahl, 1985; Reichenbach, 1947/1974; cf. Salkie, 1989).

It is beyond the scope of this work to attempt to resolve these issues. For the purposes of the present discussion, I shall follow convention and assume that English has two grammatical tenses and two grammatical aspects. In acquiring the tense / aspect system of English, then, learners need to become familiar with the forms for expressing present and past tenses, progressive and perfect aspects, and with the ways in which the tense / aspect forms may be combined (e.g., present perfect progressive, past perfect, and so on). They also need to develop an awareness of how the forms function in English; that is, "what perspectives are available for talking about different types of situations" (Smith, 1983, p. 479). This is arguably the greatest challenge, because it involves learning both the scope and the restrictions of any given tense / aspect form(s) or combination of forms - knowing, for example, that the use of the progressive in English can render some typically stative situations dynamic (*You're being obnoxious. I'm hearing a strange buzz in the basement.*), or that the "extended now" time frame established by the perfect does not permit the speaker to use adverbials of time that anchor the event in the past (**They've won every game last year. *The soccer game has been cancelled two hours ago.*). I shall return to this point later when the formal similarity but functional difference between the English perfect and the French *passé composé* is discussed.

The Acquisition of Tense and Grammatical Aspect

What is of interest, from the point of view of L2 acquisition, is how learners who move beyond the "basic variety" (Klein, 1995) find their way into the tense / aspect system and, as they do, what patterns characterize the

interlanguage development of their use and understanding of the grammatical markers.

In the 1970's, as part of the morpheme acquisition order studies, SLA researchers looked at the acquisition of verb morphology by L2 learners of English simply in terms of the accuracy of tense/aspect inflections in obligatory contexts (Dulay & Burt, 1973, 1974; Bailey, Madden, & Krashen, 1974; Larsen-Freeman, 1975, 1976). The limitations of an acquisitional approach that focused exclusively on accurate use of isolated, language-specific forms in required contexts is well-documented (for an overview see Ellis, 1994; Larsen-Freeman & Long, 1991). More recent research reflects a shift within the field to the broader dimensions of interlanguage development in which overall patterns of acquisition with sub-systems of the language (such as question formation, negation, and tense/aspect) are examined. In plotting the path to mastery of a feature or a set of features, it has become important to take both emergence and development of target forms into consideration, and to identify factors that might explain interlanguage behaviour.

Phonological Factors

One approach to understanding the acquisition of tense and aspect has been to consider the impact of different features of the phonological environment on learners' use of tense morphology. Thus far the work in this area has been confined to the acquisition of past in English by speakers of phonologically dissimilar languages: Vietnamese and Chinese learners whose native languages do not have word-final consonant clusters.

Wolfram (1985) identified surface-level phonetic constraints that influenced how 16 Vietnamese learners of English marked past tense. The data consisted of oral interviews with adolescent and adult learners. Irregular forms

were marked more consistently than regulars during the initial stages of learning, and among the irregulars, Wolfram found that saliency, defined as the relative distance between the past and non-past forms, influenced appropriate use of the irregular forms. Suppletives (*go/went*) were most frequently marked for past, replacives least frequently (*make/made*), and between the two extremes were forms with internal vowel changes (*come/came*) and forms with both internal vowel changes and a regular suffix (*keep/kept*), respectively. Although suggestive of a developmental sequence, in some cases the percentage conversions were based on very few instances of the target forms.⁵ However, Bayley's (1994) study of 20 Chinese adult learners of English also found evidence for the influence of phonetic saliency on the marking of past tense during oral interviews, while Sato's (1986) longitudinal study of 2 Vietnamese children acquiring English showed that over 10 months, the tokens of irregular past forms increased (no information was given on types), but virtually no regular past form was observed.

Further research involving learners with other L1's, as well as target languages other than English will be necessary to determine the generalizability of the findings. In addition, it will be important to include type as well as token analyses to ensure that the patterns are representative of the identified categories, and not simply of a few repeated items within the categories.

Discourse Factors

Another approach has looked at the influence of narrative structure on the interlanguage use of grammatical tense and aspect. Research taking this discourse-oriented perspective looks at whether the distribution of tense/aspect

⁵ In a later study with learners drawn from the same population Wolfram (1989) also found that a few frequently used tokens accounted for much of the observed effect. For example, *go* and *be* were the only suppletives that learners produced. See also Wolfram and Hatfield (1986).

markers in L2 speech and writing is related to the status of the information being presented; that is, whether it is part of the foreground or background of the narrative. The approach draws primarily from the work of Hopper (1979) (but see also Dry, 1981, 1983) who, based on an analysis of discourse patterns in a variety of languages, concluded that a universal organizing principle of narrative discourse involves distinguishing between the part of the narrative that provides the main events of the story line, and that which describes supportive events. Languages allow speakers/writers to accomplish this through various linguistic devices including word order, voice, and very often, verbal morphology (Hopper, pp. 213-214).

Most of the studies thus far have looked at oral discourse in the acquisition of English by small numbers of learners, and not all have yielded results in the same direction. Kumpf's (1984) case study of an adult Japanese learner of English found that foregrounded events tended to be marked with base or irregular forms, while backgrounded events had a greater variety of morphological markings (although by far the most frequent was tensed copula). In a case study of a Vietnamese adult learner of English, Wolfram and Hatfield (1986) were unable to replicate Kumpf's findings, although there were actually very few tensed forms in the short oral narrative that was analysed. Flashner (1989) and Bardovi-Harlig (1992, cited in Bardovi-Harlig 1995a and in press; 1995a) essentially found the opposite of Kumpf in the narratives of the L2 learners of English they studied. The three Russian learners in Flashner's study used simple past in the foreground and base in the background of their oral narratives; similarly the 16 and 32 learners from various L1 backgrounds in Bardovi-Harlig's two studies also used past earlier and more consistently in the foregrounded clauses of both oral and written narratives.

For the acquisition of languages other than English, Housen's (1994) study found results consistent with Flashner and Bardovi-Harlig: the American learner of Dutch in his study produced more perfect and preterite forms in the foreground of her narratives during the first recorded interview than during the second conducted a year later. Véronique (1987), however, found considerable variation among the 7 Arabic and Berber learners of French.⁶ In other studies the effects of foregrounding/backgrounding were difficult to assess. The 20 adult Turkish learners of German in von Stutterheim's (1991) study, and the 2 adult Spanish learners of French in Trévisé's (1987) did not produce many marked verb forms, while the 6 Dutch and 5 French primary school learners of English in Housen's (1998) study produced more conversation and description than narrative in their oral interviews. The notion of foregrounding and backgrounding is less relevant to these other types of discourse.

Although the research from the perspective of narrative structure has alerted us to the importance of taking discourse into account when looking at the L2 use of tense and aspect, there are certain limitations to the approach. While informative of how learners use the target forms in one type of discourse, the narrative approach does not allow one to compare performance across other types of language use. Nor is identifying clauses as providing foregrounded or backgrounded information a straightforward task. The only study cited above to report inter-rater reliability for the coding found only 65% agreement between the raters (Housen, 1998), although Bardovi-Harlig (1998) did report high rates of inter-rater reliability (98%) in a later study in which data from the earlier studies were used. The fact that the elicited narratives were based on a common topic known to the raters (participants retold the events in a silent film), and not

⁶ It is difficult to evaluate the findings of this study and to compare them with other studies because the proficiency of the learners was defined in terms of the learners' pragmatic abilities in expressing themselves, and the quantification of the results is incomplete.

learner-initiated, likely contributed to the consistency among the raters. It has also been difficult to compare learners across studies, because of variations in proficiency level, and in the methods used to determine proficiency. An additional limitation to the generalizability of the findings is the lack of cross-linguistic research: it will be important in future studies to look at the influence of narrative structure on the acquisition of languages other than English.

Semantic Factors: Inherent Lexical Aspect

Findings from creole and pidgin studies, as well as from cross-linguistic L1 and L2 acquisition research suggest that both the emergence and the development of grammatical tense and aspect are influenced by a different type of aspect, one that is inherent to verbs or situations expressed through verbs and their arguments. Of the three approaches discussed here, thus far the lexical aspect approach has yielded the most robust data, cross-linguistically. It has also been found to interact with narrative structure in the L2 acquisition of English when the influence of both factors on the same oral and production data are examined (Bardovi-Harlig, 1998).⁷ The next section offers a definition of lexical aspect and an historical overview of its application to the study of language acquisition. Subsequent sections outline the predictions of the aspect hypothesis and evaluate the evidence that exists in support of the claims.

Lexical Aspect

Unlike grammatical aspect, which is rendered through a system of overtly marked elements in the verb phrase (*be* + present participle, *have* + past participle in English), lexical aspect is an unmarked, inherent semantic property of the

⁷ Bardovi-Harlig's (1998) cross-sectional study of L2 learners of English is the only published research to date that has yielded sufficient data to permit an analysis of the two factors. The challenge for future research will be to elicit a broader range of verb types from a larger cross-sectional sample to enable further confirmation of the findings.

situation expressed by a verb, verb phrase or predicate. Situations in and of themselves can be classified into different semantic types. The phrases *be in good shape*, *play soccer*, *explain the rule* and *win the game* describe, respectively, a state, an activity, an accomplishment, and an achievement, classifications which do not depend on when the situation occurred or how it developed. Tense and grammatical aspect do interact with lexical aspect, however, and knowledge of how they do so is part of what a language learner needs to acquire, since languages vary in the ways in which the grammatical markers may be used to describe situations (see Smith, 1983).

Lexical aspect is also known as situational aspect, inherent aspect, inherent lexical aspect, and, more recently, as Aristotelian aspect (Binnick, 1991). In some accounts it has been labelled or linked with *Aktionsarten* (e.g., Brinton, 1988; Mourelatos, 1981), but this is increasingly recognized as an inappropriate use of the German term meaning "kinds of action". Although there is no consensus on the definition of *Aktionsarten*, those that distinguish it from lexical aspect (e.g., Trask, 1993; Binnick, 1991) do so on the grounds that it expresses lexical meaning through derivational morphology, unlike lexical aspect which is an unmarked, inherent property of situations. Trask gives an example of how this is accomplished in Russian: *pisat'* (write), *popisat'* (do a bit of writing), *spisat'* (copy) (p. 12); Binnick illustrates a similar phenomenon in German: *jagen* (hunt), *erjagen* (catch). Comrie (1976) noted that an English equivalent of *Aktionsarten* is difficult to find; indeed, for both the German and Russian examples just cited, the English translations for the series of semantically related words are not arrived at derivationally; rather, they are separate lexical items.

Most of the work examining the influence of lexical aspect in SLA over the past decade has used Andersen's (1991) semantic feature description of the Vendler-Mourelatos hierarchy. The standard account of lexical aspect found in

the SLA literature is that it is based on Vendler's (1967)⁸ classification system, refined by Mourelatos (1981) and adapted for SLA by Andersen (1991), that it has a long history in the philosophy of language literature which can be traced through Kenny (1963), Garey (1957), and Ryle (1949) back to Aristotle, and that it provides an explanatory account for the emergence and development of tense/aspect morphology among L2 learners of a variety of languages.

Although the essential facts of the account are not in dispute, when the information is condensed in this way (as it often is) it gives the impression of a neater picture of the progression from Aristotle to Andersen; that is, from classical philosophy to explanations for SLA, than is actually the case. It also glosses over the fact that in Andersen's (1991) seminal paper, the actual evidence from L2 learners offered in support of the theoretical claims for the development of L2 verb morphology was rather thin. I shall return to the latter point when evaluating the evidence from studies since Andersen that have investigated the aspect hypothesis.

As for the link with Aristotle - Aristotle did indeed articulate a basic distinction about situations that is compatible with various conceptualizations of lexical aspect, a point that is acknowledged in most overviews of the topic (e.g., Binnick, 1991; Brinton, 1988; Mourelatos, 1981; Smith, 1983). This is why Binnick refers to lexical aspect as Aristotelian aspect, after Aristotle's observations that situations can be divided into those that require an input of energy (doing) versus those that do not (being), and that verbs can be differentiated by whether they express inherent endpoints or not (pp. 142-143, 189). It is important to note however, that the succession of scholars that have subsequently elaborated and refined these concepts have not always done so with Aristotle in mind; rather, as

⁸ The reference to this work in SLA tends to be to the revised version (1967) of the original essay which was published in 1957. See reference list for full bibliographic reference.

Dahl (1981; see also Binnick) points out, there have been many rediscoverings and renamings of the distinctions. Vendler, for example, appears not to have been pre-occupied with Aristotle or linguistic inquiry, when he wrote his famous essay in 1957:

At that time I did not know anything about linguistics, and I did not even realize that what I am doing matches Aristotle. My aim was at the time to refute Ryle's claim that seeing is always an achievement (Vendler, in a personal letter to Henk Verkuyl, cited in Verkuyl, 1993, pp. 359-360).

Similarly, Garey (1957), who is usually credited with introducing the terms "telic" from the Greek *télos* ("tending towards a goal") and atelic ("realized as soon as [begun]", p. 106) (discussed in more detail below), did not make reference to Aristotle's distinctions either, despite, as Mourelatos (1981) observes, "the strikingly Aristotelian terminology" (p. 193).

In fact, there have been a number of verb/situation type schemes developed largely independently of each other (Kenny, 1963; Garey, 1957; Vendler, 1967). Mourelatos' contribution (in addition to explicitly identifying the connection with Aristotle among all of them) was to bring together under a single hierarchical typology Vendler's descriptive account and the binary pairings from previous schemes. Andersen (1991) reworked the hierarchy into a matrix of four categories and three semantic features from which a situation can be classified as a state, activity, accomplishment, or achievement, according to the presence or absence of the semantic features dynamic, telic, and punctual. Table 2.1 summarizes this classification.

Table 2.1
Semantic Features of Lexical Aspectual Categories (after Andersen, 1991)

Aspectual category	Semantic features		
	Dynamic	Telic	Punctual
State: <i>You need a visa to go there.</i>	-	-	-
Activity: <i>We'll swim in the ocean.</i>	✓	-	-
Accomplishment: <i>I wrote a post card to my parents.</i>	✓	✓	-
Achievement: <i>The plane arrives in the morning.</i>	✓	✓	✓

To begin with the broadest distinction, statives are distinguished from dynamic situations, that is, those requiring an input of energy, such as *swimming in the ocean, writing a postcard* and *arriving*. Among the dynamic situations, three further distinctions are made. Activities are distinguished from accomplishments and achievements in that the latter two are telic: they have outcomes or endpoints that must be reached in order for the situations to be true (the plane's arrival, the completion of the message on the post card). Some accounts of telicity invoke the notion of "bounded events" (e.g., Dahl, 1981) to render this idea. An activity, such as *swim in the ocean*, is true as soon as it has begun. While swimming does have an endpoint, in that at some point one ceases the activity, the termination is arbitrary, there is no natural, necessary goal (Brinton, 1988, p. 24); the event is not bounded. Finally, although they share the telic feature, achievements differ from accomplishments in that they describe punctual situations (*arrive, begin, recognize*), perceived as taking place instantaneously. As such, they often describe the inception or the climax of a situation (Mourelatos,

1981), as in *start, finish, reach, or win*, but they can also characterize situations in which the inception and climax are fused, due to the punctuality of the event: *explode, drop, blink, sneeze*. Accomplishments, on the other hand, have some duration - writing a postcard, even if one only scribbles a few words, takes some time; that is, it is not an instantaneous event. The amount of time is inconsequential - *write a postcard* and *write a dissertation* are both accomplishments, even though the latter takes substantially longer to accomplish. One way of conceptualizing accomplishments is to view them as consisting of both an activity phase and an achievement point; for example, the phase of writing + the point at which there is a written product (see Binnick for further discussion). Although it is normally unnatural to think of stopping in the middle of an achievement, because it has no duration (e.g., blink), one can easily imagine interrupting an accomplishment (e.g., inserting a contact lens). This is in fact a variant of one of Dowty's (1979) classification tests that has been employed for distinguishing accomplishments from achievements.

In principle, all situations can be classified as belonging to one of the four aspectual classes: situations are either stative or dynamic, and if dynamic, either do or do not have inherent endpoints (telic), and finally, if telic, are either punctual or durative. In practice, however, the classification of situations is not nearly so straightforward and a number of operational tests have been devised to determine aspectual class (e.g., Brinton's, 1988 summary of Vendler's description; Dahl, 1981; Dowty, 1979; Mittwoch, 1991; Mourelatos, 1981). The tests use a variety of criteria including logical entailments, frames, adverbial restrictions, as well as the compatibility of a given situation with grammatical aspect. Often more than one test is required for classification. The use of operational tests does not make the classification process entirely objective, however - frequently some interpretation is necessary, especially in the absence of sufficient contextual

information. This is particularly true with accomplishments and achievements, although not exclusively so (indeed, as mentioned above, part of the motivation for Vendler's essay was that he took issue with Ryle over his classification of *see* as an achievement only). Shirai and Andersen (1995) give the example of *open a box*, which can be achieved instantaneously or, if gift-wrapped, can take time to accomplish (p. 74).

Determining whether a telic situation is punctual can be a rather subjective, if not arbitrary decision (Verkuyl, 1993). Verkuyl objects to the arbitrariness on syntactic grounds, arguing that using length of time (punctuality) for distinguishing accomplishments and achievements results in different aspectual classifications for two structurally similar phrases: *walking a mile* would be an accomplishment while *walking a yard* would be an achievement - for an adult human being of normal height (p. 49). Using the lexically-determined classification criterion "punctuality" is, in his view, incompatible with his Theory of Generalized Quantification in which aspect is determined through an analysis of verbs and their arguments. Discussion of this theory is beyond the scope of the present work; it is important nonetheless to point out that there are theoretical arguments for collapsing accomplishments and achievements into a single telic category.

In adopting the Vendlerian framework of lexical aspect to explain patterns of L2 acquisition of tense and aspect, SLA has inherited the classification problem. Although most researchers use the 4-class system, some have expanded the number of aspectual classes to account for situations with properties that make them difficult to categorize. Robison (1995), for example, proposed the two additional categories of punctual activities and punctual states, to account for achievements repeated in succession (*jumped, knocked at the door*), and non-volitional achievements with state-like characteristics (*notice*). Shirai and

Andersen's (1995) comparison of maternal and child speech used the 4-way classification but also included separate analyses of repeated situations (unitary, iterative, habitual, and iterative-habitual).

Regardless of the number of categories used, the classification of learner production poses an additional challenge, because learners often use lexical items in innovative, non-target like ways. Krasinski (1995) discussed the importance of considering a learner's (in this case a bilingual child's) intended meaning when coding for lexical aspect. The use of operational tests and inter-rater reliability checks are therefore crucial components of language acquisition research. While most of the recently published research in SLA now provides information on the operational procedures used for classifying predicates (following Robison's, 1990, initiative; e.g., Hasbún, 1995; Robison, 1995; Shirai and Andersen, 1995; Bardovi-Harlig & Bergström, 1996; Salaberry, 1998), inter-rater reliability is rarely reported. To the best of my knowledge, Housen's (1998) study of the development of temporality among child L2 learners of English is the only published study that provides this information, and Shirai and Andersen's (1995) the only one to report intra-rater reliability.

A final note on classification - although it is common in the language acquisition literature to refer to target items as stative verbs, activity verbs and so on, it is not the verb in isolation, but rather the verb phrase, predicate, and sometimes even the entire proposition that is considered when determining the aspectual category, a point that has been made by a number of scholars in slightly different ways (e.g., Andersen, 1991; Comrie, 1976; Dowty, 1979; Mourelatos, 1981; Robison, 1990). For example, *I rode my bicycle* is an activity, whereas *I rode my bicycle 5 miles* would be an accomplishment. It is for this reason that "lexical" aspect is not an entirely appropriate term, since the assignment of aspectual class takes into account the context in which the individual lexical item

occurs. However, to be consistent with most of the SLA literature in this area (especially the North American literature), I have adopted the term for this study.

Lexical Aspect and SLA

Whether a verb is a state, activity, accomplishment, or an achievement is believed to influence the way in which tense/aspect markers are used by language learners as they develop productive systems of verb morphology. In keeping with the terminological complexity that has characterized the linguistic and philosophical study of aspect, there are also several terms that have been used in the language acquisition literature to describe the hypothesized influence of lexical aspect on the acquisition of verb morphology. In some accounts, the distinction between the unmarked inherent aspect and the marked grammatical aspect is blurred, but it is nevertheless possible to distinguish four slightly different perspectives on the role of lexical aspect (or some approximation of it): the *aspect before tense* hypothesis; the *defective tense* hypothesis; the *primacy of aspect* hypothesis; and now simply the *aspect* hypothesis. It is mainly the degree of influence attributed to lexical aspect that has changed in the evolution of the terminology. Variants of the terms consistent with the four presented here also exist, such as the *relative defective tense* hypothesis (Andersen, 1989, cited in Andersen & Shirai, 1994) and the *redundant marking hypothesis* (Shirai & Kurono, 1998). In addition, Bickerton's (1981) *bioprogram theory* of language acquisition includes a hypothesis regarding the acquisition of tense and aspect in which the aspectual distinctions *state/process* and *punctual/non-punctual* are presented as language learning universals (see Andersen & Shirai, 1996, for a detailed overview of Bickerton's revisions to the bioprogram theory; and Cziko's, 1989, survey of the L1 acquisition findings that were consistent with it).

The aspect before tense hypothesis

The *aspect before tense* hypothesis characterized early attempts to explain patterns of creole (Bickerton, 1981, but see also Shirai & Andersen, 1995) and L1 acquisition by applying insights from language typology. Bloom, Lifter, and Haftiz (1980), for example, claimed that the tendency for young children to use verb inflections to redundantly mark aspect in English - past with nondurative verbs with completed end-states, *ing* with durative verbs with no clear completion, and *s* with completive, durative verbs - was consistent with Jakobson's (1957/1971) observation that from the perspective of language typology, aspect markers seemed to be located closer to the verb stem than tense markers.⁹ Aspect "before" tense was thus a structural hypothesis evoked to explain acquisitional patterns in child language (for a more recent discussion, see Bybee, 1985, 1991).

The defective tense hypothesis

The *defective tense* hypothesis is somewhat of a misnomer, as it was not formulated to explain acquisition, but rather was coined by Weist, Wysocka, Witdowska-Stadnick, Buczowska, and Konieczna (1984) to refute the *aspect before tense* interpretation of child language researchers such as Bloom and colleagues and Antinucci and Miller (1976), based on Weist et al.'s findings that young children acquiring Polish simultaneously marked both tense and aspect appropriately. This prompted a debate in the literature between Weist and Bloom and their respective colleagues (Rispoli & Bloom, 1985; Smith & Weist, 1987; Bloom & Harner, 1989), in which Rispoli and Bloom and Bloom and Harner took issue with the characterization of child development as *defective*, and with the fact that thus labelled, the hypothesis misrepresented their explanation for their own

⁹ Jakobson's observation in this manuscript was in fact restricted to the Russian verb. He noted that in Russian, aspect markers "operate with the stem", whereas tense markers operate with the "desenential suffixes" (p. 146).

findings. They argued that their data (and those of others, see discussion below) showed that aspectual distinctions (both lexical and grammatical) influenced but did not categorically determine the distribution of the emergent tense markers in young children.

The primacy of aspect hypothesis

When Andersen (1991) proposed a developmental path for the acquisition of SLA based on the semantic feature description of the Vendlerian categories, it was articulated as the defective tense hypothesis, as this was the term in use at the time. He subsequently opted for *primacy of aspect* (POA) (Andersen & Shirai, 1996), a term that appears to have originated with Robison (1990), although the notion actually appears much earlier in Antinucci and Miller's comparison of their findings for L1 learners of Italian to Bronckart and Sinclair's (1973) for French: "the ontogenetic primacy of the aspectual value of tenses over their temporal value was also found by Bronckardt (sic) & Sinclair " (p. 183). "Primacy" underscores the important but relative role that lexical aspect plays. The term retains the notion of language learners' use of verb morphology to redundantly mark lexical aspect while shedding the "absolute" claim inherent in the aspect before tense formulation.

The aspect hypothesis

The current "aspect hypothesis" term is the most neutral and least categorical. The term appears to have originated in the SLA literature (Andersen and Shirai, 1994; Bardovi-Harlig, 1994; Robison, 1995), although the predictions of the hypothesis are made for both L1 and L2 acquisition, and are largely based on findings from L1 acquisition (Andersen & Shirai, 1994, 1996; Shirai & Andersen, 1995). Although Weist et al. (1984) and Smith and Weist (1987) questioned the degree to which lexical aspect could explain the development of tense and aspect in first language acquisition, Bloom and Harner's (1989) re-

analysis of Weist et al.'s data on the acquisition of Polish showed a significantly greater use of perfective with telics. If, as Bloom and Harner argue, one takes a "probability of occurrence" rather than an absolute behaviour perspective (p. 209), there is considerable evidence pointing to the influence of the aspectual semantics of verbs on children's early use of the tense and aspect inflections of the language they are acquiring. Children learning a variety of first languages have been found to exhibit a bias towards using the past or perfective marker (depending on the language) for telics. This has been observed for the L1 acquisition of English (Bloom, 1991; Bloom, Lifter, & Hafitz, 1980; Shirai & Andersen, 1995), French (Bronckart & Sinclair, 1973), Greek (Stephany, 1981), Italian (Antinucci & Miller, 1976), and Polish (Weist et al., 1984 as analyzed by Bloom & Harner, 1989), as well as for the bilingual acquisition of Catalan/English (Juan-Garau & Pérez-Vidal, 1999); English/Spanish (Krasinski, 1995); and French/German (Schlyter, 1990a, 1990b).

Predictions of the Aspect Hypothesis for SLA

The aspect hypothesis contains two main claims: that inherent lexical aspect influences the distribution of emergent verb morphology in learner language (L1 and L2), and the direction of the subsequent development of the learners' tense/aspect system (Andersen, 1991; Andersen & Shirai, 1994, 1996). The distribution is predicted to be the following: perfective or past forms (depending on the language) will initially be associated with telic verbs, and imperfective or progressive (again, depending on the language) will be associated with atelics. Statives are further predicted to remain unmarked longer than the other three categories (Andersen & Shirai, 1994, p. 135).

The predicted direction of development is for perfective/past forms to emerge with punctual telics (achievements), and then proceed to accomplishments, activities, and statives (Andersen, 1991; Andersen & Shirai,

1994, p. 143), although there are statements of the aspect hypothesis that do not differentiate between accomplishment and achievement verbs (Andersen & Shirai, 1994, p. 135; Andersen & Shirai, 1996; Bardovi-Harlig & Bergström, 1996; Shirai & Kurono, 1998, among others). The path for imperfective/progressive forms is in the opposite direction; they are predicted to emerge with statives (for imperfectives) or activities (for progressive) and spread through to achievements. Included in this prediction is the claim that progressives will not be inappropriately used with statives. Rather, progressives will emerge with activities and spread to appropriate uses with accomplishments and achievements, although there is some disagreement in the literature as to whether this prediction holds for L1 acquisition but not for L2 acquisition (Andersen & Shirai, 1996; Bardovi-Harlig, in press; Shirai & Kurono, 1998).

Explanations for the Aspect Hypothesis

The phenomenon of learners finding their way into the tense/aspect system of a language through lexical aspect is explained by several complementary environmental and cognitive factors which have been elaborated in a series of papers by Andersen and Shirai (Andersen, 1991; Andersen & Shirai, 1994, 1996; Shirai & Andersen, 1995). Several hypotheses and principles are discussed - the Distributional Bias Hypothesis, Prototype Theory, and the Relevance, Congruence, and One to One Principles. However, the essential explanation for the behaviour can be summarized as an hypothesized interaction between the input learners are exposed to, and a cognitive predisposition for assigning prototypical meanings to new forms. Stated another way, frequency effects (Andersen's, 1991, Distributional Bias Hypothesis) motivate learners to associate tense/aspect morphology with the situations with which the forms are the most semantically compatible. Learners of English, for example, are hypothesized to encounter more instances of past morphology with telics and

more progressive with activities because fluent users of the language are called upon more often to mark verbs with inherent end points with simple past (*The mosquito stung me*), and to mark dynamic unbounded activities with progressive (*The mosquito was looking for the perfect victim*). The distribution is a natural outcome of the congruence between the semantics of the verb morphology and inherent lexical aspect. According to Shirai and Andersen (1995, but see also Dahl, 1985) the most relevant semantic features for the category of simple past (or perfective) are *telic*, *punctual*, and *result*, making achievements the most prototypical situations for past morphology. Similarly, the "in progress" meaning of the progressive is most congruent with the *atelic* and *durative* features that define activities. Andersen (1984) further argues that the construction of a prototypical meaning for a verb form reflects a universal characteristic of interlanguage behaviour whereby learners are initially drawn to associate one form with one meaning (the One to One Principle¹⁰).

In summary, the explanation put forth by Andersen and Shirai claims that a distributional bias in the input fosters prototypical associations between forms and the classes of verb with which they are most congruent. From this perspective, development of the L2 tense/aspect system consists of an expansion of the use of the verb morphology to include less prototypical contexts, for example, appropriately employing the simple past to describe atelic, durative statives (*The mosquito needed blood*).

Thus far the only evidence that exists in support of a distributional bias in the input comes from Shirai and Andersen's (1995) comparison of the speech of 3 children and their 3 caretakers as they interacted in English (two from the Brown

¹⁰ This principle was postulated as an explanation for interlanguage, not L1 development, although Andersen (1984) drew from the relevant L1 literature (i.e., Slobin's Operating Principles, 1973). Shirai & Kurono (1998) note that the one form/one meaning notion is compatible with Clark's (1987) Principle of Contrast.

corpus, one from Sachs). The researchers found an uneven distribution of the past and progressive inflections in the caretaker speech that was consistent with their findings for the children's utterances: greater use of past inflections with achievements and progressive inflections with activities. However, in Shirai and Kurono's (1998) study of 3 Chinese adult learners of Japanese, the Japanese interviewer's speech did not show a distributional bias consistent with the aspect hypothesis for the target forms *-ta* (past marker) and *-te i-* (durative imperfective marker), in contrast to the data from 2 of the 3 L2 learners', in which higher percentages of *-te i-* were found with activities.

Whether there is a distributional bias in the input remains an empirical question, best answered by research using larger samples and type and token (as opposed to token only) analyses. However, even if frequency effects are not found, it may still be the case that the associations reflect a principle of categorization consistent with prototype theory (reviewed in Shirai & Andersen, 1995). That is to say, even though the forms may turn out to have a wider distribution in the input than predicted by the Distributional Bias Hypothesis, learners may nonetheless extract the most prototypical ("unmarked") meaning of the form from the input in the initial stages of acquisition. Shirai and Kurono's (1998) study offers some preliminary findings in support of a prototype account from the L2 acquisition of Japanese. Japanese offers a testing ground for a prototype account, because the *-te i-* marker can function as both a progressive (when it occurs with activities and accomplishments) and a resultative (when it appears with achievements) morpheme. Shirai and Kurono found that 17 L2 learners of Japanese from various L1 backgrounds were more successful at judging the correctness of the *-te i-* imperfective marker when it occurred with activities, conveying what the authors believed to be the more prototypical "in progress" meaning of the form. The learners were less successful in their

judgements when *-te i-* appeared with achievements and denoted a resultative meaning. Such an interpretation assumes that the resultative meaning of *-te i-* is more marked, or less prototypical than the "in progress" meaning in Japanese. It also assumes that the resulting categorization has psychological and cross-linguistic validity. As Shirai and Andersen note, these issues have not yet received much attention in the SLA literature.

Evidence for the Aspect Hypothesis in SLA

Much more attention has been focused on establishing whether there is empirical support for the predictions of the aspect hypothesis. An oft-quoted criticism of claims made in the 80's regarding the role of lexical aspect came from Meisel (1987) who argued that in the absence of quantified findings, there was not yet convincing evidence that early use of an "aspectual system" (this was written at the time of the "aspect before tense" formulation of the aspect hypothesis) by L2 learners was anything more than a "marginal phenomenon" or a "learner-specific characteristic" (p. 220). It is not clear exactly what research Meisel was referring to (none is cited), but it is certainly the case that at the time of writing, there had not yet been any systematic, large-scale investigations of the phenomenon among L2 learners. In fact, until the mid-90's, with rare exceptions (i.e., Kaplan's, 1987, study of 16 adult L2 French learners; Bardovi-Harlig's, 1992, study of 135 adult L2 English learners) research tended to be conducted with very small numbers of learners and small amounts of data (Andersen, 1991; Kumpf, 1984; Flashner, 1989; Housen, 1994; Robison, 1990). With the exception of Andersen, however, all studies provided some quantification of the results.

While there has yet to be any carefully designed longitudinal study in the tradition of the L1 acquisition research, since the mid-90's there have been cross-sectional studies that are suggestive of developmental patterns. The large-scale work has been conducted principally by Bardovi-Harlig and colleagues, who

have investigated tense/aspect acquisition among L2 learners of English, French, and Spanish. Smaller scale and longitudinal studies have also been carried out by other researchers, resulting in a substantial body of work from which the claims of the aspect hypothesis may be evaluated.

Distribution of tense/aspect forms

The most robust cross-linguistic evidence in support of the aspect hypothesis exists for the predicted association between telics and markers of perfective/past. Learners of Dutch (Housen, 1994), English (Bardovi-Harlig, 1998; Bardovi-Harlig & Bergström, 1996; Bardovi-Harlig & Reynolds, 1995; Robison, 1995; Rohde, 1996¹¹), French (Bardovi-Harlig & Bergström; Salaberry, 1998), Japanese (Shirai & Kurono, 1998) and Spanish (Andersen, 1991; Hasbún, 1995) have been found to use perfective/past markers much more consistently with achievements and accomplishments than with activities and statives. Bardovi-Harlig (in press) also reports evidence from the acquisition of Catalan, based on findings from an unpublished paper by Comajoan at Indiana University. Some of the studies have examined the oral production of small numbers of learners, but there are also large-scale, cross-sectional studies of oral or written production (Bardovi-Harlig & Bergström; Bergström, 1995; Bardovi-Harlig & Reynolds; Hasbún), and of oral and written production of the same learners (Bardovi-Harlig, 1998). A further illustration of the diversity of contexts in which the telic and perfective/past association has been found comes from Robison's (1995) study, in which half of the tokens of simple past with punctual events (achievements) among the lowest level learners of English occurred in contexts where a present form would normally be required. Other studies have

¹¹ See also Bardovi-Harlig (in press) for an interpretation of Rohde's (1996) data from two German-speaking children learning English.

either focused on past contexts only, or not reported whether the distributional bias of past/perfective morphology with telics represented appropriate use.

There is also cross-linguistic evidence for the atelic and imperfective/progressive association. In cross-sectional studies of Spanish and French, the imperfective appeared later than the perfective forms (Bergström, 1995; Kaplan, 1987; Hasbún, 1995), and was used more frequently with statives. Harley and Swain's (1978) descriptive study of the verb system among grade 5 French immersion students also found the relatively infrequent uses of the *imparfait* were restricted to statives. Similarly, in Wiberg's cross-sectional analysis of reference to past in Italian by "bilingual"¹² Italian-Swedish school age students, the *imperfetto* initially appeared with states only.

Although there is no imperfective form in English, some cross-sectional studies of adult learners have found that the base form (Robison, 1995) or a combination of base and inappropriately used present forms (Bardovi-Harlig & Reynolds, 1995) occurred more frequently with statives. Rohde's (1996) study of two German-speaking children acquiring English found a very strong association between statives and present, but no data were presented on unmarked (i.e., base) forms for comparison. Bardovi-Harlig and Bergström's (1996) analysis of written narratives in the past, however, separated base and present forms, and found results for the present consistent with Rohde's. The most frequently and consistently supplied alternative to past within the stative category was the inflected present, a form which was rarely supplied in any other category. The (inappropriate) use of present with statives was interpreted by the researchers as evidence of a prototypical association between the s present marker in English

¹² Wiberg (1996) uses "bilingual" to describe the situation of 24 second-generation Italian children (ages 8 - 17) living in households in Sweden in which both Italian and Swedish were spoken. However, the proficiency in Italian of the children varied considerably. Some were L2 speakers of Italian, others were native-like. The children were assumed to be Swedish dominant, although no evidence of their competence in Swedish was reported.

and the "inherent imperfectivity of states" (p. 321).¹³ Base forms, on the other hand, were commonly supplied alternatives to past in all 3 aspectual categories, particularly among the first two of the four groups, suggesting that statives were not necessarily unmarked more frequently than activities, accomplishments, or achievements, but rather, that learners found them to be more congruent with the inflected present than any other aspectual category.

Although the cross-linguistic findings for states are consistent with the predictions of the aspect hypothesis, there is a tendency for *be* (and to a lesser degree, *have*, particularly in the L2 acquisition of French, Bardovi-Harlig & Bergström, 1996; Bergström, 1995, 1997; Harley & Swain, 1978; Salaberry, 1998) to dominate the stative category in learner-constructed text (i.e., narratives, descriptions, and conversations, as opposed to cloze passages). As most studies have used token, rather than type analyses, it is difficult to know whether the findings are representative of the stative category in general, or rather, reflect behaviour particular to *be*. The interpretation of the findings is further complicated by the fact that *be* tends to be marked for tense in learner production earlier and more consistently than other verbs (Bardovi-Harlig, 1998).

The systematic study of the distribution of progressive forms in SLA has thus far been confined to English and Japanese (although Bardovi-Harlig, in press, does refer to some preliminary work by Giacalone Ramat for Italian). In both cross-sectional and case studies of English, there is evidence that learners favour the use of progressive with activities, including contexts where the form is inappropriate; that is, where a past or future form is required (Bardovi-Harlig, 1998; Bardovi-Harlig & Bergström, 1996; Bardovi-Harlig & Reynolds, 1995;

¹³ No information is provided in this study or in Robison's (1995) study on the distribution of 3rd person singular contexts (the only contexts in which base and present forms can be distinguished) across the 4 aspectual categories. This is not an issue in Bardovi-Harlig & Reynold's (1995) study as the instances of present and base forms were combined and reported together under the category of "non-past".

Robison, 1995). Although Rohde (1996) found that the two German-speaking children acquiring English used progressive in equal distribution with activities and achievements, Bardovi-Harlig's (in press) reanalysis of the data found that when the forms used within the two aspectual categories were compared, progressive was much more frequent with activities, and past with achievements (p. 29).¹⁴ Shirai and Kurono's (1998) two-part study of L2 learners of Japanese also found greater accuracy in grammatical judgements among 17 NNS's when *-te i-* was used as a progressive marker with activities (as opposed to a resultative marker with achievements). In the first of the two reported studies, 2 of the 3 learners (L1 Chinese) interviewed orally showed greater use of *-te i-* with activities.

Development of tense aspect forms

Although the hypothesized direction of the development of tense / aspect morphology was originally formulated by Andersen (1991) to account for the findings from two interviews conducted with 2 English-speaking siblings acquiring Spanish, it is really a theoretical argument that went beyond the existing data. The interviews were a year apart, and there were no data for some of the postulated 8 stages of development for perfective past and imperfect. Subsequent longitudinal and cross-sectional studies of Spanish, French, and English have yielded findings that are consistent with the hypothesized direction of development, but none has confirmed the existence of an 8-stage developmental progression.

The evidence for the development of past / perfective markers from telics to atelics is the most robust. However, the findings are less consistent for the

¹⁴ Rhode (1996) presented the distribution of raw token counts of forms across aspectual categories (providing information on how progressive was distributed, for example); Bardovi-Harlig's (in press) reanalysis converted the data to percentages and looked at the distribution of forms within aspectual categories (providing information on the relative frequency of progressive to other forms with activities, achievements and so on).

hypothesized spread from achievements through the four aspectual classes, one class (or semantic feature) at a time. Some studies have found little or no difference in the use of past between accomplishments and achievements (Bardovi-Harlig & Reynolds, 1995; Bergström, 1997), while others have found stronger associations between achievements and past in early and intermediary stages of learning (Bardovi-Harlig & Bergström, 1996; Robison, 1995; Rohde, 1996). There is also evidence for modality effects: Bardovi-Harlig's (1998) study of oral and written narratives found differential use of past with achievements and accomplishments consistent with the aspect hypothesis in the oral production data only. As for the spread of past within the atelic category, the studies of Spanish (Hasbún, 1995) and French (Bergström, 1995, 1997; Bardovi-Harlig & Bergström, 1996) found evidence in support of the aspect hypothesis, as learners struggled more with statives than with activities, whereas studies of English found that activities pose the greater challenge (Bardovi-Harlig¹⁵; Bardovi-Harlig & Bergström; Bardovi-Harlig & Reynolds).

Evidence from the L2 acquisition of French and Spanish support the predicted direction of the use of imperfect from states to activities (Bergström, 1995, 1997; Hasbún, 1995), but given the tendency for lexical *be* to dominate the stative category, it is difficult to know whether the direction of development should be interpreted as moving from statives to activities or rather from lexical *be* to activities. As for the development of progressive, generally speaking, the findings from the L2 studies are consistent with the L1 studies, showing very little inappropriate overgeneralization of progressive forms to states (for a review, see Bardovi-Harlig, in press). However, there has not been much published research that has specifically tracked the development of progressive

¹⁵ The findings for the written narratives show more appropriate use of past with statives than with activities, but because learners produced very few stative types in their oral narratives, it is difficult to compare the use of past in the two aspectual categories.

from activities to appropriate uses with less prototypical situations. Shirai and Kuroono's (1998, discussed above) study looked at the use of progressive with activities and achievements in L2 Japanese, but did not look at change over time or across levels. Preliminary findings from a cross-sectional study of English by Quick and Juffs (1999) presented at the American Association for Applied Linguistics do not include comparisons of the use of progressive within aspectual categories, but they do indicate that progressive is less frequent with achievements than with activities and accomplishments, and the attainment of accurate use of progressive with achievements may be subject to L1 effects (When compared to Chinese and Japanese speakers, Spanish speakers showed higher rates of accuracy for obligatory uses of progressive with achievements.).

Remaining Research Issues

Elicitation

In reviewing the findings in support of the aspect hypothesis, three research issues emerge. One challenge for investigations of both the emergence and development of verb morphology is clearly the elicitation of sufficient numbers of verb types from each of the aspectual classes. Not only is there a tendency for lexical *be* to be over-represented in the stative category, there are also disproportionate numbers of types (in the rare cases where this is reported) and tokens for achievements. For example, in Bardovi-Harlig's (1998) study of oral and written narratives, achievements accounted for approximately half of the token predicates that the learners produced.

Appropriate Use

The research has also tended to focus on documenting the distribution of the verb morphology, either across or within aspectual categories, with not much attention given to documenting the degree to which the forms are used

appropriately or accurately. Although many of the narrative studies have elicited oral or written production in past contexts, in which the use of base or present forms is by definition inappropriate, the appropriate use of the remaining past forms (simple, progressive, perfect for English, for example) is not generally reported or quantified. For example, Bardovi-Harlig and Bergström (1996) noted that the L2 students of French in the higher levels showed greater use of the French imperfect and less use of *passé composé* in their written film retells, reflecting a "more targetlike use of grammatical aspect" (p. 319), but the actual distribution of appropriate and inappropriate uses was not reported. Robison (1995) also discussed the inappropriate use of past morphology with punctual events (achievements) by L2 learners of English (p. 358), and presented data on the distribution of verb morphology by temporal reference (for example, whether the 3rd person singular occurred in past, present, or future contexts), but did not report on the distribution of inappropriate use within aspectual category (i.e., whether the instances of 3rd person singular in past or future contexts were more frequent within the stative category).

L1 Influence

A third issue that has not received much attention in investigations of the aspect hypothesis to date is the role of L1. Since the rise and fall of the strong form of the contrastive analysis hypothesis, the interest in SLA has been increasingly to investigate how L1 influence interacts with developmental sequences - in other words, how the particular interacts with the universal. In a series of papers published in the early 80's, Zobl (1980a, 1980b, 1982) argued that the emerging data from the acquisition of a variety of structures, including negation and question formation, suggested that a learner's L1 exerted a selective influence on universal or developmental sequences. That is to say, L2 learners from a variety of first language backgrounds may pass through similar stages of

development, and at the same time, may also exhibit idiosyncratic interlanguage behaviour within stages resulting from L1 influence (for examples, see Larsen-Freeman & Long, 1991; and Lightbown & Spada, 1999). If, as some researchers have claimed, the cross-linguistic findings from the aspect hypothesis point to language learning universals (Andersen & Shirai, 1996; Shirai & Kurono, 1998), an important theoretical and pedagogical question is the degree to which L1 interacts with development in this domain.

Although the discussion sections of research reports on the acquisition of tense and aspect often refer to the possibility of L1 influence as a contributing factor, there has been little systematic investigation of the issue. A potential exception was the ESF project, which stated as one of its aims the study of transfer from L1 to L2 (Dietrich, Klein, & Perdue, 1995, pp. 2-3). To this end, learners of two different source languages for each of the 5 targeted languages were recruited for the study. Although many of the learners did not develop productive systems of verb morphology, which limits the observations that can be made, the researchers concluded that overall, with the exception of some lexical borrowings and choices of base form, transfer played no significant role in the acquisition of temporality (Klein, Dietrich, & Noyau, 1995, p. 278; see also Klein, 1993). It should be noted, however, that there are different interpretations of the data by the researchers. As Housen (1995) observed, Bhardwaj, Dietrich and Noyau, 1988 and Klein (1995) claim elsewhere that there was a difference in the use of aspect / tense markers in English by the 2 Punjabi and 2 Italian learners of English - more use of aspect by the former, and of tense by the latter. The researchers attribute the source of this behaviour to L1 influence, since aspect figures more importantly in Punjabi, tense in Italian. Slobin (1996) also refers to these data as evidence of L1 influence based on the use of tense and aspect in the native language of the learners. It is difficult to reconcile the conflicting views

because not enough information is given on the number of occurrences and the distribution of the forms. The data samples provided for the Italian learner Lavina in Klein (1995), for example, show productive use of both tense and aspect markers (pp. 43-46).

The notion that the overall organization of tense and aspect in a learner's L1 might influence the approach the learner takes when learning the tense / aspect system of a new language has been cited in a number of studies as a potential explanation for trends observed among studies of adult learners. Examples include Chinese learners of Italian, English, and Japanese (Giacalone Ramat & Banfi, 1990; Bayley, 1994; Quick & Juffs, 1999; Shirai & Kurono, 1998); and Russian learners of English (Flashner, 1989). Both Chinese and Russian have productive aspectual systems. Shirai and Kurono (1998) speculated that the fact that the 17 learners of Japanese in their second study all had L1's with progressive markers may explain their tendency to prefer progressive meaning with *-te i-* over the resultative in Japanese (there is some support for this interpretation from Quick and Juffs' study, where the Chinese learners showed lower acceptability of the progressive marker on achievements in English than the Spanish or Japanese). Slabakova (1999), working within the parameter of aspect approach of universal grammar, conducted one of the rare published studies designed to specifically examine how the overall organization of an aspectual system in one's L1 might influence the L2 acquisition of tense and aspect. Differences in the way in which Bulgarian and English are hypothesized to express the parameter of aspect (the former through a perfective marker on the verb, the latter through cardinality of the object, i.e., the noun phrase) appeared to influence Bulgarian L2 learners of English in their interpretations, judgements and translations of atelic and telic sentences illustrating the relevant contrasts between the two languages.

There are studies investigating the aspect hypothesis in which most if not all learners shared the same L1 - for example English-speaking university students in a foreign language learning context studying French (Bardovi-Harlig & Bergström, 1996; Bergström, 1997) or Spanish (Hasbún, 1995; Salaberry, 1998); Bulgarian-speakers studying English (Slabakova, 1999) - but in the absence of data from other L1 groups learning the same language, it is not possible to know the degree to which the observed patterns are generalizable to other learners of the language, or reflect L1 influence.

Addressing the Research Issues

One study that addressed the elicitation and appropriate use of forms issue was Bardovi-Harlig and Reynold's (1995) cross-sectional investigation of the acquisition of tense and aspect by university ESL students from various L1 backgrounds. Although the study did not address the issue of L1 influence, it provided evidence to which the findings from future studies that isolate the L1 variable can be compared. Six levels of university ESL students completed a rational cloze instrument consisting of a series of short passages which elicited balanced numbers of verbs from all four aspectual classes. Learners were provided with the base forms of the target and distractor items which they manipulated within the texts. The researchers found that in the simple past tense contexts in which all target items were presented, learners supplied the past significantly more often with telics. That is, at all levels, achievements and accomplishments patterned together. Within the atelic category, learners used the past more appropriately with statives (of which there were 8 different types) than with activities, and in the alternative forms to past that were supplied for activities and statives, used more progressive with activities, and base and present forms with statives. To the degree that cross-sectional studies can be said to provide a window on development, the progression for appropriate use of

past went from telic to stative to activity (statives and activities initially patterned together, but as learners became more proficient they were less successful at using simple past in activity situations). This is in contrast with one of the predictions of the aspect hypothesis, in which the progression is said to go from the most prototypical achievements to the least prototypical statives.

Bardovi-Harlig and Reynolds interpreted the findings as evidence for the potential benefit of providing focused instruction on the past tense with atelics, especially with activity situations, as these appeared to be the most challenging for the learners they studied (Bardovi-Harlig, 1995b). This was a somewhat different approach to pedagogical intervention than previous focus on form studies of tense and aspect had taken, as it was based on data that went beyond identifying what learners were getting wrong (inappropriate use of past), to include descriptions of what learners also appeared to be getting right (fewer problems with the past with telics, more with atelics). What Bardovi-Harlig and Reynolds' results seemed to suggest, then, is that learners might benefit from a much more "focused" focus on form.¹⁶

Whenever I have referred to this study at conferences where teachers of francophone learners of English are in attendance, there is always surprise that the inappropriate use of perfect in the past contexts was not discussed. This is perceived to be a notoriously common problem for this population of learners, for which there is plenty of anecdotal evidence in both the speech and writing of francophones at various levels of proficiency. However, there has been no

¹⁶ Harley (1989) reported that in previous research that had described some of the interlanguage features of French immersion students there was some evidence that in oral production, the L2 learners of French restricted their use of *passé composé* to actions, and their use of *imparfait* to statives, even in contexts when other forms were required. The instructional package in Harley's (1989) study, however, was not designed to specifically target this aspect of interlanguage behaviour.

systematic or large-scale research to confirm that the misuse of the perfect among this population is a pervasive phenomenon.

The lack of reported misuse of the perfect in past contexts in Bardovi-Harlig and Reynolds (1995) is less surprising when the L1 backgrounds of the ESL students are taken into consideration. Of the 15 languages represented in the sample, roughly 70% were Arabic, Japanese and Korean speakers. There were no Germanic and very few Romance language speakers (of whom none were francophones) - languages from both of these families have a compound structure similar in form but somewhat different in function to the English perfect.

Although there is some overlap between the function of the French *passé composé* and the English present perfect, the *passé composé* is, as the name suggests, a compound past, and its semantic and functional equivalent in English is generally the simple past. The following dialogue illustrates the relevant differences and similarities.

- 1a Have you ordered the pizza? (perfect)
- 1b As-tu commandé la pizza ? (*passé composé*)
- 2a Yes, I ordered it half an hour ago. (simple past) I heard a noise outside a minute ago. (simple past) Maybe it has arrived. (perfect)
- 2b Oui, je l'ai commandée (*passé composé*) il y a une demi-heure. Tout à l'heure j'ai entendu (*passé composé*) un bruit dehors. Peut-être qu'elle est arrivée. (*passé composé*)

In both French and English, the perfect / *passé composé* form can be employed in reference to indefinite past, as illustrated in sentences 1a and 1b. However, once the event is situated in the past, English requires the simple past, as shown in *ordered* and *heard* in 2a. When the situation has current relevance as

in *has arrived*, the perfect is the appropriate form. French uses the same form, *passé composé*, to render all these meanings (see Bergström, 1997, for additional examples of the differences between English perfect and French *passé composé*). Although the distinction between current relevance and definite past is captured, to a degree, in the French *passé composé* and *passé simple* forms, respectively, in modern spoken French (and increasingly in modern written French as well), the *passé composé* has replaced the *passé simple*, assuming the functions of both forms (see Comrie, 1976; Jespersen, 1924; and Binnick, 1991, for further discussion).

Research Questions and Hypotheses

The present study was undertaken to explore the influences of both L1 and lexical aspect on the acquisition of tense and grammatical aspect among adult francophone learners of English. The following research questions were addressed:

- Will the learners use the simple past more appropriately with telics?
- Among the telics, will appropriate use of past spread from achievements to accomplishments?
- Among the atelics, will appropriate use of past spread from activities to statives (as predicted by the aspect hypothesis) or will learners have more difficulty with activities (as some empirical studies of ESL have shown)?
- Will there be a difference among the forms that compete with simple past? If so, will the patterns be consistent with the findings in support of the aspect hypothesis (progressive with activities, base / present with statives), will they reflect L1 influence, or both?
- Are the effects of lexical aspect and L1 influence mediated by proficiency?

CHAPTER 3 - STUDY 1 (METHODOLOGY)

The first study was a partial replication of Bardovi-Harlig and Reynolds' (1995) study. The studies are similar in that the same controlled elicitation instrument (a series of cloze passages) was used to collect data on the L2 use of tense and grammatical aspect, and the participants were adult L2 university learners of English enrolled in an intensive program. However it is not possible to call the present study a true replication because there are differences in the L1, learning environment, and proficiency of the participants, as well as with some of the procedures and analyses. Chapter four contains a more detailed comparison of the similarities and differences between the two studies. This chapter describes the participants, instruments, and procedures of Study 1.

Participants

The participants were 70 francophone university students enrolled in the first two levels of a four-level intensive English program in a French-speaking area of the province of Quebec, Canada. Four classes, two from each of Levels 1 and 2, participated. Students had been assigned to levels based on the results of an in-house written placement test consisting of a short listening passage, a series of multiple-choice questions and a cloze passage. The test was designed to cover a range of grammatical structures and some idiomatic/lexical items. Students who score above or below pre-determined cut-off points are not admitted to the intensive program. Level 1 is thus not a true beginner level; students placed at this level have some limited knowledge of English. Levels 3 and 4 were considered to be too advanced for the purposes of this study.

The convention that has been adopted in Quebec is to refer to the L2 instruction of English as ESL. In some respects, however, students in most parts of the province can be said to be in an English as a foreign language (EFL)

learning context, as the language used outside the classroom in the educational institutions and in the larger society is French. This was certainly the case of the participants in this study, who were attending a French university in a French-speaking city. Yet English in Quebec does have more status and function than one typically finds in an EFL situation, because it is the majority language in both Canada and North America. There are considerable opportunities for exposure to English through, for example, print and electronic media, and travel. However, when compared to most ESL students in the rest of North America (and indeed in any English-speaking society), students in most regions of Quebec have fewer opportunities to interact with speakers of English, and more instrumental (i.e., job-related) than integrative motivation for learning the language (see Nayar, 1997 for further discussion of ESL/EFL contexts).

The 6-week intensive program is a 6-credit course offered once a year in May and June, and consists of 90 hours of core instruction, organized activities, and workshops (regular language courses in the fall and winter semesters are 3-credit 39-hour courses). Students come from a variety of disciplines, and are at various stages of their studies - from first year undergraduates to post-doctoral students. Many are studying English because their program requires or recommends that students attain a certain oral and/or written proficiency in English. The intensive format allows some students to reach this goal and others to make significant progress towards it in a relatively short amount of time. In addition, there are also some students from outside the university, working or on leave from their jobs, unemployed or retired, who need to improve their English for employment or travel reasons. There is therefore a range of age, educational background, and prior exposure to English among the participants.

Instruments

The instruments consisted of a controlled elicitation task and a written retell of a silent film. The results from the film retell will not be reported here.

The controlled elicitation instrument was the 32-passage rational cloze¹ task used in Bardovi-Harlig and Reynolds' (1995)² cross-sectional study of university learners of ESL from various L1 backgrounds. Single passage cloze tasks have been used in research investigating the L2 acquisition of tense and aspect (Bardovi-Harlig, 1992; Bergström, 1995; Salaberry, 1998) but they typically do not elicit sufficient numbers and types of verbs from the four lexical aspectual categories. The innovation in Bardovi-Harlig and Reynolds' study was the use of a series of short passages, rather than a single connected text. This allowed for a much broader sampling of verb types within each aspectual category, and for the creation of distractor items in contexts other than the targeted simple past context.

In this cloze task, 46 of the 88 items target the simple past, and they are distributed across the four lexical aspectual categories. Obligatory contexts for past were determined by the responses of 29 native speakers (NS's) in Bardovi-Harlig and Reynolds' study. A list of the verbs used (9 states, 12 activities, 11

¹ Cloze testing (term attributed to Taylor, 1953) was originally designed to test reading abilities of native speakers (Bensoussan & Ramraz, 1984). The term comes from "closure", a term used in Gestalt psychology to refer to the process of constructing a whole from incomplete parts - such as perceiving a complete geometric shape from a partially drawn figure (Oller, 1979). It has since been applied to the testing of foreign and second language learning, usually as part of a proficiency test. Students complete cloze tests by inserting appropriate words of their choice or by choosing from a list of alternatives. With a random cloze, a pre-determined, standard deletion pattern is used, for example, every 7th word is deleted. With a rational cloze, the tester decides the number and types of words to delete. The 32-passage instrument developed by Bardovi-Harlig & Reynolds is very representative of the kinds of fill-in-the-blank verb exercises classroom L2 learners typically encounter, and thus has high face validity. It is not a typical cloze test, however, in that it consists of a number of unrelated passages, rather than a single passage, and the lexical items are provided (base forms of verbs which learners manipulate). For consistency, I have adopted the terminology used by the researchers.

² Hereafter referenced as Bardovi-Harlig and Reynolds, without the date of publication.

accomplishments, and 14 achievements), the instructions that were given, and two sample passages appear in Appendices A and B.³

No substantive changes were made to the cloze for this study: the number of items and pages, the order of presentation of the passages, and the essential instructions to the learners were all the same as in the original study. There were a few minor changes, however. Some cultural and situational references were adapted (e.g., changing *Fahrenheit* to *Celsius*, *California* to *Yukon gold rush*, *favorite* to *favourite*, *stewardesses* to *flight attendants*, *Juan* to *Pierre*, and so on). In addition, the written instructions emphasized that students were not to go back and change their responses. At the top of the first page, a short bio-data section (adapted from the original instrument) elicited information about the students' first language and prior instruction in English.

Procedure

The pedagogical advisor of the intensive programme informed the Level 1 and 2 teachers of the purpose of the study, and asked for volunteers. The four teachers who agreed to participate were then contacted individually, and given more detailed explanations of the purpose and procedures of the study. The teachers obtained the consent of their students.

Students completed the cloze task and the written film retell on the second half of the first morning of their intensive English program. The teachers brought their students to an amphitheater so that both tasks could be administered to all students at the same time, a procedure which took approximately an hour and a half. Students were told that the purpose of the tasks was to obtain samples of

³ The instrument also contains 18 cases in which adverbs of frequency appear in simple past contexts, as Bardovi-Harlig and Reynolds conducted a separate analysis of the effects of adverbs of frequency on the use of simple past. It was not possible to eliminate these items without revising the cloze, which would have made comparisons with the original study problematic. They were therefore retained, but have not been analyzed as they were not the focus of the present study.

their writing at the beginning of their intensive experience, that neither task would be graded, and that their teachers would be giving them feedback on their task performance at an appropriate moment in the course. Copies of the completed tasks, along with pedagogical suggestions as to how they might be used, were left with the participating teachers. A follow-up questionnaire was administered to the teachers at the end of the 6-week intensive English session, in which teachers provided information on how they had used the tasks, and rated their pedagogical usefulness. This information subsequently became part of the pedagogical suggestions provided to the teachers in Study 2 (see chapter 5).

CHAPTER 4 - STUDY 1

This chapter reports the results from the analyses of the cloze task and discusses the findings. In both the analyses and the discussion comparisons will be made with Bardovi-Harlig and Reynolds' study where appropriate.

Analyses and Results

The task was administered to 95 students, but the data from 25 of the students were not retained for analysis: 15 students reported a language other than French as their first language; 9 did not complete the task; and 1 did not supply a single instance of past. This resulted in a sample of 70 francophone students.

Three analyses of the 3220 student responses were performed: an analysis of the overall use of simple past, of the use of simple past in each of the four aspectual categories, and of the alternative forms to past which the learners supplied in the target contexts.

Use of Simple Past

The first analysis consisted of assigning a score to each student based on his or her appropriate use of simple past for all 46 items. At this stage of the analysis, lexical aspect was ignored, as the purpose of the analysis was to determine the students' overall productive knowledge of past tense morphology.

Appropriate attempts at simple past included both target-like (*finished, told, knew, wrote*) and non-target-like uses. Appropriateness of non-target like uses was determined according to the criteria established in Bardovi-Harlig and Reynolds and included: regularized irregulars (*telled, knowed, writted*); and orthographic or phonetic misspellings (*studyed, boath* for *bought*). Examples of attempts coded as inappropriate followed the criteria elaborated in Bardovi-Harlig's (1995) study of tense and aspect in learner narratives, and included

morphological innovations which are difficult to interpret, such as the use of 3rd person singular 's' with a past form (*knews, wroted, tooks*) and the use of extant but inappropriate verbs, such as *felt* for *fell*.

Students were then regrouped according to percentage of appropriate use of simple past in the 46 contexts. This procedure has been used in previous studies of tense and aspect with learner narratives (Bardovi-Harlig, 1995a; Bardovi-Harlig, 1998; Bardovi-Harlig & Bergström, 1996), but was not used in Bardovi-Harlig and Reynolds' study, in which the composition of the six intact groups had been determined by a series of placement tests. Several reasons motivated the decision to follow the procedure used in the narrative studies, i.e., grouping students by their appropriate use of the feature under investigation. This type of grouping allows for more meaningful cross-task and cross-study comparisons than does the use of intact groups, especially when the learners have been grouped according to a non-standardized in-house proficiency measure, as was the case in this study. In addition, with only two levels of students participating, regrouping learners according to their appropriate use of past allowed for a more refined cross-sectional picture. There was also some concern, based on familiarity with the results of the placement test from previous years, that there would be considerable individual variation in the use of verb morphology within the levels.

This procedure resulted in the creation of 6 groups of students whose percentage of appropriate use of simple past on the cloze ranged from 20-91% (see Table 4.1). The resulting groups do not represent equivalent ranges of use of simple past because the scores were not evenly distributed, a situation that also arose in previous studies in which percentage distributions were used to group learners. For example, in Bardovi-Harlig and Bergström (1996) and Bardovi-

Table 4.1
Distribution of Students Grouped by Percentage Use of Simple Past (SP)

Group	N	% use of SP	Placement test level	
			1	2
1	11	20 - 39	9	2
2	10	40 - 52	9	1
3	10	53 - 63	5	5
4	11	64 - 70	4	7
5	14	71 - 79	4	10
6	14	80 - 91	2	12

Note. Figures in italics show number of students in each of the original placement test levels.

Harlig's (1998) studies, the researchers grouped the upper range of the sample according to 10% ranges, but because there were insufficient numbers of ESL students in the lower range, the lowest groups in both studies represented much wider percentage distributions of appropriate use of past - 26-49% (n=4) and 10-39% (n=5), respectively. Grouping the students in this study by equivalent 10% ranges would have resulted in extreme differences in the numbers of students per group (2 students in the 20% range, compared with 15 in the 60% range, for example), or in the elimination from the study of some of the students scoring in the over-represented ranges (Bardovi-Harlig, 1998). Therefore, a data-driven approach was taken, such that the final groups include all the students sampled, reflect the actual distribution of the scores, and contain sufficient and roughly equal numbers of students to permit meaningful comparisons. The fact that this resulted in the same number of groups as there were levels in Bardovi-

Harlig and Reynolds' study is a coincidence, although it does facilitate comparisons between the two studies. As the grouping procedures were different, however, "level" will be used when referring to students in Bardovi-Harlig and Reynolds' study, and "group" when referring to participants in this study.

Table 4.1 shows the number of students in each group and the range of appropriate use of simple past within each of the groups. The third column shows the level in which the institution had placed the students. The placement test was clearly not sensitive to appropriate use of past, as there are students from both university-determined levels in each of the six groups, a finding which further validates the decision to regroup the students by an independent measure.

Distribution of Simple Past

The second analysis examined the distribution of the appropriate use of past tense in the four lexical aspectual classes, following the same procedure used by Bardovi-Harlig and Reynolds, with one exception. In this study, blanks were coded as a separate response category, and percentages were calculated based on the total number of obligatory contexts.¹ Bardovi-Harlig and Reynolds excluded blanks from their analysis, calculating scores as percentages of forms supplied, in order to compare the results from the cloze with data from free production tasks in which the concept of blank items does not exist (p. 113, footnote 4). However, treating blanks as a separate category allows one to track the response pattern to this category, and it also allows for more uniform scoring across learners, because the same denominator is used for calculating percentages within each aspectual class.

¹ Blanks refer to blank items in an otherwise complete task. As explained earlier, any students who were unable to complete the cloze task in the allotted time were not included in the study.

A usage score was calculated for each learner for each of the four aspectual classes. For example, a learner who supplied two instances of an appropriate form of the simple past for the 9-item stative category would receive a score of 2/9 or 22% for that category. Two appropriate attempts at simple past in the 12-item activity category yields a score of 2/12 or 25%. A mean score for the four aspectual classes was then calculated for each of the six groups.

The results are displayed in Figure 4.1. Figure 4.2 shows the results from Bardovi-Harlig and Reynolds for comparison purposes.² A repeated measures MANOVA revealed a significant difference in past tense use across lexical aspect, $F(3, 192) = 47.94, p < .001$, which replicates Bardovi-Harlig and Reynolds.³ However, unlike Bardovi-Harlig and Reynolds, this study found no interaction between group and lexical aspect - in other words, the effect of lexical aspect was not mediated by proficiency.

A Tukey HSD post hoc analysis of the four means for statives, activities, accomplishments, and achievements revealed significant differences between all pairwise comparisons of the means, with the exception of the accomplishment and achievement means (see Appendix C for a description of the calculations). This finding is also consistent with Bardovi-Harlig and Reynolds. Although they did not report results from post-hoc analyses, they did collapse accomplishment and achievement scores into a single telic category for the graphic display of the results, justified, in their estimation, by the similarity in the results for the two categories (p. 114).

² Bardovi-Harlig and Reynolds collapsed the results from accomplishments and achievements in their figures, since they patterned so similarly. I have separated them in Figure 4.2 to facilitate comparison with the present study.

³ Bardovi-Harlig and Reynolds also reported a significant difference in past tense use across group. This is also true of the present study [$F(5, 64) = 261.19, p < .001$] but given that use of past determined group assignment in this study and there was no overlap of scores between the created groups, a between groups effect for past was inevitable.

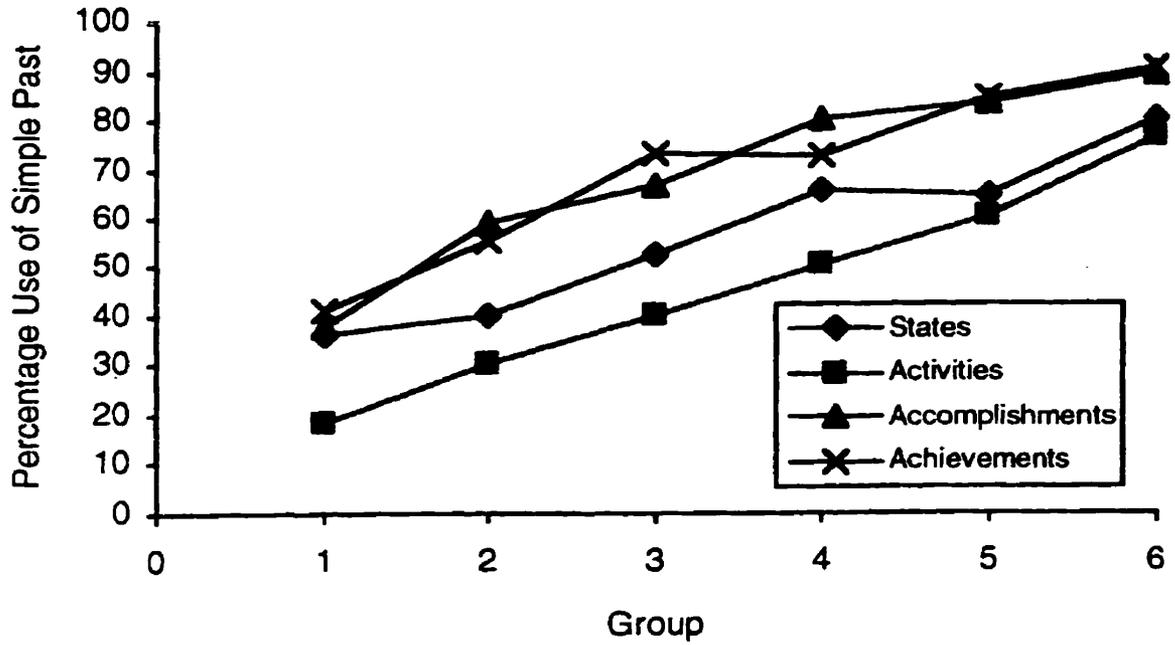


Figure 4.1. Distribution of simple past by lexical aspect

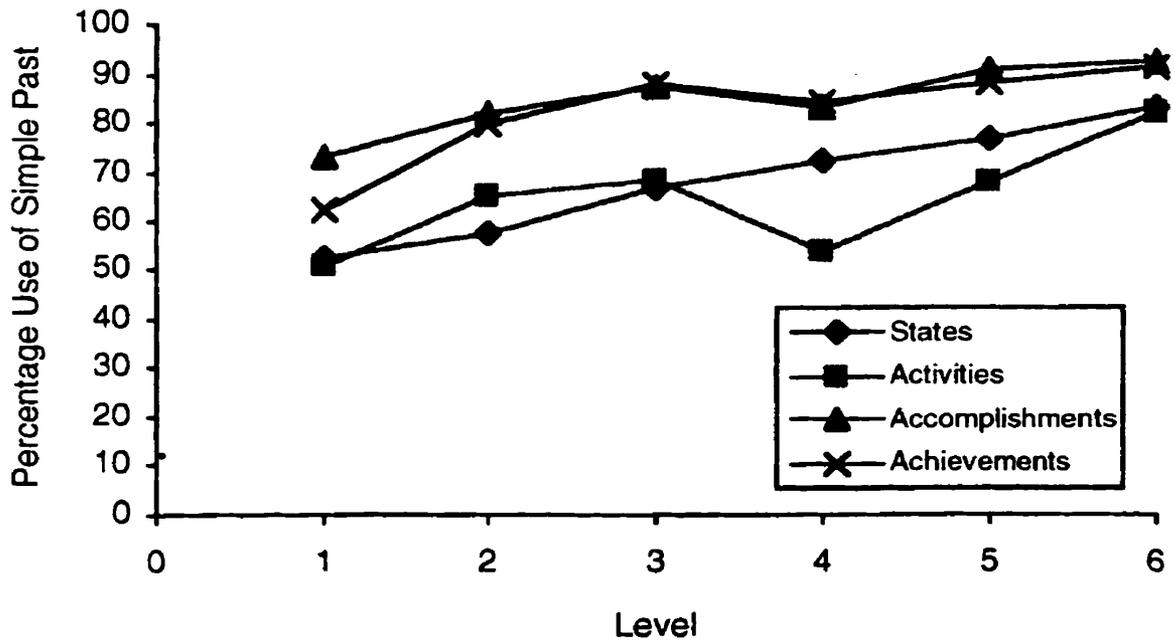


Figure 4.2. Distribution of simple past by lexical aspect in Bardovi-Harlig and Reynolds (1995)

Table 4.2 shows the means and standard deviations of the 6 groups, and Table 4.3 shows the same information for the 6 levels in Bardovi-Harlig and Reynolds. The means for all four categories are quite comparable in the highest group/level (6) in both studies, but they differ dramatically in the lowest, with differences of over 30% in both the activity and accomplishment categories. There is thus a wider range of appropriate use of simple past represented by the francophone students in this study, possibly because the intensive ESL program in Quebec included more lower level students, or because these students were tested on the first day of their program, and had not yet benefitted from the effects of instruction. It may also be that calculating scores as percentages of obligatory contexts rather than as percentages of forms supplied resulted in more scores at the lower range.

Grouping students according to their appropriate use of simple past also reduced the within group variation, as the comparatively lower standard deviations in this study show, even though there were fewer students per group than there were in the intact levels used in Bardovi-Harlig and Reynolds.

Distribution of Alternatives to Simple Past

The third analysis looked at the distribution of the alternatives to past that the students supplied, within each aspectual class. Whereas the previous analysis illuminated patterns to what learners were getting right - more success with telics (accomplishments and achievements), less with atelics (statives and activities) - the purpose of this analysis was to look for patterns in what learners were getting wrong at various stages of proficiency.

Table 4.2
The Use of Simple Past Across Lexical Aspectual Class in Mean Percentage Responses

Group	States	Activities	Accomplishments	Achievements
1	36.36 (15.79)	18.18 (14.35)	38.01 (13.98)	40.91 (15.35)
2	40.00 (15.89)	30.00 (12.54)	59.09 (14.38)	55.00 (17.83)
3	52.22 (20.32)	40.00 (10.24)	66.37 (7.48)	72.86 (13.80)
4	65.66 (11.61)	50.00 (11.79)	80.17 (9.81)	72.73 (10.51)
5	64.29 (12.46)	60.12 (15.04)	83.12 (9.34)	84.69 (7.85)
6	80.16 (8.91)	76.19 (11.72)	89.61 (7.00)	90.31 (7.20)

Note. Standard deviations are in parentheses.

Table 4.3
The Use of Simple Past Across Lexical Aspectual Class in Mean Percentage Responses
(Bardovi-Harlig and Reynolds, 1995)

Level	States	Activities	Accomplishments	Achievements
1	52.70 (21.70)	50.80 (35.40)	73.30 (27.30)	62.40 (35.40)
2	57.40 (22.60)	65.10 (19.30)	81.90 (17.10)	79.50 (17.60)
3	66.50 (21.00)	68.30 (18.40)	87.00 (15.00)	87.60 (12.20)
4	71.90 (17.30)	53.60 (19.80)	82.90 (13.90)	84.20 (12.10)
5	76.40 (25.80)	67.70 (19.70)	90.60 (11.10)	87.80 (12.40)
6	82.90 (10.60)	82.00 (13.80)	91.90 (9.70)	90.90 (13.20)

Note. Standard deviations are in parentheses.

Response categories

The response categories that emerged from the data were: present/base, a combined category because most, but not all items targeted the 3rd person singular;⁴ progressive, with and without the auxiliary, both present and past (the accuracy in supplying the auxiliary increased with proficiency); perfect, present and past; blank; and "other", which included low-frequency alternatives such as passive, conditional, future and adjectival forms, as well as morphological innovations. With the exception of the blank and perfect response categories, these categories are similar to those reported by Bardovi-Harlig and Reynolds.⁵ Almost all perfect responses were present perfect, and the relatively few occurrences of past perfect almost always consisted of *had* + the base form of the verb. There were also some responses that included elements of both progressive and perfect categories (*has been riding, has riding*). Rather than arbitrarily assigning these forms to one or the other category, they were counted in both. There were relatively few of these types of responses (less than 2% of the total number of responses produced), and they tended to occur in the activity category at the lower levels.⁶

Responses within aspectual categories

Figures 4.3 - 4.6 show the distribution of the progressive, perfect, and base/simple present responses within the stative, activity, accomplishment, and achievement categories, for all 6 groups. Past responses have been omitted from the figures in order to highlight the use of non-past forms. The mean percentages

⁴ The 11 verbs that appeared in contexts other than 3rd person singular were: 6 activities, 3 accomplishments, 1 achievement, and 1 stative.

⁵ The learners in their study did not produce a sufficient number of perfect responses to justify retaining it as a separate category.

⁶ The *have + ing* forms were difficult to classify. The decision to interpret these forms as attempts at perfect progressive, despite the absence of the *be* auxiliary was based on evidence that some learners were making a distinction between *have + ing* and *be + ing* forms, producing both, sometimes in the same passage. For further discussion (and a different interpretation) of this coding issue see Chapter 6.

and standard deviations for all response categories can be found in Tables 4.4 - 4.9 (grouped together following the presentation of the figures). Tables 4.5 and 4.7 summarize the distribution of the responses reported in Bardovi-Harlig and Reynolds for the stative and activity categories, for purposes of comparison (accomplishment and achievement responses were not reported in their study).

There are different patterns within the stative and activity categories for the suppliance of forms other than simple past. For statives (Figure 4.3), the main competing form was the base/simple present, for activities (Figure 4.4), the progressive. The progressive/activity association appears even stronger among the lower level francophone learners than the learners in the original study (compare the progressive means between the two studies in Tables 4.6 and 4.7). As learners become more proficient with simple past, the proportional use of these alternate forms declines, but even higher level learners continue to supply more base/simple present with statives and more progressive with activities. Further evidence to support the fact that learners struggled more with statives and activities comes from the results of the analysis of the distribution of the blank responses across aspectual category. Learners were more likely to leave stative and activity situations blank: of the 114 blank responses, 33% occurred with the 9 statives, 30% with the 12 activities, 17% with the 11 accomplishments and 19% with the 14 achievements.

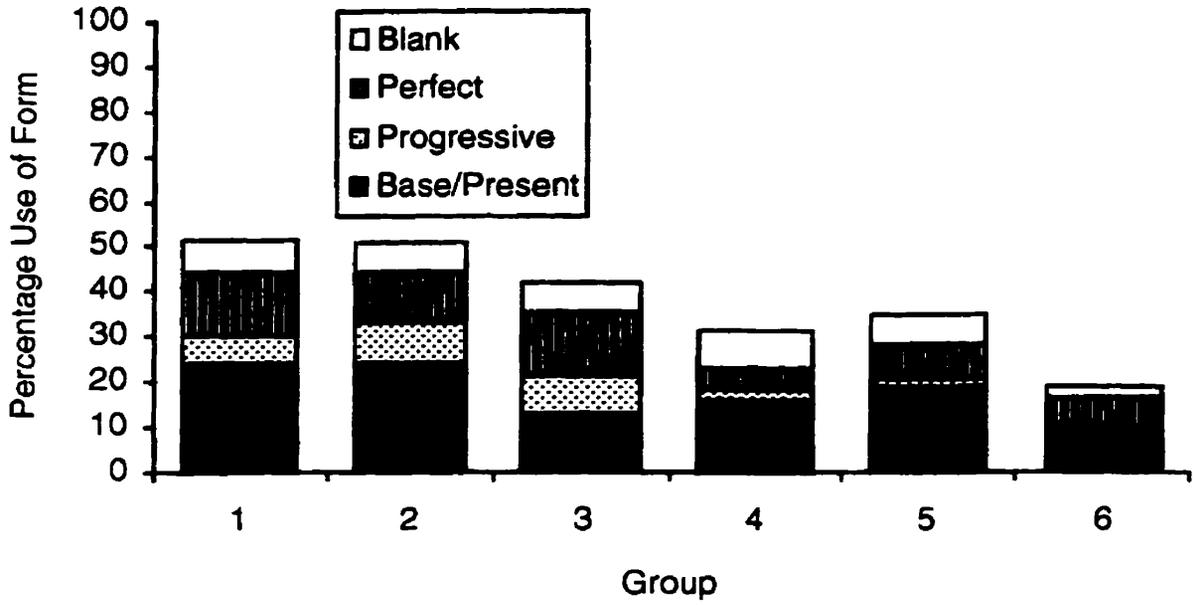


Figure 4.3. Distribution of non-past responses for statives

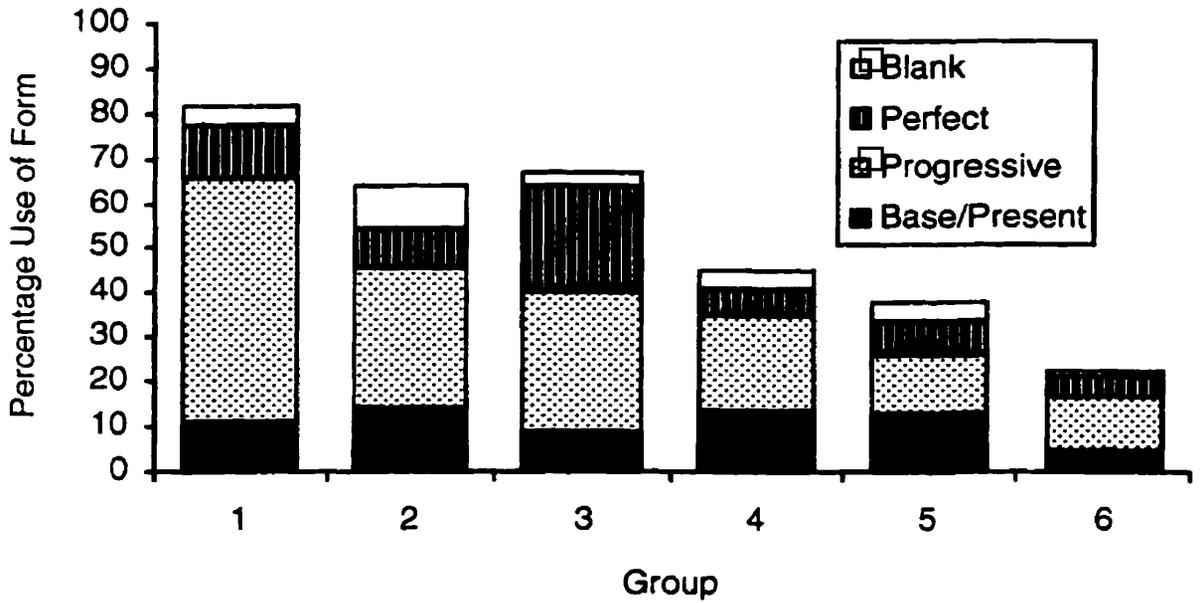


Figure 4.4. Distribution of non-past responses for activities

As the aspect hypothesis predicts that past will spread from telics to atelics, no hypotheses were entertained for the suppliance of alternatives to past for telics. Figures 4.5 and 4.6 (see also Tables 4.8 and 4.9) show that the learners in this study are indeed more successful at supplying the past with telics. However, the figures also show that among the alternative forms supplied in simple past contexts with telics, the perfect was used with comparable frequency to other non-past forms. Although the perfect rarely appeared with the frequency of the prototypical responses for activities and statives (progressive and base/present, respectively), it was nevertheless supplied at least as frequently as the other response types for atelics as well.

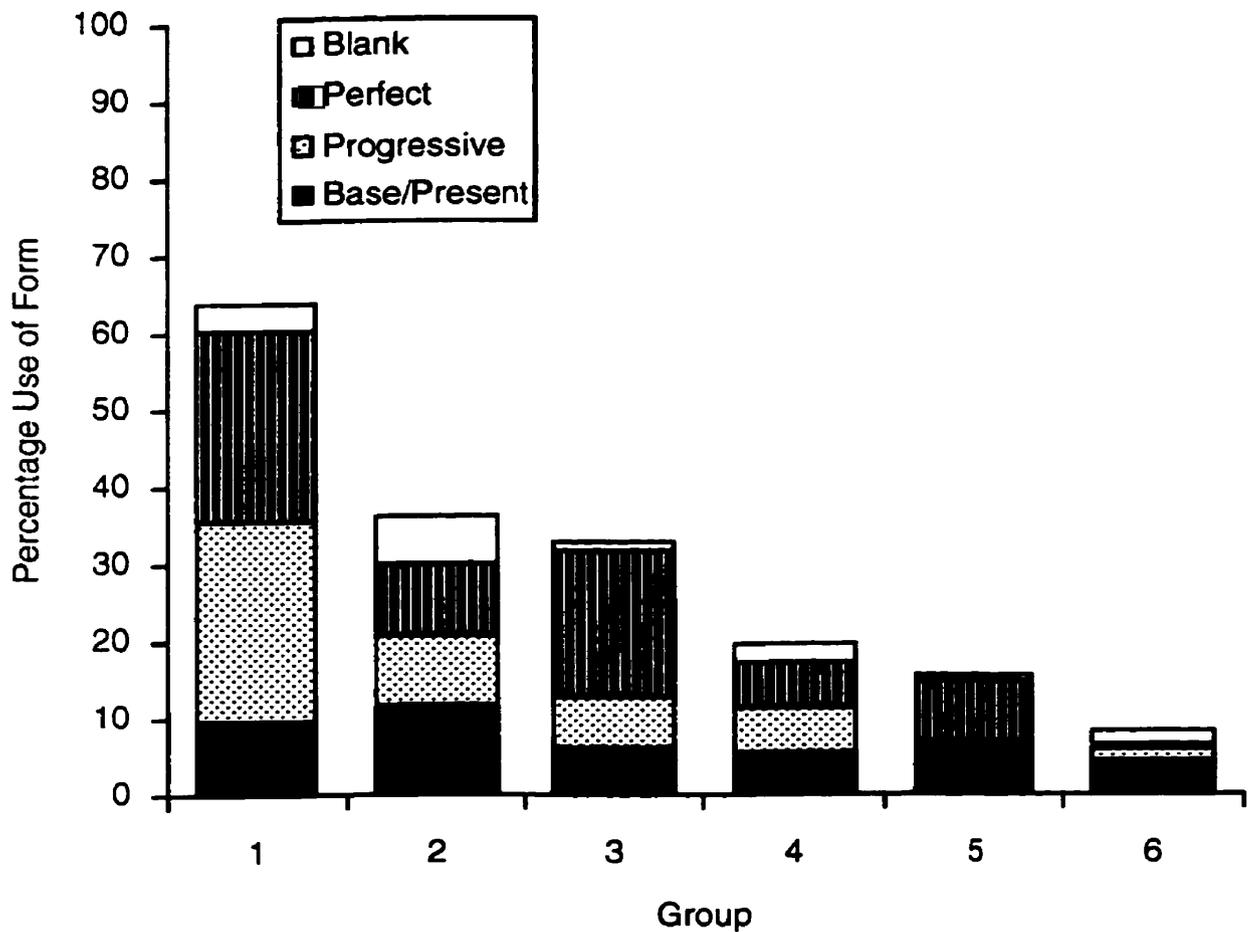


Figure 4.5. Distribution of non-past responses for accomplishments

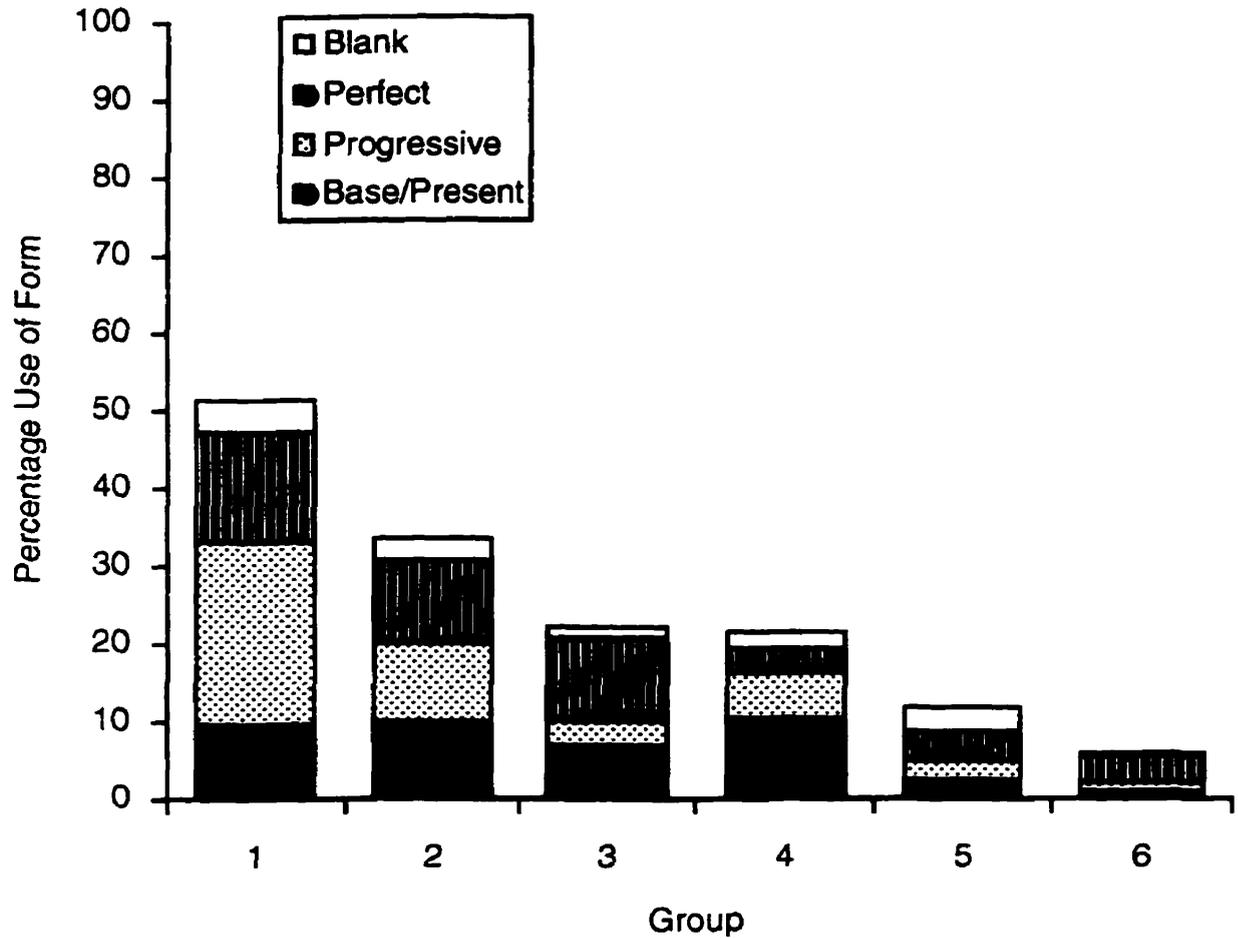


Figure 4.6. Distribution of non-past responses for achievements

A second finding concerning the perfect is that the suppliance of this form relative to other alternatives is notably higher for Group 3, across all lexical aspectual categories. For both achievements and accomplishments, perfect is the most frequent alternative to past at this level. For activities, the suppliance of perfect increases dramatically at group 3. For statives, it rivals the suppliance of base and simple present, the most frequently supplied alternative to past in all other groups.

Table 4.4
Distribution of Responses for Statives by Group in Mean Percentages

Group	Past	Present/base	Progressive	Perfect	Other	Blank
1	36.36 (15.79)	24.24 (22.12)	6.06 (9.11)	14.14 (8.74)	13.13 (9.71)	7.07 (11.41)
2	40.00 (15.89)	24.44 (21.47)	8.89 (11.48)	11.11 (18.14)	12.22 (12.23)	6.67 (9.37)
3	52.22 (20.32)	13.33 (15.54)	7.78 (11.77)	14.44 (13.91)	5.56 (5.86)	6.67 (7.77)
4	65.66 (11.61)	16.16 (16.00)	2.02 (4.49)	5.05 (7.64)	4.04 (7.49)	8.08 (11.21)
5	64.29 (12.46)	19.05 (9.17)	1.59 (4.03)	7.94 (11.88)	0.79 (2.97)	6.35 (9.46)
6	80.16 (8.91)	8.73 (6.43)	1.59 (5.94)	6.35 (9.46)	1.59 (4.03)	2.38 (4.73)

Note. Standard deviations are in parentheses.

Table 4.5
Distribution of Responses for Statives by Group in Mean Percentages
(Bardovi-Harlig and Reynolds, 1995)

Level	Past	Present/base	Progressive	Perfect
1	52.70 (21.70)	17.50 (14.20)	7.30 (13.70)	-
2	57.40 (22.60)	26.30 (18.30)	1.60 (3.90)	-
3	66.50 (21.00)	14.30 (14.60)	1.10 (4.40)	-
4	71.90 (17.30)	10.40 (11.90)	3.60 (6.50)	-
5	76.40 (25.80)	12.80 (14.40)	0.70 (3.80)	-
6	82.90 (10.60)	6.80 (10.10)	0.60 (2.40)	-

Note. Standard deviations are in parentheses.

Table 4.6
Distribution of Responses for Activities by Group in Mean Percentages

Group	Past	Present/base	Progressive	Perfect	Other	Blank
1	18.18 (14.35)	11.36 (10.05)	54.55 (25.92)	11.36 (17.19)	6.06 (7.54)	4.55 (6.83)
2	30.00 (12.54)	14.17 (16.22)	31.67 (18.34)	8.33 (12.42)	10.00 (9.46)	10.00 (9.36)
3	40.00 (10.24)	9.17 (8.29)	30.83 (10.43)	24.17 (15.44)	1.67 (3.51)	2.50 (5.62)
4	50.00 (11.79)	13.64 (10.05)	21.21 (17.23)	6.06 (12.96)	9.85 (8.99)	3.79 (5.73)
5	60.12 (15.04)	13.10 (12.54)	13.10 (14.14)	7.74 (10.06)	2.38 (6.05)	4.17 (9.67)
6	76.19 (11.72)	4.76 (6.30)	11.90 (9.65)	4.76 (8.47)	2.38 (3.91)	1.19 (3.03)

Note. Standard deviations are in parentheses.

Table 4.7
Distribution of Responses for Activities by Group in Mean Percentages
(Bardovi-Harlig and Reynolds, 1995)

Level	Past	Present/base	Progressive	Perfect
1	50.80 (35.40)	6.40 (11.80)	24.60 (28.80)	-
2	65.10 (19.30)	9.40 (8.90)	11.00 (11.60)	-
3	68.30 (18.40)	4.00 (4.20)	7.80 (11.50)	-
4	53.60 (19.80)	4.70 (5.90)	26.30 (15.50)	-
5	67.70 (19.70)	4.50 (5.40)	16.50 (17.10)	-
6	82.00 (13.80)	1.50 (3.20)	9.30 (12.30)	-

Note. Standard deviations are in parentheses.

Table 4.8
Distribution of Responses for Accomplishments by Group in Mean Percentages

Group	Past	Present/base	Progressive	Perfect	Other	Blank
1	38.01 (13.98)	9.92 (8.58)	25.62 (22.20)	24.79 (20.36)	4.13 (8.49)	3.31 (6.13)
2	59.09 (14.38)	11.82 (13.59)	9.09 (14.85)	9.09 (8.57)	5.45 (9.77)	6.36 (9.63)
3	66.37 (7.48)	6.36 (7.48)	6.36 (7.48)	19.09 (13.17)	2.73 (6.14)	0.91 (2.87)
4	80.17 (9.81)	5.79 (8.40)	5.79 (6.13)	5.79 (8.40)	0.83 (2.74)	2.48 (4.25)
5	83.12 (9.34)	7.14 (7.29)	-	7.79 (9.34)	1.30 (3.30)	0.65 (2.43)
6	89.61 (7.00)	4.55 (4.72)	1.30 (3.30)	0.65 (2.43)	1.95 (5.26)	1.95 (5.26)

Note. Standard deviations are in parentheses.

Table 4.9
Distribution of Responses for Achievements by Group in Mean Percentages

Group	Past	Present/base	Progressive	Perfect	Other	Blank
1	40.91 (15.35)	9.74 (9.73)	23.38 (15.01)	14.29 (15.32)	10.39 (7.40)	3.90 (8.67)
2	55.00 (17.83)	10.00 (11.76)	10.00 (22.13)	10.71 (9.67)	12.86 (10.54)	2.86 (4.99)
3	72.86 (13.80)	7.14 (8.91)	2.86 (4.99)	10.71 (12.71)	5.00 (4.82)	1.43 (3.01)
4	72.73 (10.51)	10.39 (8.67)	5.84 (8.93)	3.25 (4.91)	6.49 (6.74)	1.95 (4.62)
5	84.69 (7.85)	2.55 (3.55)	2.55 (3.55)	3.57 (8.29)	3.57 (4.65)	3.06 (6.08)
6	90.31 (7.20)	1.02 (3.82)	1.02 (2.59)	3.57 (6.72)	3.57 (3.71)	0.51 (1.91)

Note. Standard deviations are in parentheses.

Discussion

Summary of Findings

The study found support for both the influence of lexical aspect and the influence of L1 in the acquisition of tense and grammatical aspect. When confronted with obligatory contexts for the simple past, francophone learners supplied the simple past significantly more often with telics than with atelics, and within the atelic category, struggled more with activities than with statives. In the alternatives to past, there was a preference for progressive with activities and base/simple present forms with statives. These findings for francophone learners of English are consistent with the findings for L2 learners of English from a variety of L1 backgrounds who completed the same cloze task (Bardovi-Harlig & Reynolds, 1995), despite the fact that the students in this study were grouped according to different criteria, appeared to represent a wider range of proficiency, shared the same first language, and were learning in an EFL-type context.

The findings with respect to the use of perfect were in contrast to Bardovi-Harlig and Reynolds' data where there were too few instances of perfect for it to be treated as separate response category. The use of perfect is interpreted as an L1 effect due to the formal similarity between English perfect and French *passé composé*. It also appeared that the instances of transfer of an L1 form perceived to be an equivalent of an L2 form were not necessarily greatest in the initial stages of learning. There were uses of perfect in simple past contexts in the two lowest groups, but perfect responses were more frequent once learners had acquired a certain level of productive use of simple past (roughly 50% appropriate use, as defined by this study). This suggests that L1 influence interacts with the development of tense and aspect.

There were very few learners in this study who supplied past less than 30% of the time, and thus the findings do not permit any comments on "emergent" use of the tense and grammatical aspect (to the degree that a cross-sectional study may address emergence). The inclusion of lower proficiency learners in future research using this instrument will allow us to see whether the patterns observed in this study also apply to learners with more limited knowledge and use of tense and grammatical aspect in English. It may be, however, that there is a "floor" effect with this task, such that included in the knowledge of English necessary to complete the task is some familiarity with simple past (there were 9 students who did not finish the cloze).

Assessment of the Instrument

Bardovi-Harlig and Reynolds made a significant contribution to our understanding of the influence of lexical aspect on the acquisition of tense and grammatical aspect by developing an instrument with high face validity that allowed for controlled elicitation of a variety of verbs within each lexical aspectual class. There are nevertheless some limitations to the task which must be taken into consideration when interpreting the results, and which have important consequences for the theoretical and pedagogical implications of the findings.

Progressive and present responses

There was evidence in this study that the effect for progressive within the activity category should be interpreted with caution. Of the 12 verbs in this category, 3 - *snow*, *dance*, and *sing* - accounted for almost 50% of the progressive effect (see Figure 4.7). All 3 verbs came from the same cloze passage (the second sample passage shown in Appendix A), and, unlike most of the other activity verb items in this instrument, appeared equally acceptable with the progressive

to this native speaker. Although the NS's who provided the baseline data in Bardovi-Harlig and Reynolds' study supplied simple past for the three target items in this passage, the task does not allow one to see if NS's would also accept a progressive for these items, or if they would be more inclined to accept progressive with these items than with other items in the activity class. The cloze only allows us to see that the NS's first choice would be the simple past. It may be that a few activity verbs in a single passage accounted for both the magnitude of the progressive/activity association and the finding that, contrary to the predictions of the aspect hypothesis, activities, rather than statives, present the greatest challenge for L2 learners of English.

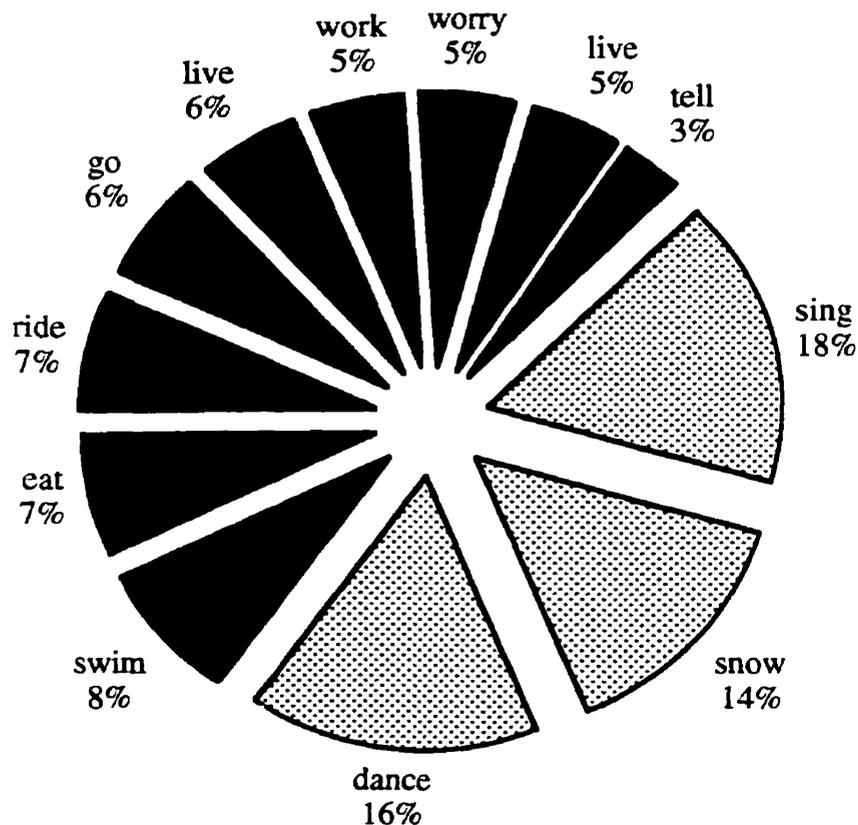


Figure 4.7. Distribution of progressive responses for activities

One of the advantages of this instrument over the elicitation instruments that have been used in previous studies is the number of types of statives other than "be" that are elicited, allowing for a better understanding of language learner behaviour within this aspectual category. However, because some target items in all 4 aspectual classes were not in 3rd person singular contexts, it was not possible to tease apart the base / present responses to determine the degree to which learners made an association between the inflected present form and stative situations. It may well be that the base forms were also attempts at the present, especially in the interlanguage of lower level learners, but restricting the contexts to 3rd person singular would give a more refined perspective on the use of these forms.

Distractor and target items

This is a task in which learners are not often called upon to supply forms other than simple past. As mentioned earlier, in addition to the target items, there are 18 additional simple past context items with adverbs of frequency. The simple past would also have been an acceptable response for several distractors (7/24).

The instrument does elicit more balanced numbers of verbs from each of the aspectual classes than natural production tasks do, which is indeed one of the strengths of the task. However, there is still an imbalance (e.g., 9 statives vs. 14 achievements), which means that when students are grouped according to appropriate use of past based on responses to all target items, not all aspectual categories contribute equally to the score.⁷ The imbalance also has an impact on comparisons of the distribution of forms across aspectual classes.

⁷ The original study for which this instrument was developed did not group students this way; this observation pertains to the grouping procedure used in this study only.

Some variation in passage length and the number of blanks per passage is inevitable, given the necessity of providing sufficient context to establish unambiguous situations for the use of specific tense/aspect forms. The distribution of blanks in the instrument was more varied than necessary, however. Some of the cloze passages were one-sentence in length, and contained a single blank, whereas others were several sentences long and required as many as 10 responses. Less variety among the presentation of the target items is desirable, so that learners experience each verb in comparable conditions.

Incomplete tasks

Data from students who did not complete the cloze tasks were not included in the study, but this sometimes meant excluding a student who had completed all but the final two passages on the last page (the penultimate passage was quite long). Had these students been included, the effect would have been to artificially increase the number of blanks for the items found in the final passages. If there had been 2 or more versions of the task, however, the effect of including tasks in which only a few items were left unfinished would have been minimized, thereby allowing for the inclusion of a greater number of potential participants. Different versions of the task would also allow for some control over ordering and attention effects on students' performance.

These observations on the cloze task come with the benefit of hindsight, of course, and none of the points raised above calls into question the validity of using this type of instrument for investigating acquisitional patterns in the use of tense and grammatical aspect among L2 classroom learners. Rather, they point to issues that need to be considered in future research using a cloze passage-type elicitation instrument. The second study attempted to address these issues.

CHAPTER 5 - STUDY 2 (METHODOLOGY)

The second study took place one year after the first, and involved different francophone students from the same institution who were enrolled in the annual intensive ESL programme. As this study involved different tasks from the first, a NS control group was also included. This chapter outlines the methodology of the second study, explaining the various ways in which the study addressed the methodological issues raised in the previous chapter.

Participants

The participants were drawn from the same population as the first study, but they represented a wider range of proficiency. The year the second study was conducted, the university had decided to expand their intensive ESL programme by admitting a group of lower-level ("beginner") students who had scored below the usual cut-off point on the placement test. The participants in the study therefore included students from the first three levels of the (now) five-level intensive English programme, one class from Level 1 and two from each of Levels 2 and 3. The total number of students participating in the study was 136, of which 28 reported a first language other than French. This study reports the results from the 108 francophone learners of English only.

In addition, 30 fluent speakers of English who had also been studying a second language (French) provided baseline data. They were high school students (17 and 18 year olds for the most part) in an English-speaking city in Ontario. Of the 30 students, 7 reported having a first language other than or in addition to English (4 Chinese speakers and 1 speaker each of French, Spanish, and Tagalog), but all used English as their primary language and had done their elementary and high school education in English schools. Furthermore, their performance on the tasks was indistinguishable from that of the participants

reporting English as their L1. They were therefore included as part of the baseline group, which, for ease of reference, will be referred to as the NS group. It should be noted, however, that Fluent or Standard Speaker would better reflect the language history of the group (and indeed of increasing numbers of people around the world).

Instruments and Procedure

There were 3 instruments: a revised version of the cloze task used in Bardovi-Harlig and Reynolds (1995) and Study 1, a preference task, and a guided retell of a silent film (copies of the revised cloze and preference tasks appear in Appendices D and E).¹ All tasks were piloted with both NS and NNS (francophone) populations prior to the main data collection. The only changes made to the instruments after the pilot-testing involved some rewording of the instructions and the examples.

The data were collected over two consecutive days, during the students' regular class time. All participants viewed the film and did the written retell on the first day (a process which took approximately an hour), and the cloze and preference tasks (which took 30 and 15 minutes respectively) on the second. Only the results from the cloze and preference tasks will be reported here; the results of the film retell are reported in a separate study (Collins, 1999). However, some mention will be made of the retell task during the discussion of the findings from the other two tasks.

Procedures for NS's

I administered all three tasks to the NS group. Students were told that they were participating in a study investigating the patterns of acquisition

¹ The instructions for the tasks in which reference was made to the L2 learning of English were modified (changed or deleted) for the NS participants.

among francophone learners of English, and that their contribution would be to serve as a comparison group of fluent English speakers. Before doing the tasks, each student completed a written consent form (see Appendix F) and was offered the choice of either participating in the study or having a study period. All students agreed to participate. On the second day of the data collection, after they had finished the final two tasks, they were told the grammatical focus of the study, and were given an opportunity to ask questions about the research project. In addition, at the request of the participating teacher, they were given a short lecture on the nature of interlanguage development during which they were shown examples of responses to the tasks produced by francophone L2 learners of English.

Procedures for NNS's

The same procedure for contacting teachers described in the first study (see chapter 3) was used here. To avoid recent instructional effects, data collection again took place during the first two days of the 6-week programme. The film retell was administered to all 5 classes at the same time. Teachers administered the cloze and preference tasks on the second day of the programme, having agreed to delay any verb review lessons until after the students had completed the tasks. A debriefing was held with each teacher individually on the second day of the data collection to identify any irregularities in the administration of the tasks, of which none were reported. The teachers obtained written consent from the students in French to participate in the study (an English version of the consent form appears in Appendix G).

Revised Cloze

The revised cloze consisted of 25 passages in which 56 of the 82 items targeted the simple past. There were 14 items from each of the aspectual categories. A list of the 56 verbs appears in Appendix H. Passages were at least 2

sentences long and most contained 2 or 3 blanks (target and/or distractor items).² All target items (but not necessarily the distractors) were in 3rd person singular contexts.

The items from the original cloze that had been created to examine the effect of adverbs of frequency were either rewritten without the adverbs, or eliminated.³ Other changes included: the omission of the 3 activity items that had been problematic in the previous version; the replacement of the activity *worry*, which had frequently elicited the adjectival form *was worried*, with *panic*; and the removal of *be* as one of the statives, as previous research with learner narratives has found that learners treat this stative differently from other statives (it always appears as a tensed form) (Bardovi-Harlig, 1998). Among the 26 distractors, an attempt was made to provide more variety in the contexts for tense/aspect forms other than simple past.

An additional feature of the new version of the cloze was the use of repeat items, both within and across categories. There were 5 verbs that appeared in both the activity and accomplishment categories, to see whether learners would produce different responses when the same verb appeared in a different aspectual context. For example, *swim*, *run*, and *ride* are accomplishments in passage #5:

Bill was a participant in a triathlon here last summer. He didn't win but he (seem) _____ satisfied at the end of the race. He (swim) _____ a kilometer, (run) _____ 5 kilometers and then (ride) _____ his bicycle 10 kilometers. Maybe next year I (participate) _____, too.

² Of the 25 passages, 17 had either 2 blanks (n=8) or 3 blanks (n=9). The distribution of blanks in the remaining passages were: 3 passages with 4 blanks; 4 with 5 blanks and one passage had 7.

³ In one of the newly created items there was one activity verb predicate containing an adverb of frequency (*run + sometimes* in passage #18, see Appendix D). This was an oversight.

and achievements in passage #18:

My parents' vacation in Florida didn't start off very well. It (rain) _____ for the first 6 days! After that, the weather was nice so my mother (swim) _____ in the ocean and my father (ride) _____ his bicycle along the beach. Sometimes my mother (run) _____ along the beach beside him. They (plan) _____ to go back to the same place next year.

In addition, within each aspectual category, one verb appeared twice. The purpose was to explore the amount and type of variation for repeated verbs both within and across categories.

There were two versions of the cloze: the same passages appeared in both versions, but in reverse order. This was to control for ordering effects and to minimize the impact of unfinished items in the final passages on the last page, making it possible to retain data from students who simply ran out of time. A further advantage of having two versions of the cloze was that the repeat items were also experienced in different orders. For example, half the participants first encountered *ride*, *run*, and *swim* as accomplishments, while the other half first encountered them as activities. In the package which was provided to each teacher, the two versions of the cloze had been arranged in alternate order for distribution to the class.

Preference Task

The preference task was designed primarily to investigate NS and NNS behaviour with the past progressive in the activity verb category. It consisted of 11 passages from the cloze (1 from the original and 10 from the revised cloze), in which the base verbs and blanks had been replaced by full verb phrases. In each

passage, learners were presented with 3 to 5 pairs of forms and asked to indicate their preference for one, both or neither of the forms by:

- circling one of the two choices
- circling both
- circling neither and marking an x
- marking a ? if they did not know

Here is an example of a passage:

Bill was a participant in a triathlon here last summer. He didn't WIN/WON but he seemed satisfied at the end of the race. He WAS SWIMMING/SWAM a kilometer, RAN/WAS RUNNING 5 kilometers and then WAS RIDING/RODE his bicycle 10 kilometers. Maybe next year I'll participate, too.

The first pair (*win/won*) is a distractor, the three other pairs are target items.

There were 40 items, of which 20 were distractors, and 20 presented choices between past progressive and simple past. Table 5.1 presents the 20 simple past/past progressive pairs and identifies the aspectual class of the items. Of the 12 activity items, 9 were from the revised cloze used in Study 2, and 3 were the "problematic" activity verbs from Bardovi-Harlig & Reynolds' cloze (*snow, dance, and sing*). There were also 5 accomplishments and 1 achievement (hereafter referred to as the telics), and 2 non-target items from the revised cloze, which served as "progressive" distractors, so that not all target items were confined to activity situations only.⁴ Included in the 20 pairs were 4 of the verbs that had appeared in both activity and accomplishment contexts on the revised cloze (*swim, run, ride, and tell*). The order of presentation of progressive and simple forms varied from item to item so that students did not always encounter

⁴ The non-target items were distractors on the cloze, and were included by default, as they occurred in passages in which key activity verb items were located.

the same form first when deciding on their preference for each context. The only instances of progressive in the preference task passages occurred with the 20 pairs of simple past/ past progressive choices. Simple past was used elsewhere in the texts, however (for an example, see the distractor item in sample passage above).

Table 5.1
Simple Past/Past Progressive Items in Preference Task

Item	Aspectual class
snowed/was snowing	activity (B-H&R)
were dancing/danced	activity (B-H&R)
sang/were singing	activity (B-H&R)
was panicking/panicked	activity
rained/was raining	N/A
was swimming/swam	activity
rode/was riding	activity
was running/ran	activity
told/was telling a story	accomplishment
was working/worked	activity
wrote/was writing two papers	accomplishment
was finishing/finished	achievement
ate/was eating	activity
was cooking/cooked	activity
was telling/told	N/A
lived/was living	activity
was swimming/swam a km	accomplishment
ran/was running 5 km	accomplishment
was riding/rode 10 km	accomplishment

Note. Items are presented in the order in which they appear on the preference task. B-H & R identifies the 3 items from Bardovi-Harlig and Reynolds' (1995) cloze task; all other items are from revised cloze task. N/A identifies the 2 distractors from the revised cloze (i.e., items which did not occur in obligatory contexts for simple past).

The distractors presented the participants with choices between other tense/ aspect pairs, and between a variety of grammatical categories, such as articles and pronouns. They covered the range of possible response choices. Table 5.2 lists the 20 distractors and the distribution of the response types. There were 10 cases in which one of the two forms was correct, 5 in which both were

correct, and 5 where neither response was correct. The first page of the preference task contained the examples and the first passage only, a passage in which all items were distractors. This was to allow participants some experience with the task before they encountered the target items.

Table 5.2
*Distribution of Response Types for Distractor Items
 in Preference Task*

Correct Response	Item
one	the/a
neither	she/it
one	marries/married
one	are/is
both	my/his
both	for practicing/to practice
neither	their/her
both	his/my
neither	goes/has gone
one	in/to
one	the/a
one	they/we
both	has been improving/has improved
one	to/at
neither	peoples/persons
one	at/in
both	beside/near
neither	cooked/cook
one	changed/has changed
one	win/won

Note. Items are presented in the order in which they appear on the preference task.

For the NS's, the purpose of the preference task was to see whether they would accept progressive responses for activity verbs for which their first choice in the cloze had been simple past,⁵ and whether the tendency to do so would be greater for some verbs than others, thereby serving as a check on the reliability of the activity verb items in the cloze. For the NNS's, the primary purpose of the

⁵ Or, as we shall see, habitual past, as a few NS's preferred habitual past for some activity items. This will be discussed in more detail in the next chapter.

preference task was to probe the strength of the progressive/ activity association, through a comparison of the acceptance of simple past and past progressive on the preference task with the production of the same forms for the same items on the cloze.

CHAPTER 6 - ANALYSES AND RESULTS OF CLOZE TASK (STUDY 2)

There were 108 francophone students who participated in the study, and the cloze tasks of 91 were retained for analysis: 16 students did not complete the task¹ and 1 supplied past appropriately 100% of the time.

Three quantitative analyses of the 5096 responses were performed: an analysis of the overall use of simple past, of the use of simple past in each of the four aspectual categories, and of the alternative forms to past supplied in the target contexts. Responses to the repeat items, both within (n=4) and across (n=5) aspectual categories, were analyzed by group and by individual learner.

Of the 91 learners, 49 had completed one version of the cloze task, 42 completed the other. The results of a series of independent *t*-tests on the effect of cloze version on the overall use of simple past, and on the use of simple past within each of the 4 aspectual categories, revealed no significant differences between the two versions (see Table 6.1).² Therefore, no further distinction was made between the two versions for the remainder of the analyses.

The 1680 NS responses were examined to establish that the 56 target items constituted obligatory contexts for the simple past. Table 6.2 summarizes the frequency distribution of the suppliance of simple past by percentage of NS responses. For the overwhelming majority of the items, the agreement was 100% in favour of simple past. The lowest percentage of agreement was 80%, for two of the items, and even then the verbs were treated as unambiguous contexts for past, as the alternative form that was supplied was always habitual past. A more

¹ The fact that there were two versions of the cloze allowed for the inclusion of the tasks of a small number of students who left only the final passage or parts of the final two passages incomplete, since the effect of doing so was spread across different verbs.

² As the purpose of the comparison was to verify that the use of the 2 versions did not lead to differences in the groups, the alpha level (α) was set at a conservative .10. This reduces the risk of a Type 2 error, i.e., rejecting a true null hypothesis.

detailed discussion of the alternative forms used by the NS's will be taken up later in the chapter.

Table 6.1
The Effect of Cloze Version on Use of Simple Past (NNS)

Use of past	Cloze version ^a	<i>M</i>	<i>SD</i>	<i>t</i>
Overall	A	62.90	24.95	-.842
	B	66.88	19.19	
States	A	54.66	25.57	-1.760
	B	63.44	21.30	
Activities	A	62.40	28.04	-.191
	B	63.44	23.46	
Accomplishments	A	65.31	27.90	-.697
	B	69.22	25.22	
Achievements	A	69.24	27.25	-.415
	B	71.43	22.20	

Note. None of the *t*-values is significant at $\alpha = .10$

^aVersion A, *n* = 49; Version B, *n* = 42

Table 6.2
NS Use of Simple Past on Cloze

Percentage use of simple past	Number of items (<i>N</i> =56)
100	35
97	12
93	4
90	1
87	2
80	2

Use of Simple Past

To obtain a cross-sectional profile of the sample, students were regrouped according to their appropriate use of simple past for all 56 target items, following the same scoring procedure used in Study 1. As there were now equal numbers of predicates from each of the four aspectual categories (14 x 4), none of the categories over- or under-contributed to students' scores. The grouping procedure yielded 9 groups of approximately 10 students per group. Table 6.3 shows the number of students per group, the percentage range of appropriate use of past within each group, and the level in which the university placement test had placed the students.

Table 6.3
*Distribution of Students Grouped by Percentage
Appropriate Use of Simple Past (SP) - Study 2*

Group	N	% use of SP	Placement test level		
			1	2	3
1	11	3 - 38	3	7	1
2	10	39 - 48	1	8	1
3	10	49 - 57	2	4	4
4	10	58 - 64	-	10	-
5	10	65 - 70	1	5	4
6	11	71 - 79	1	4	6
7	9	80 - 84	1	2	6
8	10	85 - 90	-	4	6
9	10	91 - 99	-	1	9

Note. Figures in italics show number of students in each of the original placement test levels.

Although the learners in this study represented a wider cross-section of proficiency than those of the first study (the appropriate use of past ranged from 3 - 99 %), there were still relatively few students in the lower half of the sample. To include all students in groups of approximately equal numbers of participants, the same data-driven approach employed in the first study was used, and the variation in the range of appropriate use of simple past in the groups reflects the actual distribution of the 91 scores.

In examining the placement test levels we see once again the justification for using an independent measure for regrouping the students. For example, students in group 3, who supplied the simple past appropriately approximately 50% of the time, came from all three of the placement-test determined levels.

Distribution of Simple Past

The second analysis was an analysis of the distribution of the appropriate use of simple past tense by group in the 4 lexical aspectual classes. Learners received a score for each item in the stative, activity, accomplishment, and achievement categories. Percentages were calculated based on the number of simple past forms supplied, out of a possible 14 for each category, and the mean was calculated for each aspectual category in each of the 9 groups.

The results are shown in Figure 6.1 and Table 6.4. A repeated measures MANOVA showed that there was a significant difference in past tense use across lexical aspect [$F(3, 246) = 12.17, p = .001$], and that there was no interaction between group and lexical aspect. Even at the higher levels of proficiency, then, lexical aspect continued to influence learners' use of simple past. A Tukey HSD post hoc analysis of the four means for statives, activities, accomplishments, and achievements revealed significant differences between achievements and both

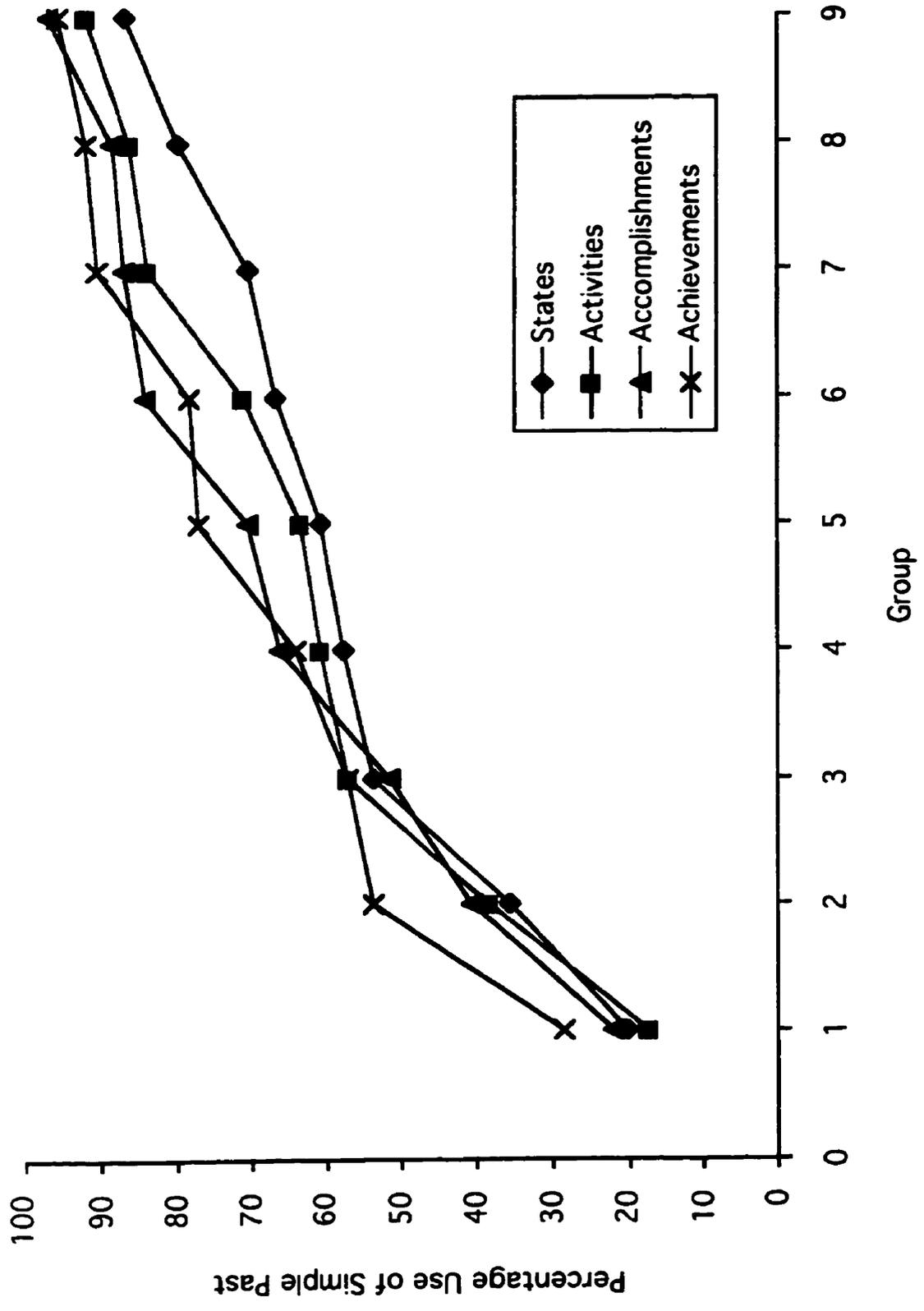


Figure 6.1. Distribution of simple past by lexical aspect

Table 6.4
The Use of Simple Past Across Lexical Aspectual Class in Mean Percentage Responses

Group	States	Activities	Accomplishments	Achievements
1	20.13 (13.86)	17.53 (14.76)	22.08 (17.63)	28.57 (19.95)
2	35.71 (12.14)	38.57 (14.36)	40.71 (12.62)	53.57 (18.82)
3	53.57 (15.15)	57.14 (17.50)	51.43 (10.54)	57.14 (20.76)
4	57.86 (14.07)	60.71 (14.77)	66.43 (13.06)	64.29 (11.17)
5	60.71 (18.52)	63.57 (9.79)	70.71 (17.32)	77.14 (15.36)
6	66.88 (12.89)	71.43 (11.95)	84.42 (7.01)	78.57 (9.58)
7	70.63 (12.60)	84.13 (5.95)	87.30 (8.58)	90.48 (5.05)
8	80.00 (12.51)	86.43 (7.10)	88.57 (6.02)	92.14 (4.05)
9	87.14 (8.11)	92.14 (8.55)	97.14 (3.69)	95.71 (4.99)

Note. Standard deviations are in parentheses.

statives and activities (atelic), and between accomplishments and statives. There were no significant differences between accomplishments and activities, or between statives and activities (see Appendix I for a description of the calculations). Thus, learners showed more appropriate use of past with accomplishments and achievements (telic), and within the atelic categories, least appropriate use with statives.

Although there were no significant differences among the telic or the atelic means for the sample, Figure 6.1 shows that there were some differences within

these categories for some of the groups. In the two lowest groups, students had more success with achievements than with accomplishments. Among the three highest groups, learners were consistently challenged more by stative situations than by activities. An examination of the stative category in these three groups further revealed that the use of forms other than simple past occurred with a variety of verbs in the category.

Distribution of Alternatives to Simple Past

The third set of analyses looked at the effect of lexical aspect on the alternatives supplied for past. This first analysis examined the distribution of the different forms within each of the aspectual categories, by group. The second analysis looked at the distribution of the forms across categories, by verb. The two analyses complement each other: the former highlights response patterns for aspectual classes, the latter examines the robustness of the observed patterns by examining the degree to which the suppliance of a particular form is characteristic of the aspectual category in general or of only a few items within the category.

Response categories included the same categories used in the first study (progressive, perfect, other, and blank) but because all target items were in 3rd person singular contexts, it was possible to examine base (uninflected forms) and present forms separately. The coding conventions were also the same, with the exception of the *have + ing* responses. In the first study, the relatively few instances of this form were treated as both perfect and progressive responses, as some (but not all) learners seemed to making a distinction between *be + ing* and *have + ing*. In this study they were coded as progressive responses only, as it is not at all clear that the presence of *have + ing* without some form of *be* can or should be interpreted as present or past perfect progressive, or that the

distinction being made by learners who used both reflected a difference corresponding to past and present perfect progressive. It seemed more likely that learners were simply working out the correct auxiliary for the past progressive, possibly influenced by French in which both *be* and *have* are used when forming the compound past. There were only two instances in the data of a 'true' perfect progressive form, and these were coded as both perfect and progressive.

Alternative Response Patterns Within Aspectual Categories

Figures 6.2-6.5 show the distribution of the base, blank, present, progressive, and perfect responses by group (in mean percentages) for each of the 4 aspectual categories. Past responses have been removed to focus attention on the other forms that the learners supplied. In addition, because responses in the "other" category were relatively infrequent and represented a variety of forms, they have also been excluded. The y axis in each graph therefore only goes as far as 80%. The mean percentages and standard deviations for all response categories can be found in Tables 6.4-6.8.

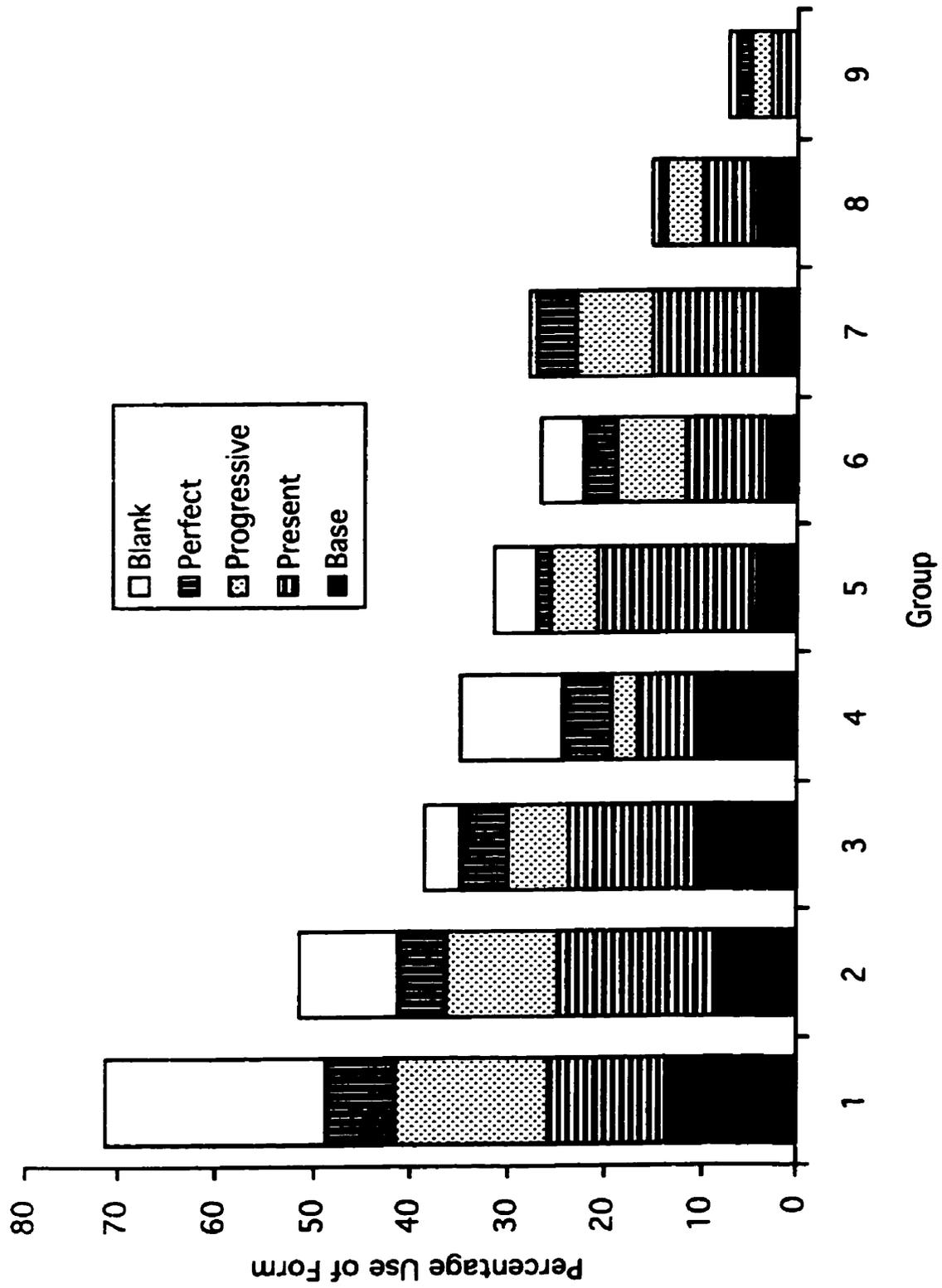


Figure 6.2. Distribution of non-past responses for statives

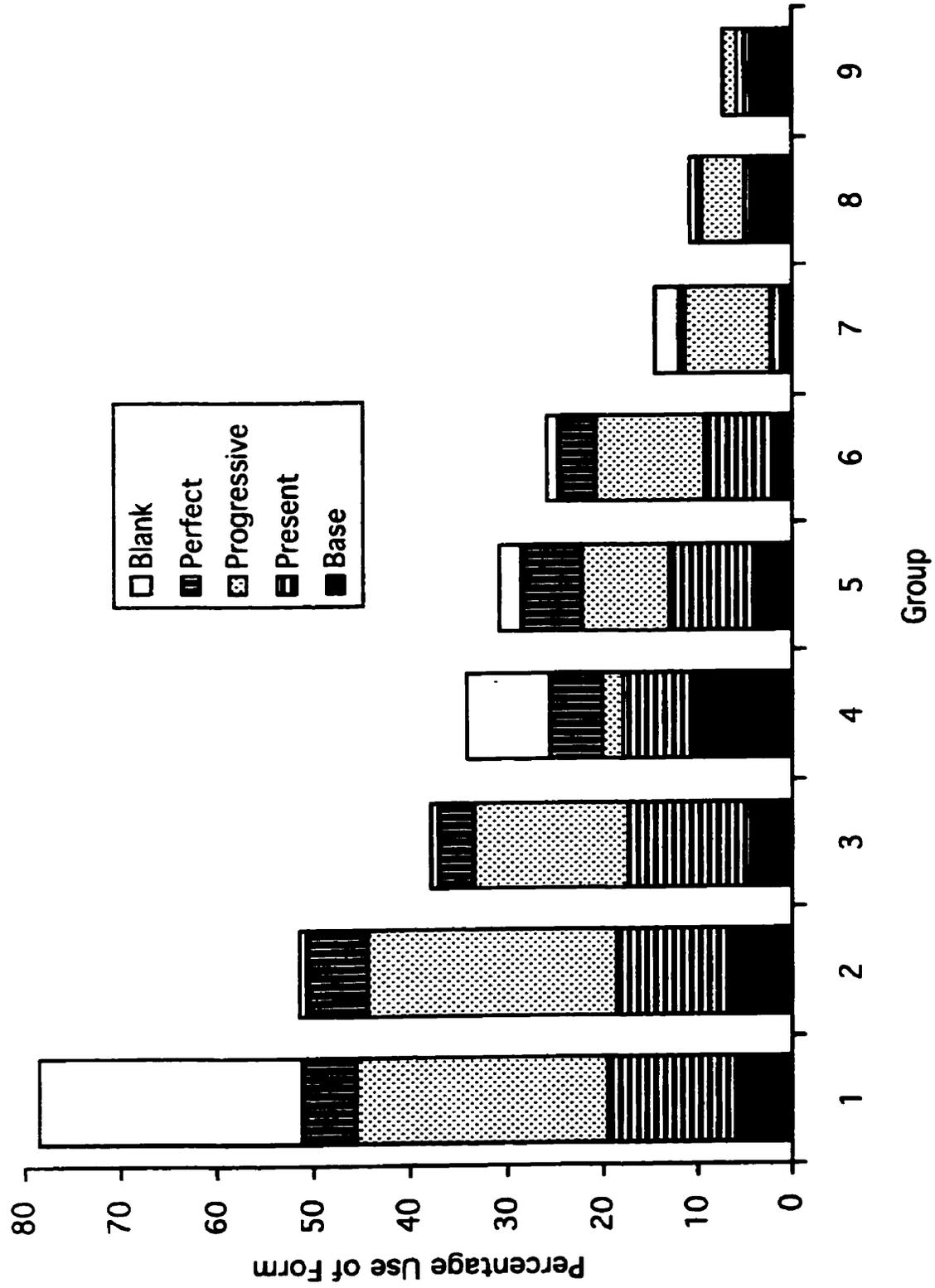


Figure 6.3. Distribution of non-past responses for activities

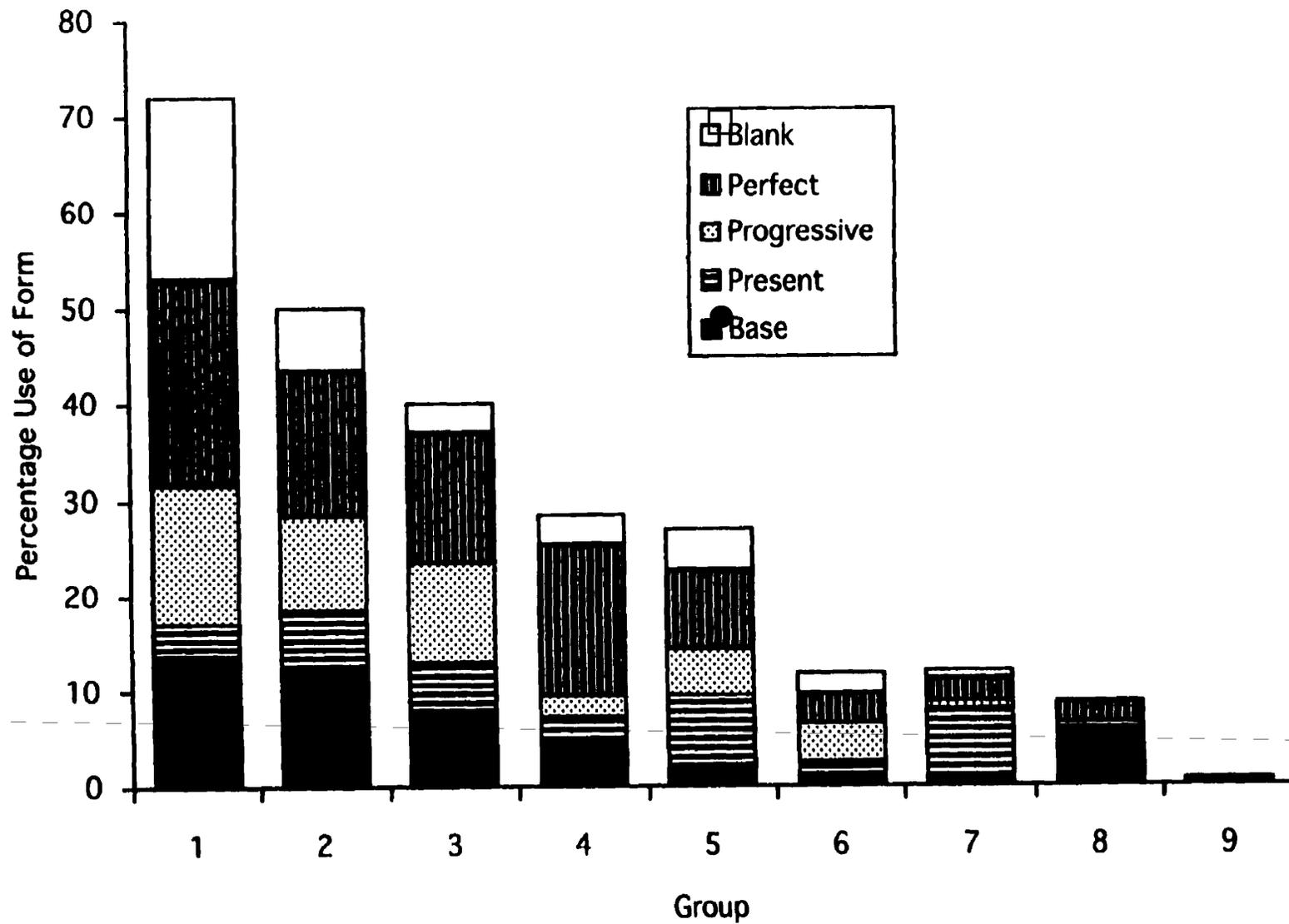


Figure 6.4. Distribution of non-past responses for accomplishments

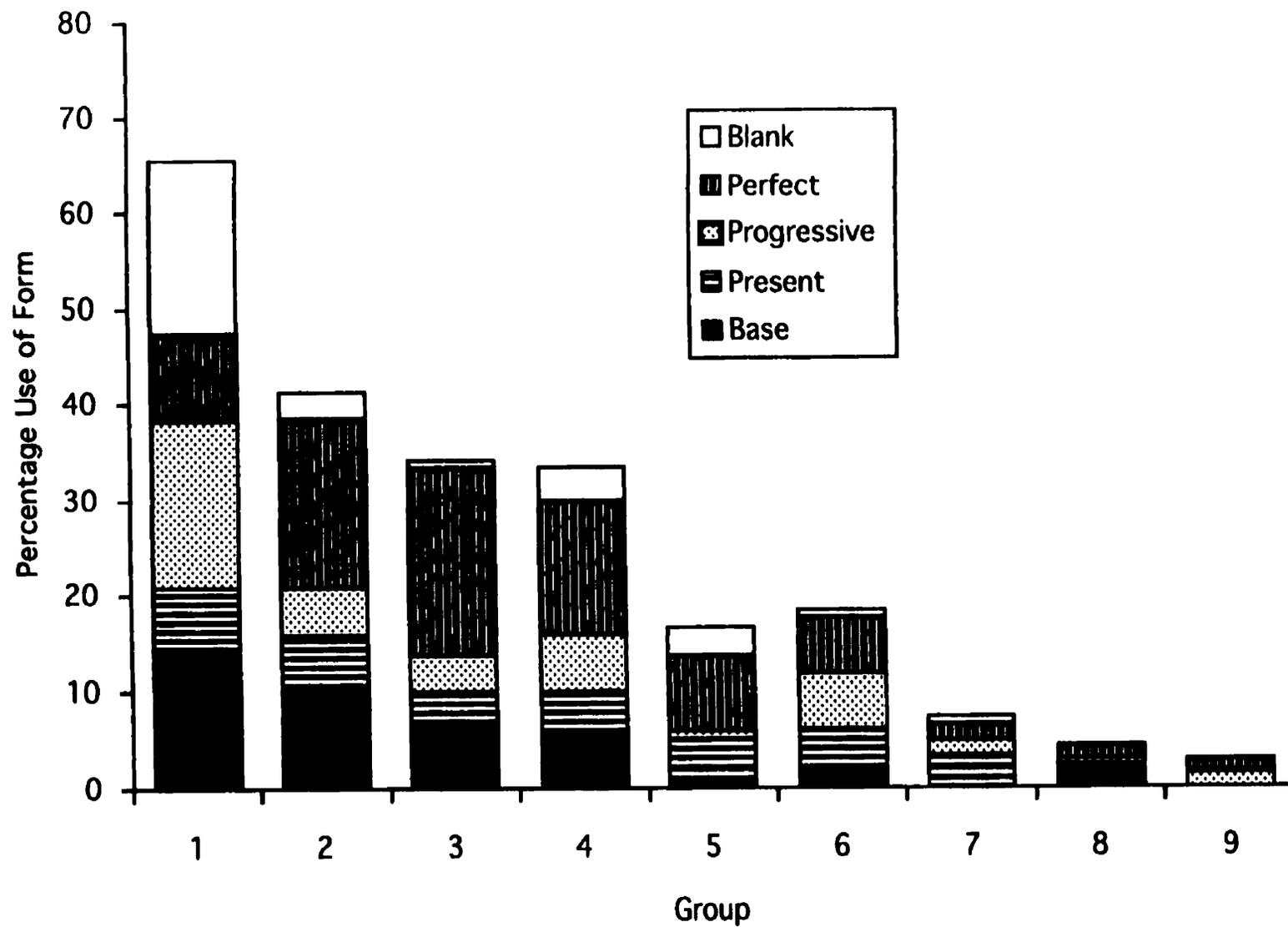


Figure 6.5. Distribution of non-past responses for achievements

Statives

The alternative responses to statives (see Table 6.5) seem to reflect the difficulty this category represented for learners. There are patterns to the responses, but there is also considerable variation, more so than with activities, accomplishments, and achievements.

Table 6.5
Distribution of Responses for Statives by Group in Mean Percentages

Group	Past	Base	Present	Progressive	Perfect	Other	Blank
1	20.13 (13.86)	13.64 (16.12)	12.34 (14.32)	15.58 (19.12)	7.14 (7.14)	8.44 (7.71)	22.73 (19.38)
2	35.71 (12.14)	8.57 (13.80)	16.43 (8.94)	11.43 (13.13)	5.00 (9.55)	13.57 (14.46)	10.00 (10.75)
3	53.57 (15.15)	10.71 (13.98)	12.86 (17.10)	6.43 (7.10)	5.00 (5.88)	8.57 (8.11)	3.57 (6.07)
4	57.86 (14.07)	10.71 (11.29)	5.71 (11.07)	2.86 (3.69)	5.00 (5.88)	7.14 (13.47)	10.71 (15.52)
5	60.71 (18.52)	4.29 (6.02)	16.43 (13.49)	5.00 (6.78)	1.43 (3.01)	7.86 (7.10)	4.29 (7.68)
6	66.88 (12.89)	3.25 (4.91)	8.44 (8.34)	7.14 (7.82)	3.25 (4.91)	6.49 (6.74)	4.55 (4.82)
7	70.63 (12.60)	3.97 (6.30)	11.11 (12.93)	7.94 (9.74)	3.97 (5.19)	1.59 (3.15)	0.79 (2.38)
8	80.00 (12.51)	4.29 (9.04)	5.71 (6.56)	3.57 (6.07)	0.71 (2.26)	5.00 (5.88)	0.71 (2.26)
9	87.14 (8.11)	-	2.86 (3.69)	2.14 (4.82)	1.43 (3.01)	5.71 (4.52)	0.71 (2.26)

Note. Standard deviations are in parentheses.

Present and base responses combined are the most commonly supplied alternatives to simple past in this category. However, because it is possible to separate these two response categories in this study, we see that it is in fact the

inflected form - present - and not merely the uninflected base, that is the most common response overall for statives. There is also some suppliance of progressive and when compared to other categories, there is greater use of blanks with statives. (The distribution of blank responses for the sample as a whole show 34% of the blank responses occurring in the stative category, compared with 26%, 17%, and 22% in the activity, accomplishment, and achievement categories.).

Group 4 is the one exception to the trend, as the uninflected base and blank responses are the most frequent. In this group, a few learners supplied unusually high numbers of these responses (different learners for each of the two alternatives).

Activities

With activities, the most common non-past response category is progressive (see Table 6.6). Even in the least proficient group, in which a variety of responses are produced, the suppliance of progressive is quite frequent. Progressive continues to be supplied frequently relative to other responses, even as proficiency with simple past increases. The one exception to the trend is again Group 4, for the reasons explained above. There is also some use of present with activities.

Accomplishments and achievements

For accomplishments and achievements, the suppliance of past is greater than for other categories (see Tables 6.7 and 6.8), but there is nevertheless a pattern among the responses other than simple past. Perfect is the most common response overall - it is supplied much more frequently for telics than for atelics. In addition, the use of perfect increases, relative to the use of other non-past forms, with proficiency (see percentage use of perfect in groups 2 through 5). It is

also interesting to note that the response pattern for Group 4 follows this trend in both accomplishment and achievement categories.

Table 6.6
Distribution of Responses for Activities by Group in Mean Percentages

Group	Past	Base	Present	Progressive	Perfect	Other	Blank
1	17.53 (14.76)	5.84 (8.34)	13.64 (16.43)	25.97 (29.50)	5.84 (5.36)	3.90 (4.91)	27.27 (27.63)
2	38.57 (14.36)	6.43 (15.59)	12.14 (7.57)	25.71 (24.56)	6.43 (7.86)	10.00 (17.24)	0.71 (2.26)
3	57.14 (17.50)	4.29 (9.64)	12.86 (17.43)	16.43 (11.69)	3.57 (5.05)	5.00 (4.82)	0.71 (2.26)
4	60.71 (14.77)	10.71 (13.98)	7.14 (9.52)	2.14 (3.45)	5.71 (9.40)	5.00 (6.78)	8.57 (18.38)
5	63.57 (9.79)	3.57 (9.07)	9.29 (8.94)	9.29 (10.13)	6.43 (10.35)	5.71 (7.38)	2.14 (3.45)
6	71.43 (11.95)	1.95 (3.34)	7.14 (7.14)	11.69 (9.73)	3.90 (5.86)	2.60 (3.60)	1.30 (2.89)
7	84.13 (5.95)	0.79 (2.38)	1.59 (4.76)	8.73 (6.94)	0.79 (2.38)	1.59 (4.76)	2.38 (5.05)
8	86.43 (7.10)	4.29 (6.02)	0.71 (2.26)	4.29 (6.90)	0.71 (2.26)	2.86 (3.69)	0.71 (2.26)
9	92.14 (8.55)	4.29 (7.68)	1.43 (4.52)	1.43 (3.01)	-	0.71 (2.26)	-

Note. Standard deviations are in parentheses.

Table 6.7
Distribution of Responses for Accomplishments by Group in Mean Percentages

Group	Past	Base	Present	Progressive	Perfect	Other	Blank
1	22.08 (17.63)	13.64 (13.35)	3.25 (4.91)	14.94 (24.63)	21.43 (25.95)	5.84 (8.34)	18.83 (22.19)
2	40.71 (12.62)	12.14 (19.36)	6.43 (10.35)	10.00 (11.27)	15.00 (19.47)	9.29 (14.70)	6.43 (10.88)
3	51.43 (10.54)	7.86 (9.19)	5.00 (6.78)	10.71 (10.24)	13.57 (14.07)	8.57 (5.63)	2.86 (4.99)
4	66.43 (13.06)	5.00 (5.88)	2.14 (4.82)	2.14 (3.45)	16.43 (17.83)	5.00 (11.19)	2.86 (4.99)
5	70.71 (17.32)	2.14 (3.45)	7.14 (8.91)	5.00 (6.78)	8.57 (13.38)	2.14 (6.78)	4.29 (6.90)
6	84.42 (7.01)	1.30 (2.89)	1.30 (2.89)	3.90 (4.91)	3.25 (4.91)	3.90 (5.86)	1.95 (4.62)
7	87.30 (8.58)	0.79 (2.38)	7.14 (8.75)	0.79 (2.38)	2.38 (5.05)	0.79 (2.38)	0.79 (2.38)
8	88.57 (6.02)	5.71 (7.38)	0.71 (2.26)	-	2.14 (4.82)	2.86 (3.69)	-
9	97.14 (3.69)	0.71 (2.26)	-	-	-	2.14 (3.45)	-

Note. Standard deviations are in parentheses.

Table 6.8
Distribution of Responses for Achievements by Group in Mean Percentages

Group	Past	Base	Present	Progressive	Perfect	Other	Blank
1	28.57 (19.95)	14.29 (10.10)	6.49 (8.72)	17.53 (14.41)	9.09 (13.96)	5.84 (6.24)	18.18 (22.22)
2	53.57 (18.82)	10.71 (13.15)	5.00 (5.88)	5.00 (4.82)	17.86 (22.14)	5.00 (11.19)	2.86 (4.99)
3	57.14 (20.76)	6.43 (8.55)	3.57 (5.05)	3.57 (3.76)	20.00 (19.58)	8.57 (11.57)	0.71 (2.26)
4	64.29 (11.17)	5.71 (8.11)	4.29 (9.04)	5.71 (6.56)	14.29 (15.06)	2.14 (3.45)	3.57 (6.94)
5	77.14 (15.36)	0.71 (2.26)	4.29 (4.99)	0.71 (2.26)	7.86 (9.79)	6.43 (7.10)	2.86 (6.90)
6	78.57 (9.58)	1.95 (4.62)	3.90 (7.40)	5.84 (8.93)	5.84 (8.93)	3.25 (3.73)	0.65 (2.15)
7	90.48 (5.05)	-	3.17 (3.76)	1.59 (3.15)	1.59 (4.76)	2.38 (3.57)	0.79 (2.38)
8	92.14 (4.05)	2.14 (3.45)	-	0.71 (2.26)	1.43 (3.01)	3.57 (3.76)	-
9	95.71 (4.99)	-	-	1.43 (3.01)	1.43 (3.01)	1.43 (3.01)	-

Note. Standard deviations are in parentheses.

Summary of within category response findings

To summarize the main trends that emerge from these data: when learners were not supplying the simple past, they tended to prefer perfect with telics, progressive with activities, and present (and base) with statives. These are relative and not absolute patterns, however. The standard deviations for the response categories were high (see Tables 6.5 through 6.8) indicating the degree of variation among learners. Furthermore, although there are clear shifts in response categories shown in the graphic display of the data in Figures 6.2 through 6.5, the figures and tables also show that there was some variation in the responses, especially in the atelic situations where progressive forms occur with statives, and base and present forms with activities.

NS responses

It was relatively rare for NS's to supply forms other than simple past - they did so only 2% of the time (41 responses out of a possible 1680). Table 6.9 summarizes the distribution of the forms other than past and includes the aspectual category and number of verb types for the various responses. Habitual past responses were the most common, followed by progressives, and both almost always occurred with activities. Perfect and present responses were quite rare, and when produced, tended to be associated with achievements and statives, respectively.

Table 6.9
Distribution of NS Responses Other than Simple Past

Response form	Aspectual category number of responses (verb types)		Totals	
			Responses	# of NS's
Habitual Past	Activities 19 (6)	Statives 1 (1)	20	12
Progressive	Activities 10 (5)	Telics 3 (3)	13	8
Perfect	Achievements 4 (3)	Statives 1 (1)	5	4
Present	Statives 4 (3)		4	4

Alternative Response Patterns Across Aspectual Categories

In Study 1, it was found that a disproportionate percentage of the progressive responses for the activity category came from 3 verbs in a single passage. That passage was removed from the revised cloze, but the finding showed the importance of analyzing response trends to determine that they reflect associations with lexical aspectual categories in general, and not just specific verbs within each of the categories. To that end, an item analysis of all verbs attracting more than 10% of the perfect, present, or progressive responses was undertaken, for the sample as a whole. Figures 6.6 through 6.8 show the results.

Perfect

Figure 6.6 shows the results for the 11 verbs attracting 10% or more of the perfect responses. The verbs³ are indicated along the x axis, and the percentage of perfect, progressive or present responses along the y axis. Note that because there are 91 participants, 1% is roughly equal to 1 student's response.

None of the verbs were statives, and only 1 was an activity. The rest (n=10) were all achievements and accomplishments (telics), and no one verb appeared to be accounting for a disproportionate amount of the effect. Thus the association between perfect and telics is not restricted to a few telic items, but rather is spread across a variety of verbs in both the accomplishment and achievement categories.

Progressive

Progressive responses greater than 10% were found for 14 verbs (see Figure 6.7). None of the verbs were accomplishments and only 1 was an achievement. Most were activities (n=9), and again, the differences among the verbs were not dramatic.

There were 4 stative verbs that also attracted high percentages of progressive, and in all 4 cases they are verbs that are commonly found in situations denoting activities: look (n=2), smell, and think.

These findings also show that the progressive / activity association is spread among several verbs in the category.

Present

The present responses (displayed in Figure 6.8) showed greater distribution across aspectual categories - there were 15 verbs for which present was supplied more than 10% of the time: 7 statives, 4 activities, and 2 each from

³ For the context in which the verb was used (i.e., the complete predicate), please refer to Appendix D in which the a copy of the cloze instrument appears.

the achievement and accomplishment categories. Of the statives, 3 verbs (enjoy, need, and belong) attracted somewhat more of the present responses than other statives. Although the differences are not dramatic, the strength of the prototypical association between present and stative is somewhat less robust than the associations between perfect and telics or between progressive and activities. In addition, 3 of the 4 activities (*tell stories*, *panic*, and *live*) elicited present responses with comparable frequency to the top 3 statives.

Other forms

An item analysis of the verbs in the base, blank, and past response categories was also performed, to see if any one verb attracted dramatically greater or fewer responses than other verbs. No unusual patterns were observed, with the possible exception of the stative *belong*, for which the blank and simple past responses were somewhat higher and lower, respectively, than for other items. The same item, however, was among the statives attracting the highest use of present.

Summary of across category response findings

The associations found between the use of perfect forms with telics and the use of progressive forms with activities occurred across a variety of items within each aspectual category. Although the association between present and stative also occurred with a number of verbs, the association was somewhat stronger for a few verbs within the category, and equally strong with 3 activity verbs. Finally, the stative *belong* was much more difficult for many of the learners than any of the other 56 verbs.

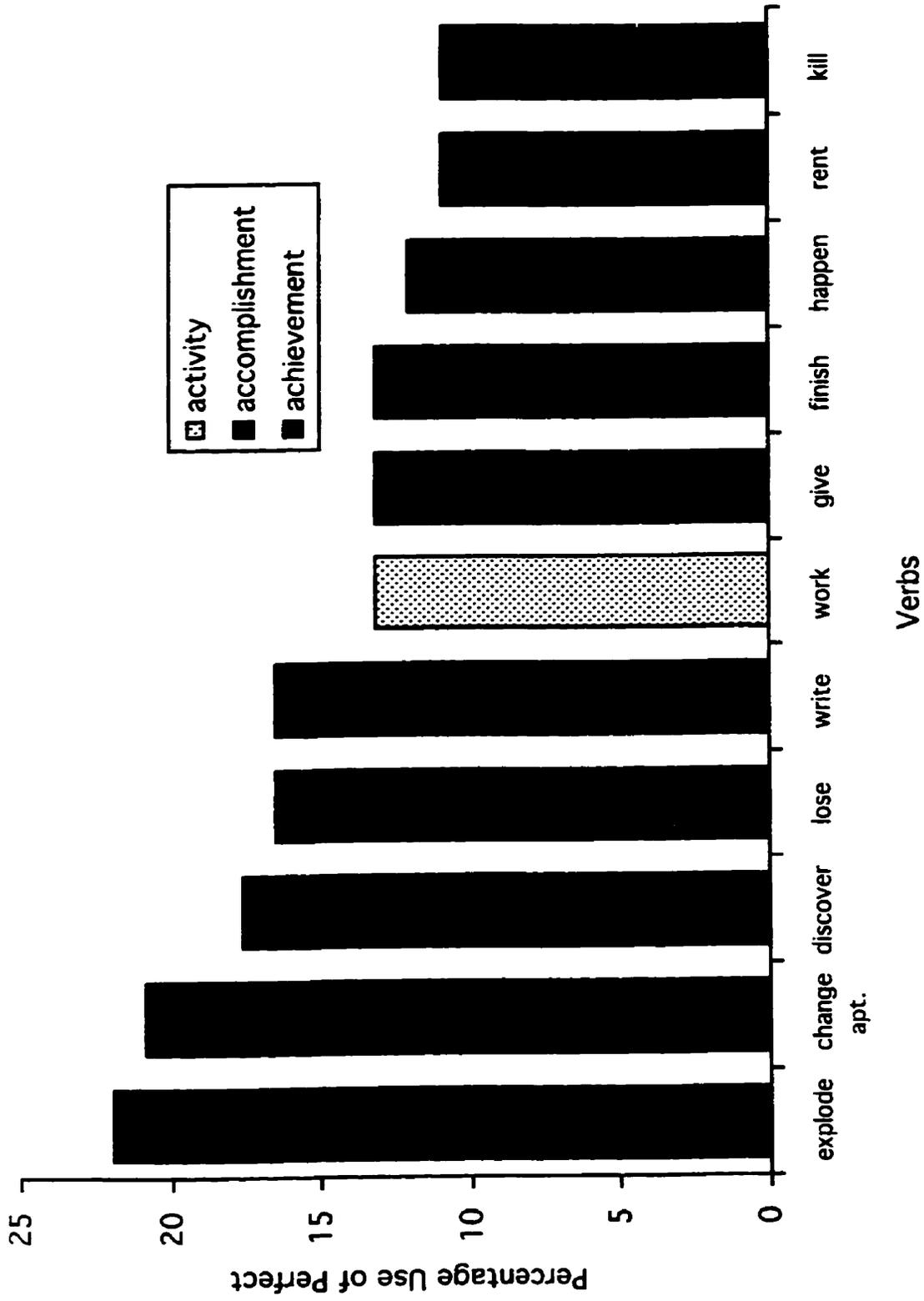


Figure 6.6. Distribution of perfect by verb (percentage of responses > 10%)

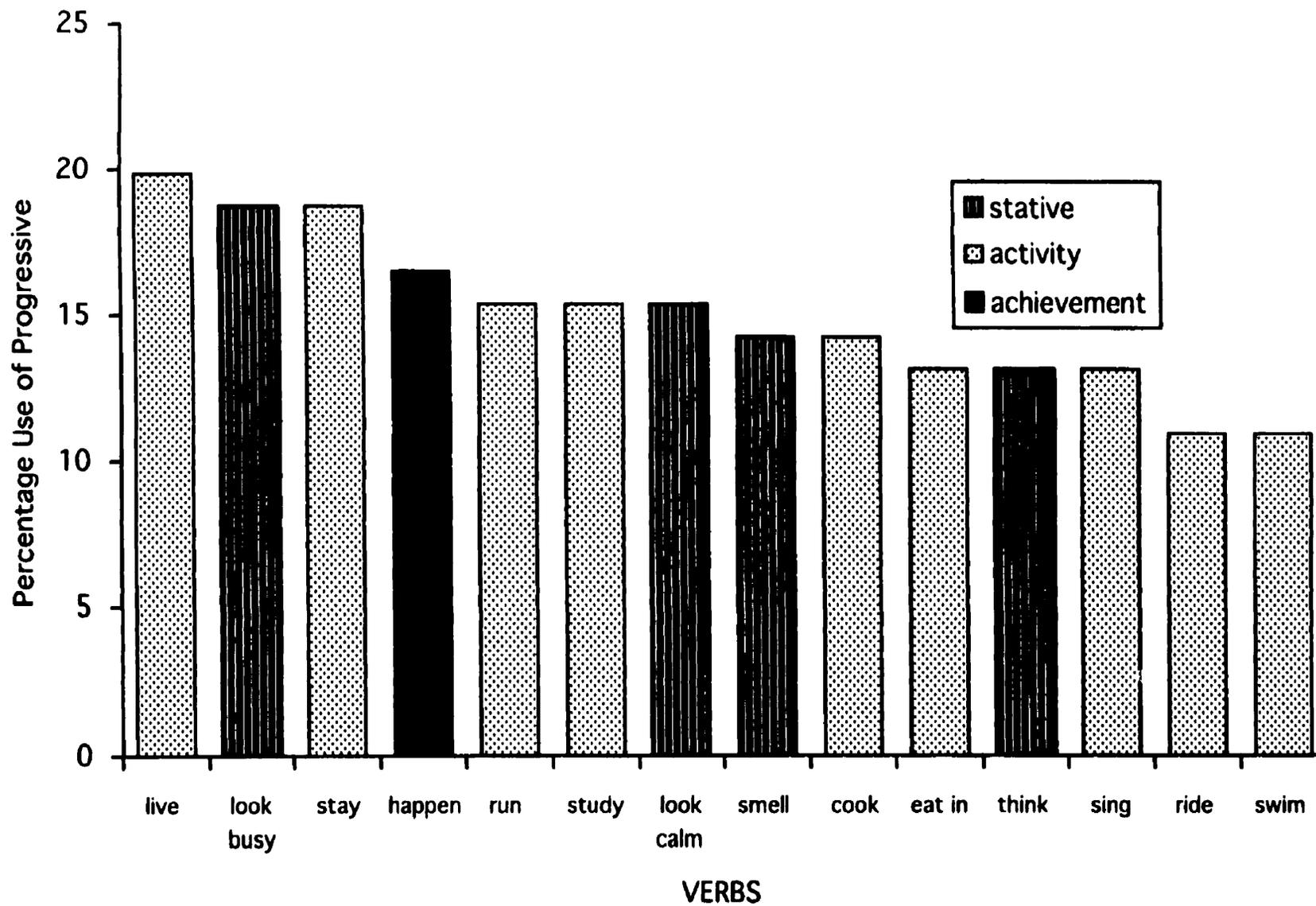


Figure 6.7. Distribution of progressive by verb (percentage of responses > 10%)

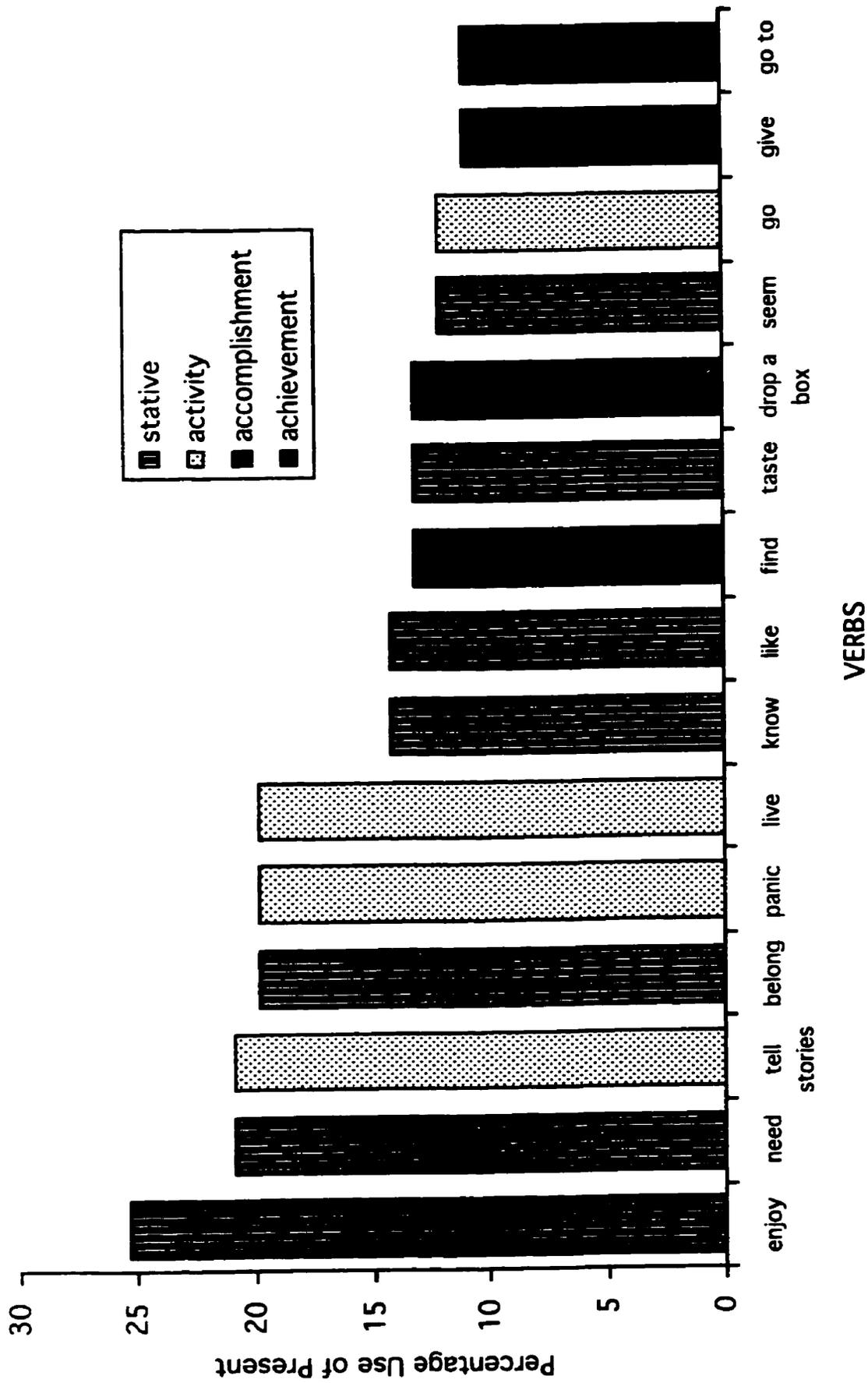


Figure 6.8. Distribution of present by verb (percentage of responses > 10%)

Distribution of Responses to Repeat Items

Across Categories

The following analyses looked at the responses of the participants to the 5 verbs that appeared as both activities and accomplishments: *swim*, *run*, *ride*, *tell*, and *go*. The quantitative analyses summarize the group patterns for the 5 items; the qualitative analyses look at a selection of individual learners' responses to 3 items that appeared in the same passage (*swim*, *run*, and *ride*).

Quantitative analyses

The NS's treated the 5 pairs of items repeated in the activity and accomplishment categories as obligatory contexts for past. Table 6.10 summarizes the distribution of their responses. For 3 of the pairs of items, 97% or more of the NS's supplied simple past in both activity and accomplishment contexts. When *run* and *tell* were activities a small number of responses were habitual past - 20% and 13% respectively. In general, however, the NS's produced simple past for the 5 pairs of repeated items, regardless of lexical aspectual category.

Table 6.10

Percentage Distribution of NS Responses to Repeat Items Across Aspectual Categories

	Swim		Ride		Run		Go		Tell	
	<u>Acc</u>	<u>Act</u>	<u>Acc</u>	<u>Act</u>	<u>Acc</u>	<u>Act</u>	<u>Acc</u>	<u>Act</u>	<u>Acc</u>	<u>Act</u>
Simple past	100	100	100	100	100	80	97	97	100	87
Habitual past						20		3		13
Past progressive								3		

Note. Percentages have been rounded off, and 3% represents 1 participant.

The NNS responses present a very different picture. The quantitative results for the 9 groups on the 5 pairs of items are summarized in Table 6.11. For

each activity/accomplishment pair, the number of students supplying a different response in the two contexts is given. Learners in the five lowest groups frequently used a different form for the same verb when it appeared in a different aspectual context. There is less variation in the responses in the upper three groups, as learners in these groups are more proficient overall in supplying the simple past.

Table 6.11
*Number of NNS's Responding Differently for
 Repeated Items Across Categories by Group*

Group	<i>n</i> ^a	Go	Ride	Run	Swim	Tell
1	11	7	8	9	7	8
2	10	7	4	5	5	7
3	10	4	4	2	2	4
4	10	6	5	3	4	6
5	10	6	2	4	2	4
6	11	3	1	2	3	5
7	9	1	1	2	3	1
8	10	0	0	0	0	0
9	10	0	0	1	0	1

^a*n* represents the total number of students in each group

To explore whether the variation in learner responses was due to greater accuracy with simple past for the accomplishment contexts, a comparison was made of the mean percentage suppliance of simple past by group for all 5 verbs in each of the activity and accomplishment contexts. Figure 6.9 shows that although the trend was for the suppliance of past to be higher for accomplishment contexts in the 6 lowest groups, the differences between the two means do not account for all of the response variation between the two sets of verbs. In group 1, most of the participants produced a different form for the

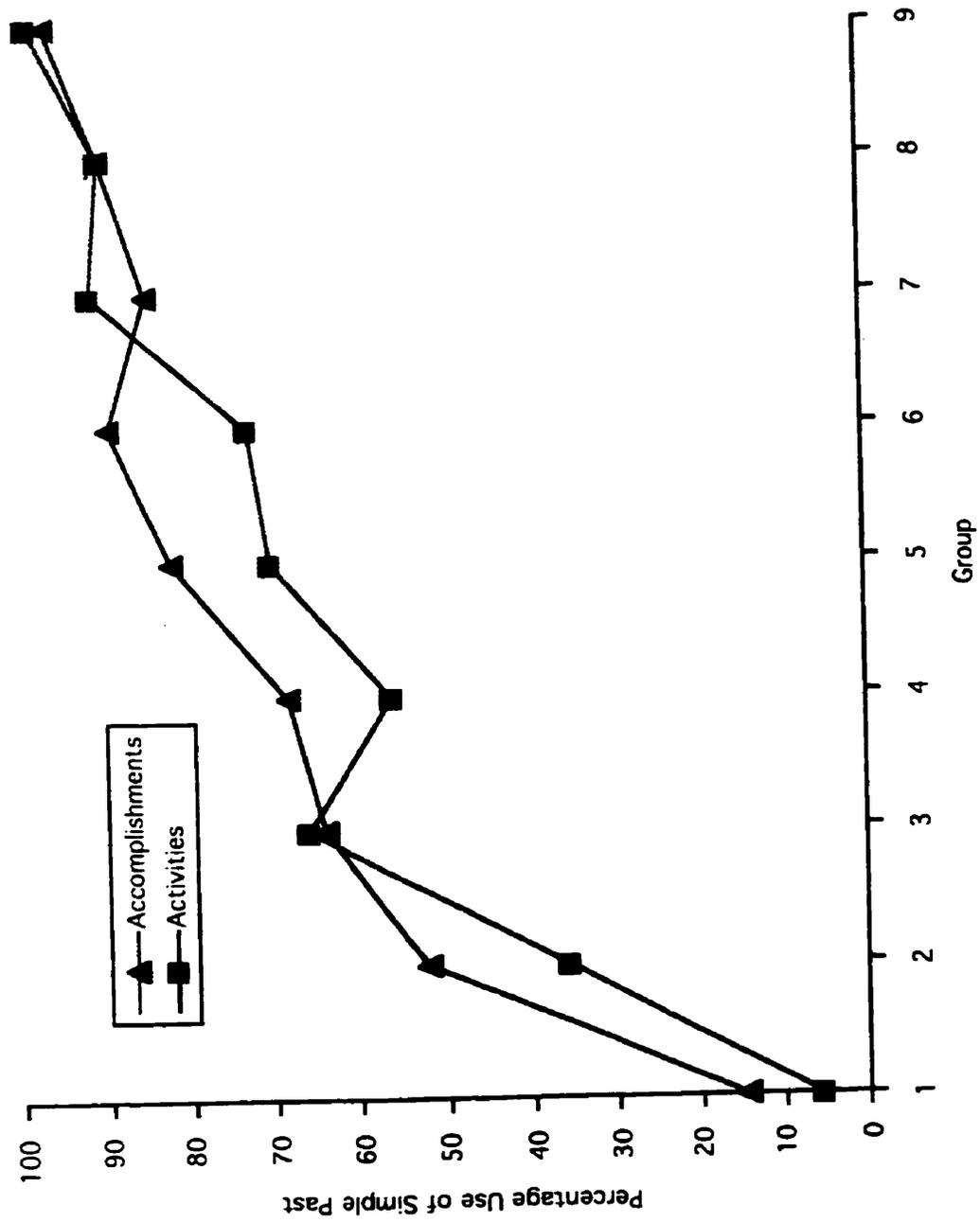


Figure 6.9. NNS use of simple past with repeated items

verbs when they occurred in a different aspectual context (see Table 6.11), but there is only 10% more use of simple past with accomplishments. The learners in group 3 also produced different responses when the verbs were in a different category, but they were equally successful with simple past for both activities and accomplishments. Thus, the response variation for the same verbs in the two aspectual contexts was not simply because learners had more success with simple past when the items were accomplishments - there was also variation in the alternative forms to simple past used in the two aspectual contexts.

The distribution of the forms supplied in the activity and accomplishment contexts for the 5 verbs is shown in Figures 6.10 and 6.11. The percentage of the various responses for all 5 verbs is presented in the columns, by group. Past responses have been omitted to focus attention on the other forms. In addition, the responses of the two highest groups have not been included, as learners in these groups rarely supplied a form other than simple past for the verbs, regardless of the aspectual context.

Groups 1 and 2 will be used as examples illustrating how the calculations and comparisons were made. There are 11 students in group 1 and 5 target verbs, for a total of 55 responses for each of the activity and accomplishment contexts. Learners in group 1 supplied 13 instances of perfect when the verbs were accomplishments, and none when the same verbs were activities, yielding percentages of 23.5 (13/55) and 0 (0/55), respectively. Although the comparison of perfect across the two aspectual categories reveals a rather dramatic response difference for this group, it is also important to look at the distribution of forms within each category. Comparing percentages of forms supplied by each group across categories only can be misleading, since the somewhat greater success with simple past for accomplishments means that the proportional use of other

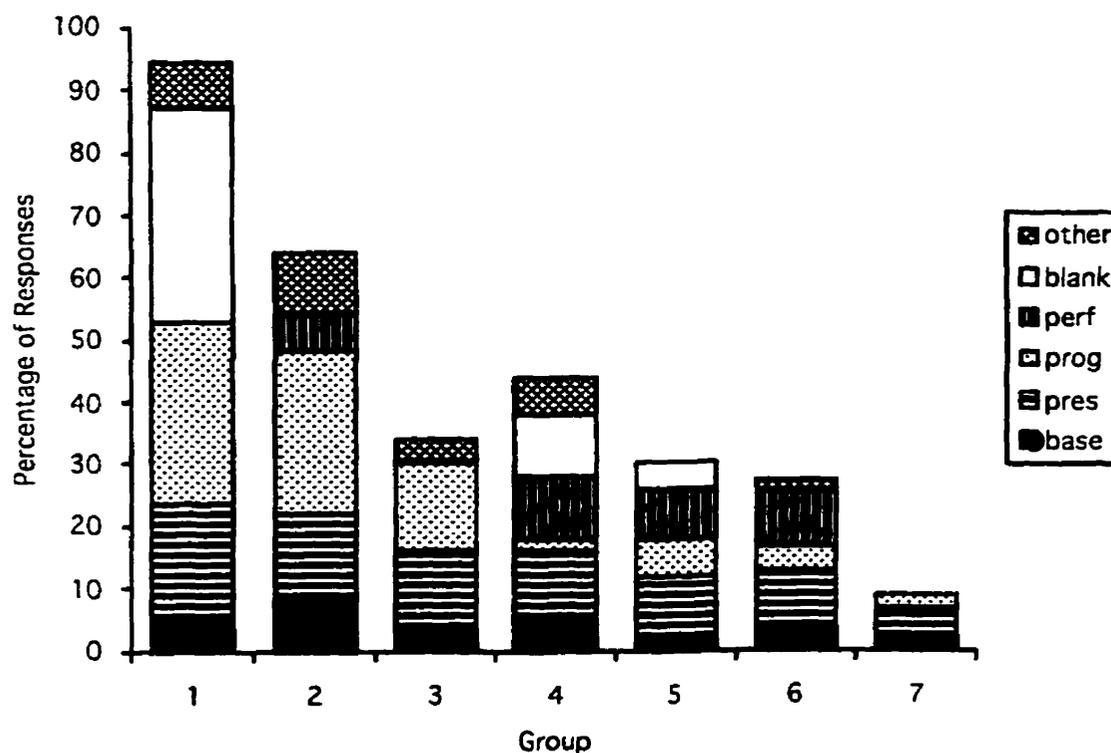


Figure 6.10. Non-past responses for repeated items: Activities

forms will by definition be less in this category. In group 2, for example, it is not just that the learners supplied more progressive forms when the verbs were activities than when they were accomplishments; it is also that, relative to the other forms in the activity category, progressive was supplied more often by the learners in this group (26% progressive versus 14% present). In the accomplishment category, progressive forms do not dominate the responses of the learners in group 2 - they are one of five response types produced with roughly equal frequency.

It is clear that the learners did not treat the verbs the same when they were presented in different aspectual categories, and that the response differences are greatest at the lower levels. It is also clear that no one category of responses dominates in either aspectual category, and that the response patterns shift somewhat from group to group.

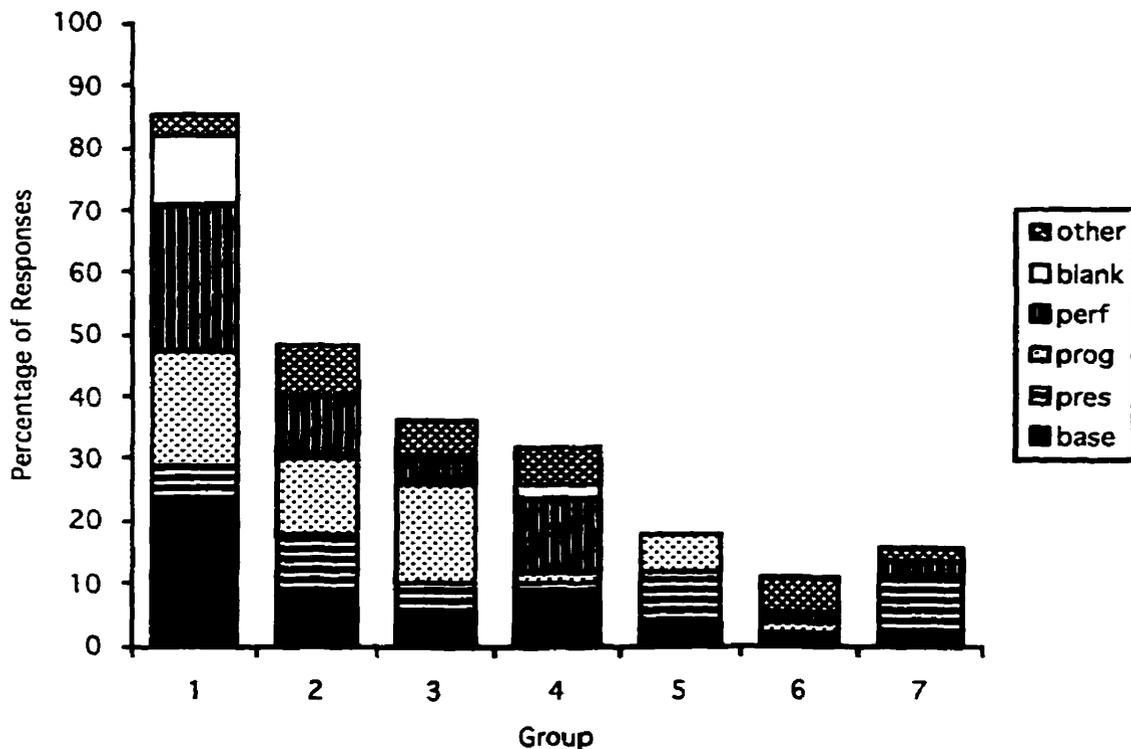


Figure 6.11. Non-past responses for repeated items: Accomplishments

In Group 1, when the verbs were accomplishments, perfect and base responses were the most common, whereas when the same verbs appeared in the activity category, progressive and blank responses dominated - there was no use of perfect and very little use of base. Of particular interest is the differential use of the "blank" response in the two aspectual categories. It should be noted that the distractors in the same passage tended not to be blank (examples will be given in the qualitative analyses below), thus a blank response did not indicate that the participants were simply skipping over the passage altogether.

In group 2, progressive continues to be the most common response for activities, whereas the responses in the accomplishment category are divided among 5 forms. In group 3, learners use progressive with the verbs regardless of the aspectual category, but there is a difference in the use of present forms when the verbs are activities. From group 4, the use of progressive drops off - with

activities, the most common responses are perfect and present, with accomplishments the response patterns continue to shift from group to group.

In summary, when the verbs appeared in activity contexts, there was greater use of progressive by the lower groups, and present in general. When the verbs were accomplishments, although there was more use of perfect in the lower groups, there was also considerable variety in the forms. In general, however, beyond the finding that learners definitely treat the same verbs differently when they appear in the two aspectual categories, the patterns in the variation are difficult to quantify. This is partly because pooling the responses by group obscures the qualitative differences among the responses of individual learners.

Qualitative analyses

The qualitative analysis focused on a subset of individual responses to the 3 verbs (*swim, run, ride*) that were presented in the same passage in each of the activity and accomplishment categories (see Cloze Task passages #5 and #18 in Appendix D). Among the 91 francophone learners, there were 24 from groups 1 - 7 who treated two or all three verbs differently when they appeared in the different aspectual contexts: 9 learners from group 1; 5 from group 2; 3 from each of groups 3 and 4; 2 from group 5; and 1 from each of groups 6 and 7.

It is important to remember that with the exception of a few instances of habitual past, the NS's treated all three verbs the same, supplying simple past for *swim, run, and ride* in both the activity and the accomplishment passages. This was not the case for these 24 L2 learners, as shown in Table 6.12.⁴ The most dramatic differences occurred in Group 1 where 8 learners supplied different

⁴ Nor was it the case for a number of other learners who treated one of the three pairs of items differently. The qualitative analysis concentrated on the 24 learners who exhibited the greatest dissociation between the two sets of items, however.

forms for all 3 verbs in the two aspectual categories. A3,⁵ for example, produced progressive with the verbs as activities, and a few minutes and 3 pages later supplied perfect with the same verbs in the accomplishment passage. B3, who saw the accomplishment passage first, also produced perfect, but upon encountering the 3 verbs as activities, left them blank (one of the two distractors in this passage was not blank, so it is unlikely that the learner missed or skipped the passage). Even when a learner preferred progressive with the 3 verbs for both categories (B36) the form of the progressive differed - no auxiliary was used with the accomplishments, but *have* was supplied with the activities. In general, there was more use of perfect with the accomplishments, and somewhat greater use of progressive and blanks with activities.

In Group 2, B34 knew the past form of all 3 verbs, and supplied it when they were activities. When they were accomplishments, the learner preferred perfect. B32 and B1 both produced past progressive with the activities, but in the accomplishment context, B1 preferred present and B32 attempted the simple past. B37 also attempted past with the accomplishments, but in the activity category, was first drawn to supply progressive with *swim* and *ride*, and then changed his or her mind.⁶ In this group we continue to see a greater tendency to use progressive with activities. There is also more use of simple past with accomplishments.

⁵ The codes were used to identify students; they do not require interpretation.

⁶ The use of present with *run* may have been triggered by the presence of the frequency adverb *sometimes*. See also B25, B13, and B9. This would be consistent with Bardovi-Harlig and Reynolds' (1995) finding that ESL learners had a tendency to supply base/present forms with stative and activity verbs in past contexts in which adverbs of frequency appeared.

Table 6.12
Responses to Repeated Items (Swim, Run, Ride) by Individual Learners

Student	Accomplishments	Activities
Group 1		
A3	He HAS SWIMS a kilometer, HAS RUNS 5 kilometers and then HAS RIDE his bicycle 10 kilometers.	... the weather was nice so my mother SWIMMING in the ocean and my father RIDING his bicycle along the beach. Sometimes my mother RUNNING along the beach beside him.
B3	He HAS SWIM a kilometer, HAS RUN 5 kilometers and then HAS RIDE his bicycle 10 kilometers.	... the weather was nice so my mother BLANK in the ocean and my father BLANK his bicycle along the beach. Sometimes my mother BLANK along the beach beside him.
B27	He HAS SWIMMED a kilometer, HAS RUN 5 kilometers and then HAS RIDE his bicycle 10 kilometers.	... the weather was nice so my mother SWIMS in the ocean and my father RIDES his bicycle along the beach. Sometimes my mother RUNS along the beach beside him.
B31	He SWIM a kilometer, RUN 5 kilometers and then RIDE his bicycle 10 kilometers.	... the weather was nice so my mother SWIM in the ocean and my father RIDING his bicycle along the beach. Sometimes my mother RUNNING along the beach beside him.
B39	He HAS SWIM a kilometer, RUN 5 kilometers and then RIDE his bicycle 10 kilometers.	... the weather was nice so my mother WAS SWIM in the ocean and my father WAS RIDE his bicycle along the beach. Sometimes my mother RUNING along the beach beside him.
B36	He SWIMMING a kilometer, RUNNING 5 kilometers and then RIDING his bicycle 10 kilometers.	... the weather was nice so my mother HAS SWIMMING in the ocean and my father HAS RIDING his bicycle along the beach. Sometimes my mother HAS RUNNING along the beach beside him.
A7	He SWIMMING a kilometer, RUNNING 5 kilometers and then RIDING his bicycle 10 kilometers.	... the weather was nice so my mother SWIMS in the ocean and my father RIDES his bicycle along the beach. Sometimes my mother BLANK along the beach beside him.
C33	He SWIM a kilometer, RUN 5 kilometers and then RIDE his bicycle 10 kilometers.	... the weather was nice so my mother BLANK in the ocean and my father BLANK his bicycle along the beach. Sometimes my mother BLANK along the beach beside him.
RB1	He SWAM a kilometer, RAN 5 kilometers and then RIDE his bicycle 10 kilometers.	... the weather was nice so my mother BLANK in the ocean and my father BLANK his bicycle along the beach. Sometimes my mother BLANK along the beach beside him.

Table 6.12
continued

Group 2

B34	He HAS SWAM a kilometer, HAS RAN 5 kilometers and then HAS RODE his bicycle 10 kilometers.	... the weather was nice so my mother SWAM in the ocean and my father RODE his bicycle along the beach. Sometimes my mother RAN along the beach beside him.
B32	He SWAM a kilometer, RUNED 5 kilometers and then RIDED his bicycle 10 kilometers.	... the weather was nice so my mother WAS SWIMMING in the ocean and my father WAS RIDING his bicycle along the beach. Sometimes my mother WAS RUNNING along the beach beside him.
B1	He SWIMS a kilometer, RUNS 5 kilometers and then RIDES his bicycle 10 kilometers.	... the weather was nice so my mother WAS SWIMMING in the ocean and my father WAS RIDING his bicycle along the beach. Sometimes my mother WAS RUNNING along the beach beside him.
A5	He SWIMMING a kilometer, RUN 5 kilometers and then RIDE his bicycle 10 kilometers.	... the weather was nice so my mother SWIMMING in the ocean and my father RIDING his bicycle along the beach. Sometimes my mother RUNNED along the beach beside him.
B37	He SWIMED a kilometer, RUNED 5 kilometers and then RIDED his bicycle 10 kilometers.	... the weather was nice so my mother WAS SWIMING/SWIMED in the ocean and my father RIDING/RIDED his bicycle along the beach. Sometimes my mother RUN along the beach beside him.

Group 3

B25	He SWIMED/SWAN (IRREGULAR) a kilometer, RUNED/RAN 5 kilometers and then RIDED (IRREGULAR) his bicycle 10 kilometers.	... the weather was nice so my mother IS SWIMING in the ocean and my father IS RIDING his bicycle along the beach. Sometimes my mother RUNS along the beach beside him.
A8	He HAS SWIMMING a kilometer, HAS RUNNING 5 kilometers and then HAS RIDING his bicycle 10 kilometers.	... the weather was nice so my mother SWIMMING in the ocean and my father RIDING his bicycle along the beach. Sometimes my mother RUNNING along the beach beside him.
C1	He WAS SWIMMING a kilometer, WAS RUNNING 5 kilometers and then WAS RIDING his bicycle 10 kilometers.	... the weather was nice so my mother SWAM in the ocean and my father RIDED his bicycle along the beach. Sometimes my mother WAS RUNNING along the beach beside him.

Table 6.12
continued

Group 4

B41	He SWAM a kilometer, RAN 5 kilometers and then RODE his bicycle 10 kilometers.	... the weather was nice so my mother BLANK in the ocean and my father BLANK his bicycle along the beach. Sometimes my mother BLANK along the beach beside him.
B13	He SWIMED a kilometer, RAN 5 kilometers and then RIDED his bicycle 10 kilometers.	... the weather was nice so my mother SWIMED in the ocean and my father RIDE his bicycle along the beach. Sometimes my mother RUNS along the beach beside him.
B35	He SWIMMED a kilometer, RUN 5 kilometers and then RIDED his bicycle 10 kilometers.	... the weather was nice so my mother HAD SWIM in the ocean and my father RIDE his bicycle along the beach. Sometimes my mother HAD RUN along the beach beside him.

Group 5

B9	He SWIM a kilometer, RAN 5 kilometers and then RODE his bicycle 10 kilometers.	... the weather was nice so my mother HAS SWIMMED in the ocean and my father HAS RODE his bicycle along the beach. Sometimes my mother RUNS along the beach beside him.
C24	He HAD SWIMMING a kilometer, RUNNING 5 kilometers and then RIDING his bicycle 10 kilometers.	... the weather was nice so my mother SWIMMED in the ocean and my father RIDED his bicycle along the beach. Sometimes my mother BLANK along the beach beside him.

Group 6

C27	He SWAM a kilometer, RUN 5 kilometers and then RODE his bicycle 10 kilometers.	... the weather was nice so my mother HAS SWUM in the ocean and my father HAS RIDEN his bicycle along the beach. Sometimes my mother RUN along the beach beside him.
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Group 7

C35	He SWIMS a kilometer, RUNS 5 kilometers and then RIDES his bicycle 10 kilometers.	... the weather was nice so my mother SWIMMED in the ocean and my father RODE his bicycle along the beach. Sometimes my mother RAN along the beach beside him.
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Again in Group 3 we see a learner (A8) who preferred progressive for the verbs, but used a different form of the progressive in each category (same forms as A3 but in opposite aspectual contexts). When B25 had to use the verbs as accomplishments, s/he struggled with the irregular forms of the simple past, crossing out two of the regularized forms and including a note indicating that s/he knew the verb was irregular, but just did not know or remember the correct form. Yet when confronted with the same verbs as activities, the learner produced progressive for two of them and simple present for the other.

Learner B41 in group 4, on the other hand, knew the irregular past of all 3 verbs, and produced them in the accomplishment context. When they were activities, however, the learner left the spaces blank (but not the distractors in the passage). The other students in Group 4 also used past for all but one of the accomplishment verbs, but produced base, present, and past perfect forms when they were activities.

In Groups 5 through 7, as learners became more proficient in their use of simple past, the variation in the responses in the two contexts diminished. Only 4 learners produced different forms for 2 or all 3 verbs.⁷ For 2 of the students (B9, C27) the main contrast was between perfect with activities and simple past with accomplishments. Students C24 and C35 preferred progressive and present, respectively, for the accomplishments but attempted simple past with the activities.

In summary, although there are some general patterns to the forms the learners supplied in the two different contexts, patterns which are consistent with the overall findings for the cloze - more perfect and past with

⁷ There continued to be students who produced a different form for one of the 3 verbs, however (*swim* or *run*), in Groups 5 through 7 and Group 9 (2 in Group 5, 4 in Group 6, 2 in Group 7, 1 in Group 9). In all but 2 cases, students produced simple past for the accomplishment contexts and a variety of forms when the verb was an activity (present, progressive, perfect, base).

accomplishments, more progressive and blanks with activities - there is also considerable variety from learner to learner in the use of tense/aspect markers. At the individual level, however, learners did show some consistency in the different forms they used for the verbs in the two aspectual categories.⁸

Within Categories

The final set of analyses for the cloze looked at the responses of the participants to the 4 verbs that were repeated in two different passages within each of the aspectual categories: the stative *look*, activity *eat*, accomplishment *change*, and achievement *drop*. The quantitative analyses summarized the group patterns for the 4 items; the qualitative analyses looked at the responses of the subset of 24 learners whose responses had been consistently different for the swim, run, and ride pairs.

Quantitative analyses

Of the 240 NS responses to the 4 pairs of verbs, only 1 involved a form other than simple past (past perfect with the achievement *drop*). There was thus strong - virtually unanimous - agreement among the NS participants that both contexts in which the pairs of verbs appeared within each of the 4 aspectual classes were unambiguous contexts for the simple past.

Among the NNS responses there was less agreement. Of the 364 pairs of responses to the repeated verbs (a total of 728 responses), the students supplied different forms for 118 or 32%.⁹ Table 6.13 presents the number of students producing a different form for each of the 4 pairs of verbs in all 9 groups. The

⁸ With the remaining repeated verbs, *go* and *tell*, each of which appeared in a different passage, many (but not all) of the 24 learners also supplied different forms in the different aspectual categories, sometimes consistent with the *swim*, *run*, *ride* items, sometimes not.

⁹ With the exception of Group 1 in which there was the most response variation, it was rare for a student to supply a different response for all 4 pairs of items.

differences were spread across all 4 pairs of items (although there was somewhat less variation among the forms used for the activity *eat*).

Table 6.13
Number of NNS's Responding Differently for Repeated Items Within Categories

Group	<i>n</i> ^a	Change ACC	Drop ACH	Eat ACT	Look STA
1	11	5	5	5	8
2	10	6	6	4	3
3	10	5	5	2	6
4	10	3	3	1	3
5	10	3	3	1	4
6	11	4	4	4	1
7	9	2	2	3	3
8	10	1	1	1	2
9	10	0	0	1	1

^a*n* represents the total number of students in each group

To explore whether the variation in learner responses was the result of learners struggling more with simple past in one of the two contexts in which the verbs appeared, the mean percentages of use of simple past by group for the 4 pairs of items were compared (see Figures 6.12 through 6.15). For both the activity and stative items, there was little difference in the learners' use of the target form. There were greater differences for the telics, but only with *change* were the differences consistently in the same direction for one of the verbs. Although this does suggest that learners were challenged more by one of the contexts (*change apartments*) than the other, the greater success with simple past still does not account for all of the response differences. It was therefore not the case that learners simply did better with simple past in one of the contexts for the repeated verbs - rather, the response differences involved a range of forms when

the same verb in appeared in a different context within the same aspectual category.

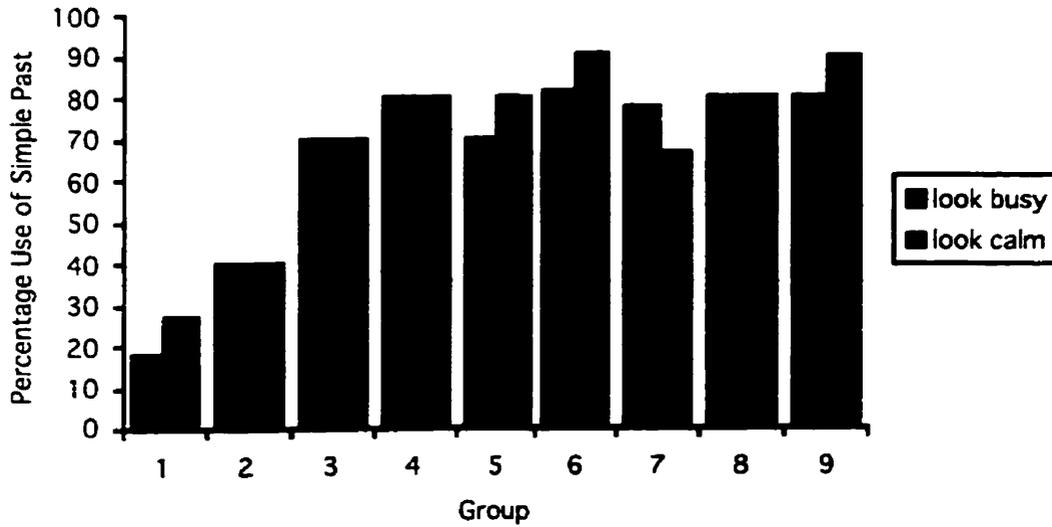


Figure 6.12. Use of simple past with repeated items: States

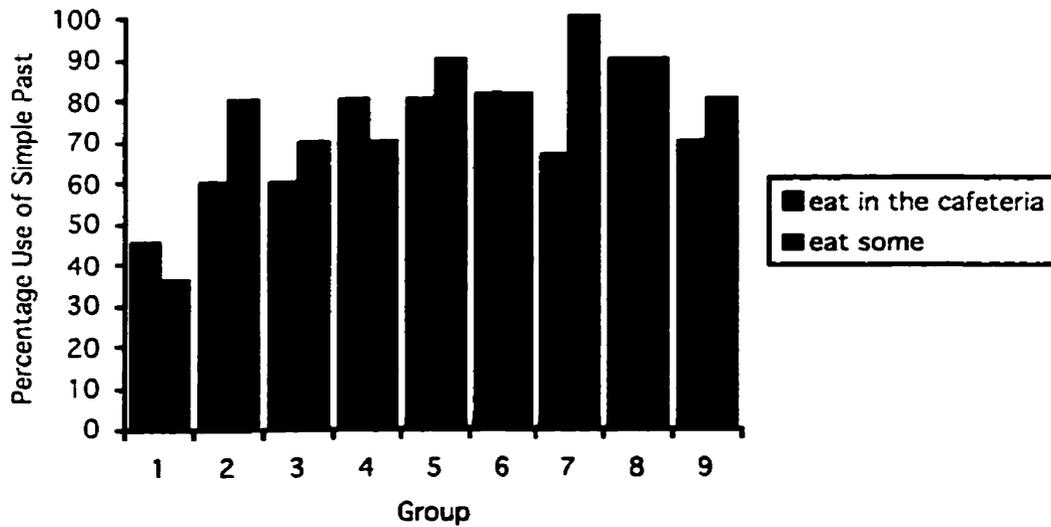


Figure 6.13. Use of simple past with repeated items: Activities

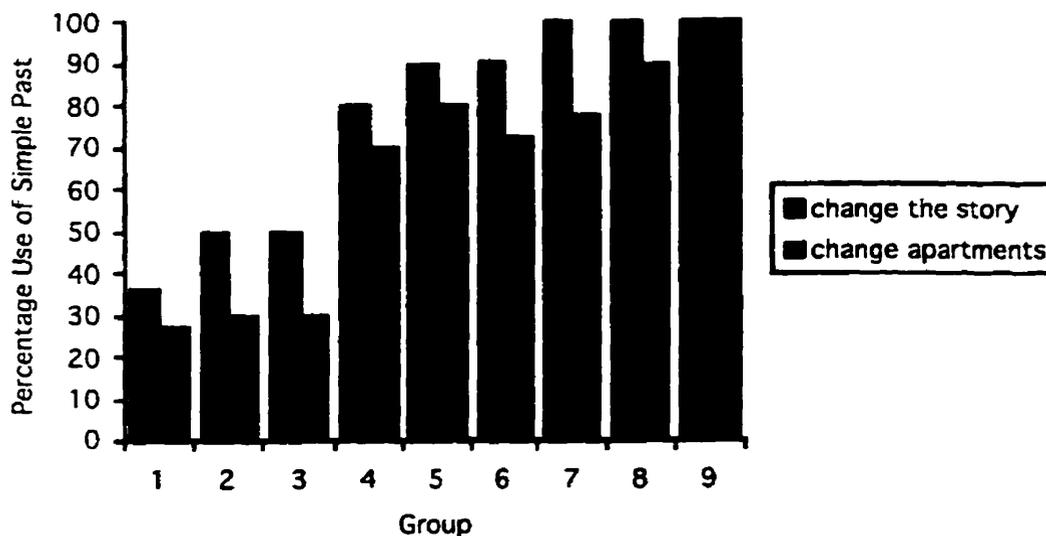


Figure 6.14. Use of simple past with repeated items: Accomplishments

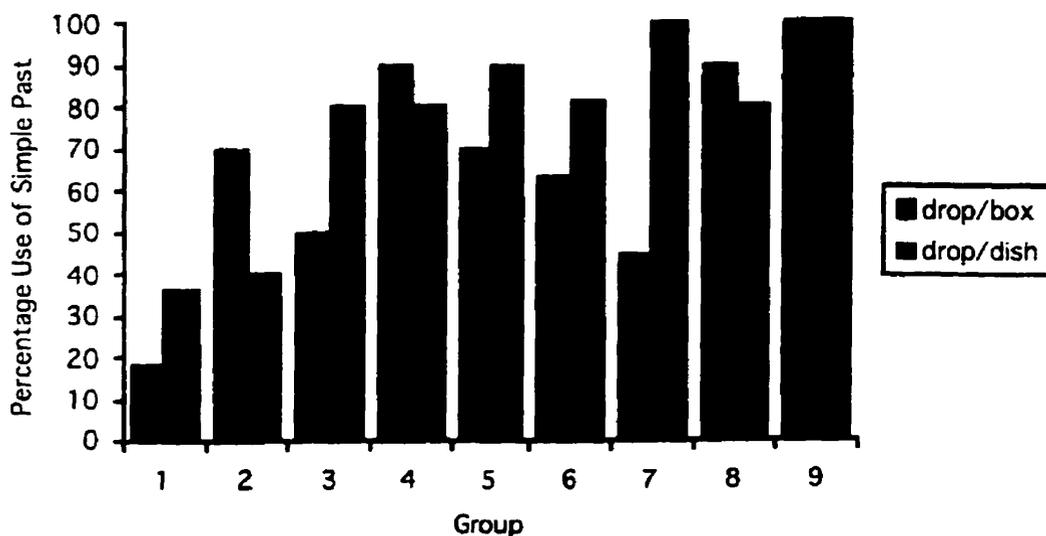


Figure 6.15. Use of simple past with repeated items: Achievements

In most cases one of the forms was an attempt at simple past, but there were not obvious patterns to the other forms the learners supplied. For example, among the 6 different response pairs produced for *change* in Group 2, the response categories included present, base (2), perfect (2), and progressive. For *drop*, the categories represented in the 7 sets of responses were present (2), base

(2), perfect (2), and progressive. The 4 learners responding differently to *eat* produced present, base, progressive and perfect, and with *look* the 3 learners used present, base, progressive, and blank (one of the students produced base in one context and present in the other). The one pattern that did emerge was that the perfect tended to be the most frequently supplied form for the telics in Groups 3 through 6 (accounting for 17 of the 28 differences, or 60%).

The comparison of the variation in responses both within and across aspectual categories in Table 6.14 reveals that learners produced different forms both when the same verbs appeared in different aspectual categories, and when they appeared within the same aspectual category. For the sample as a whole, the response difference percentages are identical (32%) for the two sets of repeated

Table 6.14
*Comparison of Frequency of Response Differences for Repeated Items
 Across and Within Categories*

Group	<i>n</i>	Across (5 items)		Within (4 items)	
1	11	70.91	<i>39/55</i>	59.09	<i>26/44</i>
2	10	56.00	<i>28/50</i>	50.00	<i>20/40</i>
3	10	32.00	<i>16/50</i>	42.50	<i>17/40</i>
4	10	48.00	<i>24/50</i>	25.00	<i>10/40</i>
5	10	36.00	<i>18/50</i>	30.00	<i>12/40</i>
6	11	25.45	<i>14/55</i>	25.00	<i>11/44</i>
7	9	17.78	<i>8/45</i>	36.11	<i>13/36</i>
8	10	0.00	<i>0/50</i>	17.50	<i>7/40</i>
9	10	4.00	<i>2/50</i>	5.00	<i>2/40</i>
Total	91	32.75	<i>149/455</i>	32.42	<i>118/364</i>

Note. Raw numbers are in italics.

items, although at the group level there was a greater tendency in the lower level groups for the variation in verb morphology to occur when the verbs appeared in different aspectual categories.

Qualitative analyses

The final analysis was a qualitative comparison of the individual responses to the 4 items by the same 24 learners who had exhibited consistent response differences for the *swim*, *run*, and *ride* items. The purpose of this analysis was to compare the variability of the learners' responses when there were changes in contexts for verbs repeated within and across aspectual categories.

Table 6.15 presents the pairs of forms produced for the 4 verbs by the 24 learners. Most of the response differences occurred in the two lowest groups. As the learners became more proficient with past (from group 3 on) their responses for the repeated verbs within the same aspectual category became more consistent, even though the forms were not always target-like (see C31). Learners tended to alternate between the same pairs of forms, one of which was usually past, regardless of aspectual category. For example, learners B27 and B39 alternated between past and perfect, B31 and A5 between past and base, B36 between different forms of the progressive, B32 between past and progressive. Thus, although there was considerable variation in the responses for the repeated items between learners, there was nevertheless consistency in the responses of individual learners. When the forms the learners produced within aspectual categories are compared with the forms they produced across aspectual categories (compare Tables 6.12 and 6.15), there were learners who alternated between the same pairs of forms for both sets of repeated verbs (see, for example, the use of progressive by B32 and B36, the use of blank/perfect or blank/past by

B3 and RB1 respectively). However, this was not always the case (for example, compare the responses in Tables 6.12 and 6.15 for B25, A8, A5).

Table 6.15

Responses to Repeated Items Within Categories by Individual Learners

Group	Student	Verb			
		Drop ACH	Change ACC	Eat ACT	Look STA
1	A3	past/other	PAST	past/other	past/prog
	B3	blank/perf	blank/perfect	BLANK	BLANK
	B27	pres/perf	PERF	PAST	past/perf
	B31	past/prog	base/past	other/base	base/past
	B39	PAST	past/perf	PAST	perf/past
	B36	prog/prog ^a	prog/prog ^a	prog/prog ^a	prog/prog ^a
	A7	PRES	pres/blank	past/blank	base/blank
	C33	blank/past	PAST	PAST	base/blank
	RB1	past/blank	BLANK	blank/past	BLANK
2	B34	prog/pres	perf/past	PAST	PAST
	B32	pres/past	past/prog	prog/past	prog/past
	B1	pres/past	past/pres	PAST	prog/prog ^a
	A5	PAST	base/past	base/past	base/pres
	B37	past/other	past/perf	past/other	PROG
3	B25	past/pres	past/pres	PRES	pres/past
	A8	past/perf	PAST	PAST	PAST
	C1	PAST	OTHER	PROG	past/prog
4	B41	PAST	PAST	PAST	blank/past
	B13	PAST	PAST	PAST	PAST
	B35	PAST	PAST	PAST	PAST
5	B9	past/pres	perf/past	PAST	PAST
	C24	PAST	PAST	PAST	PAST
6	C27	PAST	PAST	PAST	PAST
7	C35	past/pres	PAST	PAST	PAST

Note. **BOLD** indicates that the same form was produced in both contexts.

^aA different form of progressive was produced in the two contexts

In summary, among the lower-level learners in particular, repeated items both within and across categories elicited different responses. There was some variation between learners, but there were also patterns to the responses that were consistent with the overall findings, and with the interlanguage behaviour of individual learners. As learners became more proficient with past, there was more variation in responses to the same verbs repeated across categories than those repeated within.

CHAPTER 7 - ANALYSES AND RESULTS OF PREFERENCE TASK (STUDY 2)

The preference task was completed by 106 francophone students, but because the analysis required comparisons with cloze task performance, only the students who had completed both tasks were retained for analysis ($N = 88$).¹

There were no changes in the NS group - all 30 participants did both tasks.

The responses to the preference task were analyzed in two steps. The first step consisted of a verification of the use of all response options through an examination of the distractor behaviour by both NS's and NNS's. The second step concentrated on the 20 simple past/past progressive items.

Use of Response Options

A verification of distractor responses revealed that all NS participants had availed themselves of the "both", "neither" and "one form" options at least once. Thus we can assume that the response choices for the target items likely reflected genuine preferences for past progressive and/or simple past forms, and not simply preferences for or aversions to a certain response type.

Similarly, most of the L2 learners also used the full range of preference options at least once. There were 15 (17%) that did not use the "both" option, and 6 (7%) that used neither the "both" nor the "neither" option. Table 7.1 shows that these students were distributed across the sample. Thus the reluctance to use one or both of these two responses was not related to proficiency with simple past.

Although 83% (73/88) of the learners had availed themselves of the "both" option at least once for the distractors, there was a marked difference between NS's and NNS's in the use of the "both" option for the 20 simple past/past

¹ Three students who had completed the cloze did not complete the preference task. This affected the n in group 3 (changed from 10 to 8 students) and group 5 (changed from 10 to 9 students).

Table 7.1
NNS Distractor Responses

Group (n) ^a	No use of "both"	No use of "both" or "neither"
1 (11)	2	1
2 (10)	1	1
3 (8)	2	1
4 (10)	4	0
5 (9)	0	1
6 (11)	2	0
7 (9)	1	2
8 (10)	1	0
9 (10)	2	0
TOTAL	15	6

^aThe number of students in groups 3 and 5 differs from the cloze task, as there were 3 students who did not complete the preference task

progressive items (12 activities, 6 telics, and 2 distractors from the cloze). As indicated in Table 7.2, the frequency of the use of this option for the 20 items was distributed across the NS group, with all but 1 NS finding "both" forms acceptable at least once. Among the NNS's, almost 70% never used the "both" option, and a further 10% only did so once. The relatively few learners who did use this response option were distributed among the various groups - with the lowest use occurring in the most and least proficient groups (see Table 7.3). Thus the reluctance to accept both simple and progressive forms as correct also did not appear to be related to proficiency with simple past.

There were no cases of a NS participant rejecting both forms, and only 1 instance of a target item left blank. It was also rare for the L2 learners to reject both responses (16 learners for 25/1760 responses, or 1%), and only a relatively

Table 7.2
*NS and NNS Use of the "Both" Option for
 Past/Progressive Items*

Number of "both" responses	Frequency (number of participants)	
	NNS n=88	NS n=30
max = 20		
0	61	1
1	9	3
2	1	2
3	4	2
4	6	3
5	2	1
6	0	1
7	0	4
8	2	5
9	1	4
10	1	0
11	1	1
12	0	0
13	0	1
14	0	0
15	0	0
16	0	0
17	0	1
18	0	0
19	0	1
20	0	0

small number of learners indicated uncertainty (19 learners for 92/1760 responses, or 5%).² In most cases, the rejection and uncertainty responses were used by a learner for one or two items only, although there was 1 learner from the most proficient group (group 9) who indicated uncertainty for all 20 past/progressive items, and one from the least proficient (group 1) who did so

² There were 9 learners who left items blank, and 10 who used the "?" option to indicate uncertainty. These responses were collapsed into a single uncertainty category, as with one exception, students either left items blank or marked "?".

for 12. On the cloze task, the group 9 learner had supplied simple past for the 9 activity and 6 telic items, and the group 1 learner had left them blank.

The tendency among the NNS's, then, was to find one of the two forms acceptable.

Table 7.3
Distribution of "Both" Responses for Simple Past/Past Progressive Items (NNS)

Group	n	Students	Frequency of "both" response	Total possible responses	Percentage use of "both"
1	11	1	1	220	0.45
2	10	5	18	200	9.00
3	8	3	6	160	3.75
4	10	3	18	200	9.00
5	9	2	6	180	3.33
6	11	3	15	220	6.82
7	9	3	17	180	9.44
8	10	4	20	200	10.00
9	10	2	2	200	1.00

Analysis of Simple Past and Past Progressive Responses

The subsequent analyses looked in some detail at the patterns to the preferences for simple past and past progressive, including comparisons with cloze task performance. Of the 20 items in which the contrast between the two forms were presented, only the responses to 18 were of interest for the remaining analyses. The 2 cloze distractors which had been included were not analyzed because they did not constitute obligatory contexts for the simple past, but rather provided contexts in which either form might be acceptable (see Table 5.1; for complete context see Appendix E, items 13 and 18 in passages 5 and 6).

The first analysis looked at the NS responses to the 3 "problematic" activity items (*snow, dance, and sing*) that had attracted such high uses of progressive by the NNS's on the original cloze from Bardovi-Harlig & Reynolds (1995) used in Study 1, and which had been eliminated from the revised cloze used in Study 2. The primary interest was in determining whether NS's and NNS's treated these activities differently from the 9 others.

The remaining analyses concentrated on the 15 items (9 activities and 6 telics) that had appeared in the obligatory contexts for the simple past on the revised cloze used in Study 2. The analyses compared the acceptance of simple past and past progressive on the preference task with the use of simple past and progressive³ for the same items on the cloze. Although it was the NNS behaviour that was of primary interest, the NS behaviour was also analyzed to provide a base-line against which the NNS responses could be compared. That is, in order to interpret any interlanguage variation with the target forms, it was important to determine how much variation existed among competent speakers of the language when performance on two tasks was compared.

The final analysis was a qualitative comparison of the cloze and preference task responses to the 3 repeated accomplishment/ activity items (*swim, run, and ride*) by the subset of 24 students whose responses to these items showed the greatest variation when the verbs appeared in different aspectual categories (see chapter 6, Table 6.12).

Item Verification

The percentage of NS's who accepted a progressive (i.e., who indicated either a preference for the progressive form over the simple past or that both

³ On the cloze task, "progressive" responses included present progressive and inflected forms without an auxiliary.

simple and progressive forms were acceptable) for the 12 activity items are shown in Figure 7.1. Over 90% of the NS's accepted a progressive for *snow*, *dance*, and *sing*, with close to 100% acceptance for the latter two. These are the three verbs that attracted the disproportionate percentage of progressive use on the cloze among the NNS participants in Study 1, and that were eliminated from the revised version of the cloze used in this study. This preference was indicated most often through the use of the "both" response - a preference for the progressive form over the simple past on any activity item was rare (only 23 instances out of a possible 360). However, the preference for progressive only did occur most often with these three items as well (16/23). Of the 87% of the participants accepting progressive for *snow*, 13% (n=4) preferred progressive over simple past, and of the 97% for *dance* and *sing*, 20% (n = 6) chose progressive only for *sing* and *dance*.⁴ Thus the NS's appeared to treat these 3 items differently from the other activities.

The NNS response to the 3 problematic activities mirrored the NS's. Figure 7.2 shows that the use of progressive with these items was much greater than with any other activity item. Furthermore, there was very little variation in the use of progressive with the other 9 items, confirming the finding from the item analysis of the distribution of progressive among activity verbs on the cloze (see chapter 6) that the use of/acceptance of progressive by NNS's occurred with activities in general, and not just with a few verbs in the category.

For the 9 activity verbs which were on the revised cloze, there was nevertheless some variation in the acceptance for progressive among NS's, with acceptance rates ranging from 7% to 73%. There were higher rates for two items: *work* (73%) and *panic* (63%) (from passages #7 and #4 on the preference task, see

⁴ The remaining 7 progressive only choices were spread across 4 different activity verbs: *work*, *panic*, *live*, *cook*.

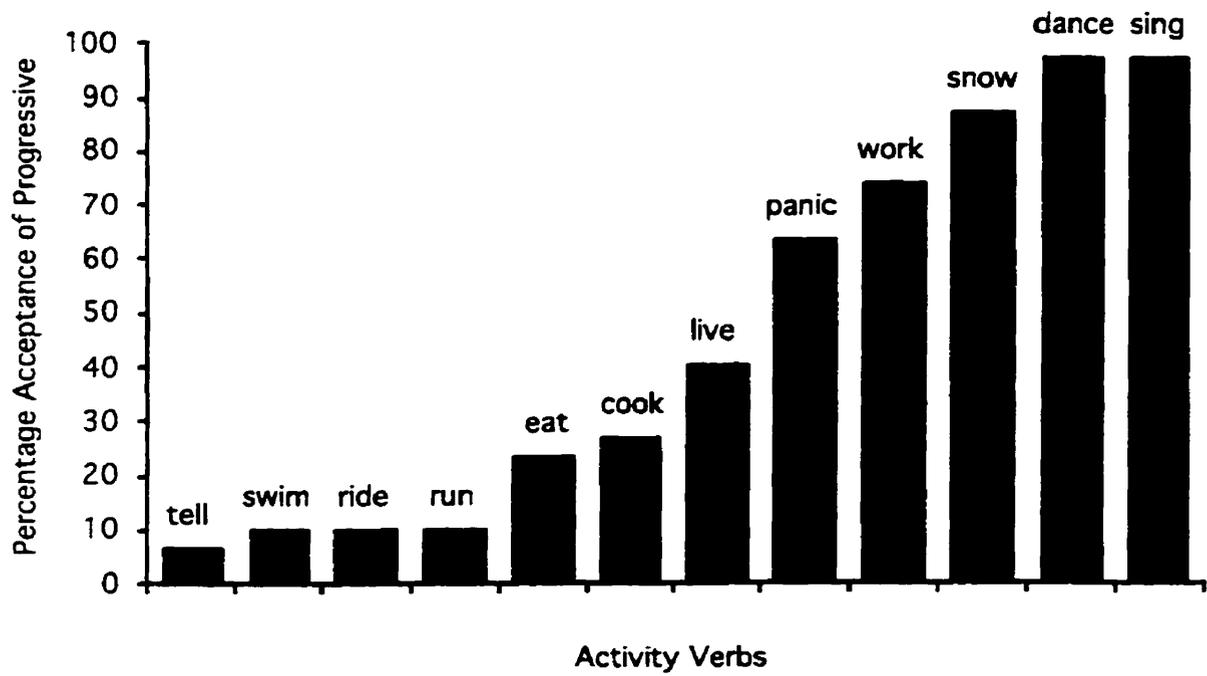


Figure 7.1. NS acceptance of past progressive for activities

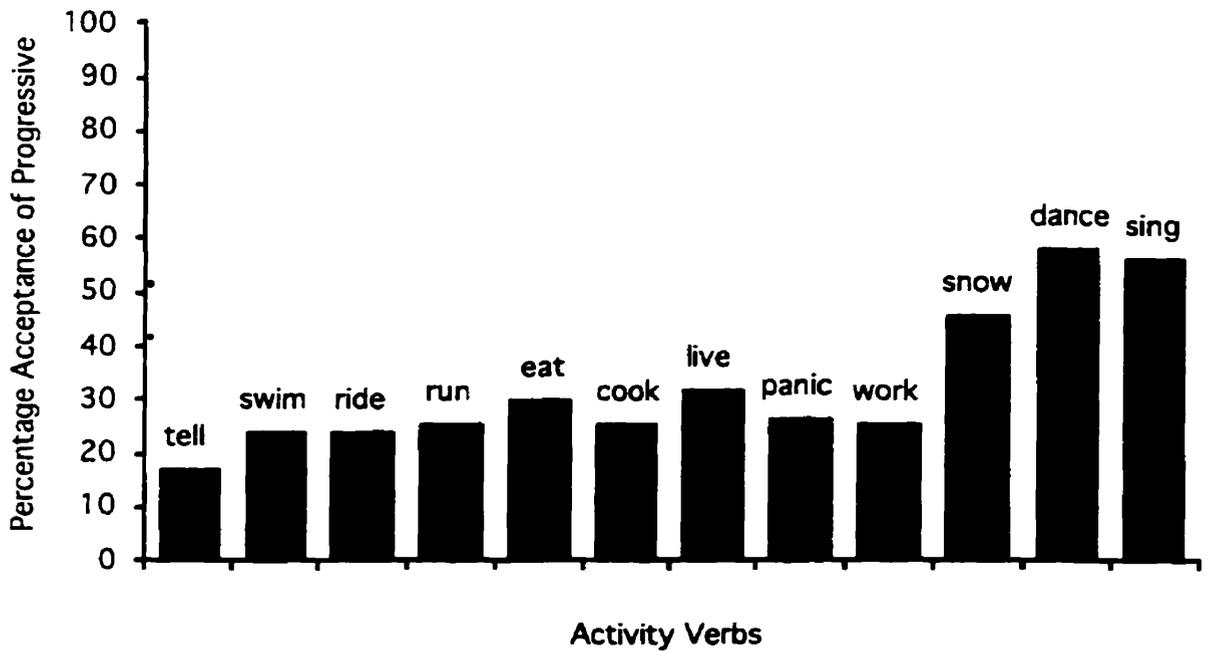


Figure 7.2. NNS acceptance of past progressive for activities

Appendix E). On the cloze task, the suppliance of simple past for these verbs was 87%, and 90% respectively, but when confronted with a choice between simple past and past progressive, over 50% of the NS's found both forms to be acceptable.⁵ Neither of these verbs attracted high rates of progressive among the NNS's on the cloze.

There was also some acceptance of progressive for 3 of the 6 telics (see Figure 7.3) - notably with *tell a story* (passage #6), *write* and *finish*. The latter two items occurred in the same passage (#7) as the activity *work* and thus the events in the passage are viewed from the perspective of a "progressive" situation in the minds of some NS's. Again, however, none of these three verbs had attracted high uses of progressive among the NNS's on the cloze, not even among groups 1-3 where there was the greatest use of progressive with accomplishments (see chapter 6, Figure 6.4). On the preference task, Figure 7.4 shows that as a group, the NNS's were also less likely to accept progressive with the 6 telics, behaviour that was consistent for all items, including the 4 that appeared in both activity and accomplishment categories (*swim, run, ride, and tell*).

In summary, NS's supplied simple past for the 9 activities and 6 telics on the cloze, but they indicated that past progressive would also be acceptable for some of the activity and telic situations. Although there were higher rates of acceptance for some verbs than others, and in particular for 3 verbs in the same passage (#7), when compared with the NNS behaviour on the cloze and the preference tasks, no one item appears to account for a disproportionate amount of the progressive effect for either the activity or the accomplishment categories. The NNS treatment of the progressive with the telics is quite different from the

⁵ Only 5 NS's indicated a preference for progressive over simple past for one or the other of the items (not both). Of the 73% acceptance of progressive for *work*, 10% (n=3) represented a preference for progressive over simple past, while 7% (n=2) of the 63% acceptance for *panic* represented a progressive only response.

NS's, providing further evidence of the effect of lexical aspect on the L2 use of verbal morphology.

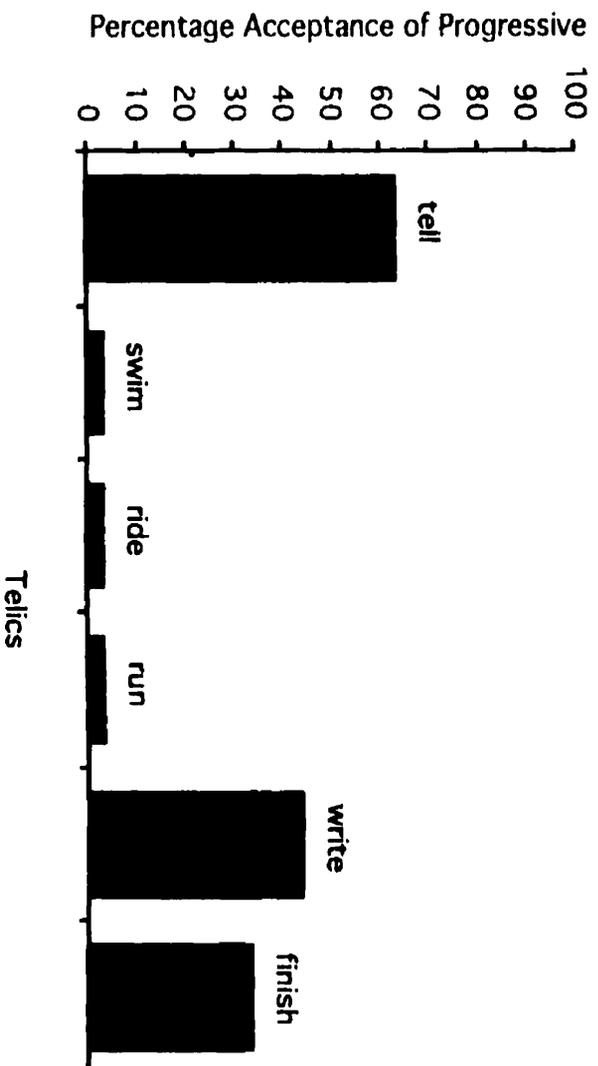


Figure 7.3. NS acceptance of past progressive for telics

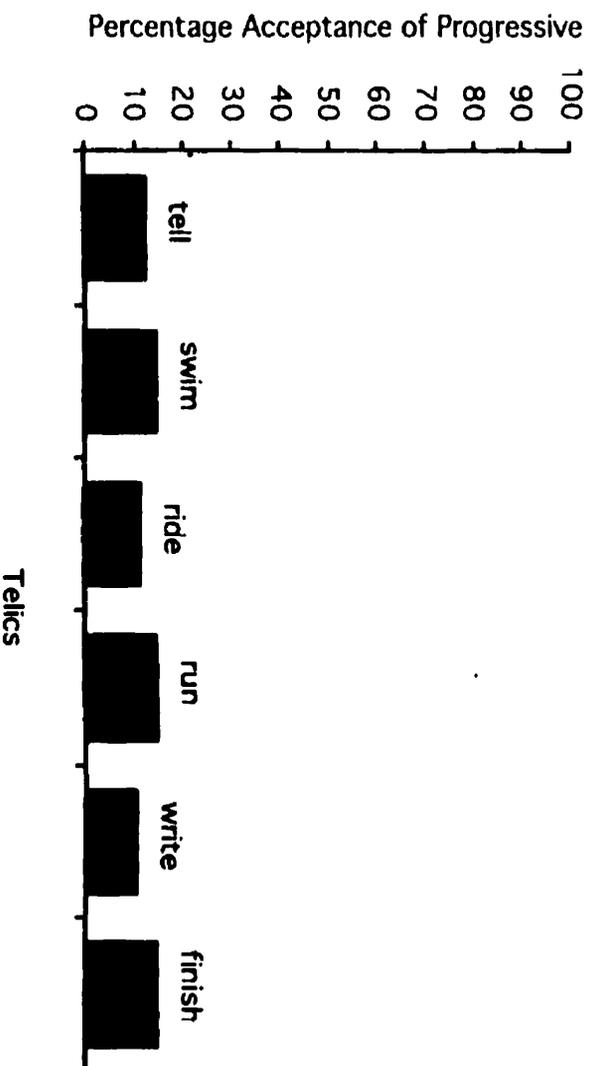


Figure 7.4. NNS acceptance of past progressive for telics

Native Speaker Results

Before exploring the stability of interlanguage behaviour through a comparison of the simple past / past progressive responses on the two tasks, it was important to establish the amount of variability that exists among proficient users of the language. Thus a comparison of the NS responses on the cloze and preference tasks for the 9 activities and 6 telics was undertaken.

There was very little use of or preference for progressive by NS's on either task. Table 7.4 shows that in total, there were 10 instances of progressive on the cloze (supplied by 7 NS's) and 11 on the preference task (supplied by 8 NS's), out of a possible 450 responses. In all but 1 case, NS's who had supplied a progressive form for an item on the cloze indicated a similar choice on the preference task, either by choosing the progressive response (n=3) or by accepting both progressive and simple past responses (n=6). There were also cases of simple past responses on the cloze changing to progressive on the preference task (n=8), but when examined as a percentage of the total number of simple past cloze responses (see Table 7.5), this in fact represents a shift of only 2% of simple past to past progressive responses.⁶

⁶ There were also 11 instances of habitual past (with either *used to* or *would*), all used with activities. On the preference task the participants preferred simple past in almost every case (8/11). There were two instances where "both" forms were found acceptable, and 1 case where there was preference for progressive.

Table 7.4
 Comparison of NS Progressive Responses on Cloze and Preference
 Tasks

Verb	Participant	Cloze	Preference
Work	NS15	progressive	both
	NS17	progressive	both
	NS22	PROGRESSIVE	SIMPLE PAST
	NS27	progressive	progressive
	NS1	<i>simple past</i>	<i>progressive</i>
	NS16	<i>simple past</i>	<i>progressive</i>
Panic	NS6	progressive	both
	NS9	progressive	both
	NS7	progressive	progressive
	NS21	<i>simple past</i>	<i>progressive</i>
Live	NS7	progressive	progressive
Cook	NS13	<i>simple past</i>	<i>progressive</i>
Write (acc)	NS7	progressive	both
	NS27	<i>simple past</i>	<i>progressive</i>
Finish (ach)	NS7	progressive	both
	NS27	<i>simple past</i>	<i>progressive</i>
Tell (acc)	NS10	<i>simple past</i>	<i>progressive</i>
	NS23	<i>simple past</i>	<i>progressive</i>

Table 7.5
Comparison of NS Cloze and Preference Task Responses

	Same in both tasks		Changed from cloze to preference			Expanded ^a from cloze to preference	
	Progressive ^b	Past ^c	Past to progressive	Progressive to past	Total changed	Past	Progressive
Telic	0/2 0%	134/177 75%	4/177 2%	0/2 0%	4/179 2%	39/177 22%	2/2 100%
Activity	3/8 37.5%	190/262 73%	4/262 1.5%	1/8 12.5%	5/270 2%	68/262 26%	4/8 50%
Total	3/10 30%	324/439 74%	8/439 2%	1/10 10%	9/439 2%	107/439 24%	6/10 60%

Note. Percentages have been rounded off.

^aExpanded from either past or progressive on cloze to "both" on preference task

^bPast progressive

^cIncludes simple and habitual past responses

An analysis of the "both" responses showed that about a quarter of the participants (24%) who supplied simple past on the cloze for the 9 activity and 6 telic verbs found a progressive form equally acceptable for the verbs in either situation. The acceptance of both forms was greater for those who had supplied a progressive on the cloze (60%) but it should be noted that because there were so few instances of progressive on the cloze, the percentages comparing progressive and simple past responses represent considerable differences in raw numbers.

Overall, there was very little change in the responses between the two tasks - on the whole, NS's did not reverse the decisions they originally made on the cloze task. Any difference in behaviour on the two tasks tended to involve an expansion of the original choice, through the acceptance of both past progressive and simple past forms for some items. This occurred with comparable frequency for both the telics and the activities.

L2 Results

The previous analyses for the L2 learners documented the behaviour of the francophone sample as a whole; the following analyses looked at the response patterns by groups, both on the preference task itself, and in comparison with the cloze. Hereafter the analyses focus on the 15 items on the preference task that had appeared as obligatory contexts in the revised cloze (6 telics and 9 activities).

Preference task

Figures 7.5 and 7.6 show the distribution by group of the preference for progressive and simple past for the telics and the activities. In Figure 7.7, the acceptance of progressive includes progressive only and "both" responses, which tends to slightly magnify the response patterns in some groups, but does not

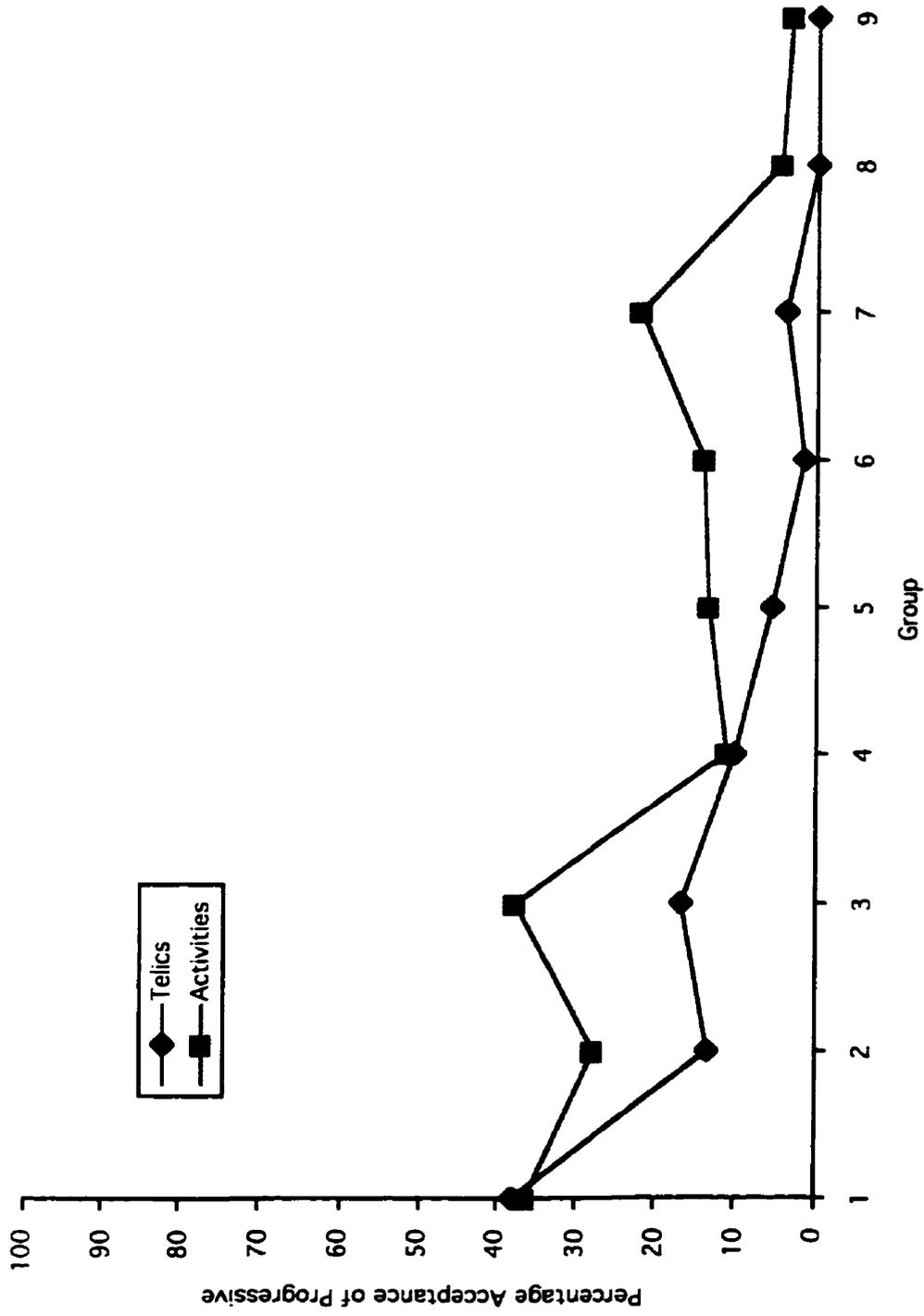


Figure 7.5. NNS acceptance of past progressive on preference task

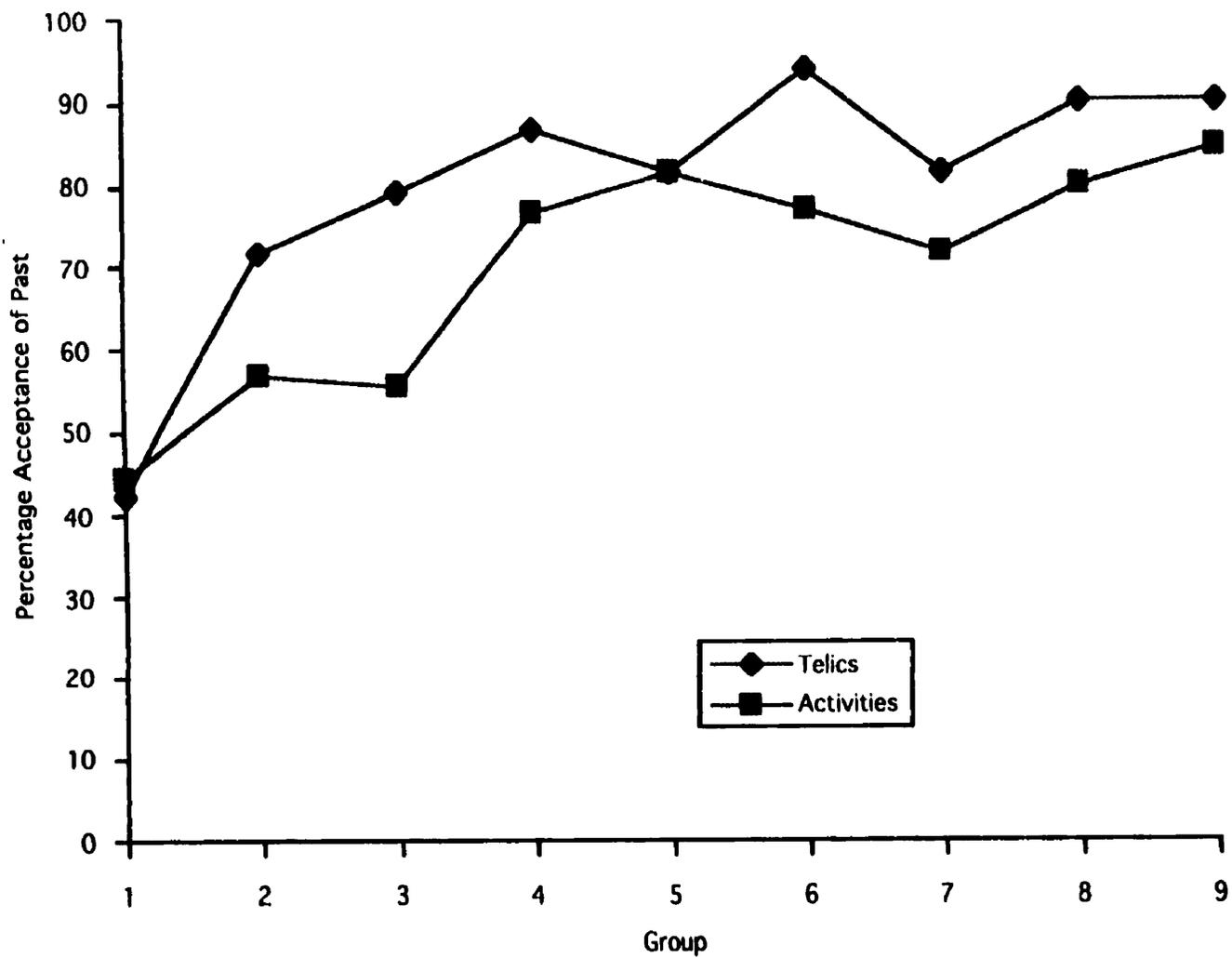


Figure 7.6. NNS acceptance of simple past on preference task

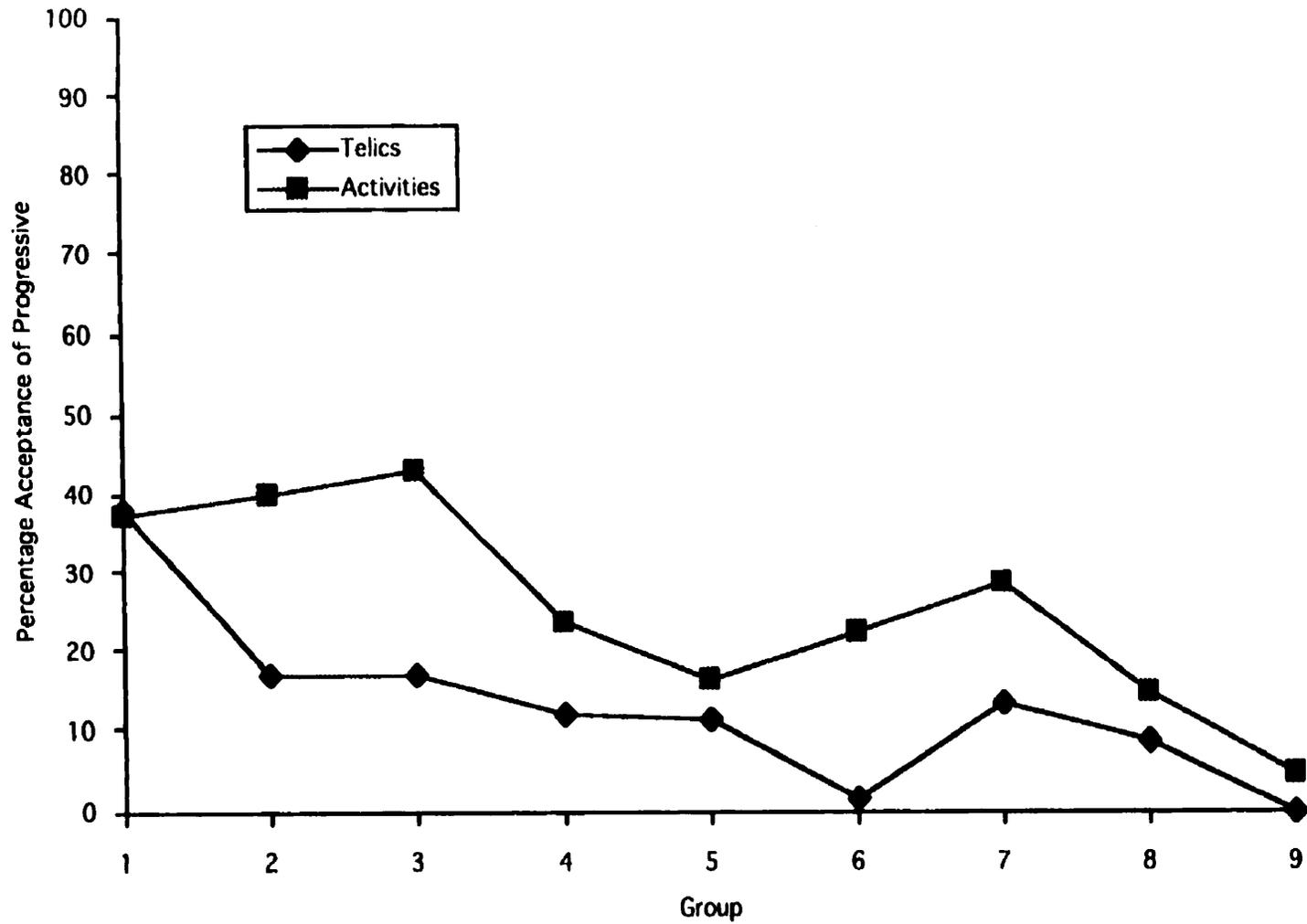


Figure 7.7. NNS acceptance of both simple past/past progressive and past progressive (combined) on preference task

change the direction of the findings because there is so little use of the "both" response by the NNS's.

The cross-sectional profile reveals that although the trend is for higher rates of acceptance of past progressive with activities and simple past for the telics across the groups, the acceptance rates do converge at the extremes and the middle of the sample, albeit for different reasons. In the least proficient group, learners found progressive and simple past forms equally acceptable for telics and activities. In the most proficient, learners found past progressive equally unacceptable for telics and activities, preferring simple past to the same degree for both. The similar use of past and progressive for the groups in the middle of the sample (groups 4 and 5) reflects different distributions of the various response categories in each group, and does not appear to have a single or obvious explanation.⁷

Comparison of preference and cloze tasks

The most common alternative to simple past for activities on the cloze in Study 1 had been the progressive; thus one of the purposes of the preference task was to explore the strength of association between progressive and activities by asking learners to indicate their preference for one or the other forms (or both or neither). There was very little use of progressive with telics on the cloze - learners were most successful with simple past with these items, and, as shown in chapter 6, supplied perfect more often than any other form when they did not use simple past. The next set of analyses, therefore, compares the use of progressive with the 9 activity items only.

⁷ The use of the "both" response in Group 4 for activities (compare Figure 7.5 with Figure 7.7) may explain some of the behaviour with progressive in this group. Although they found progressive equally acceptable for both telics and activities, they accepted progressive as well as simple past more frequently with the activities than with the telics.

Although progressive was the most common alternative to simple past on the cloze, learners did supply other forms as well. In the preference task, though, their choice of forms was restricted to simple past and past progressive. Learners did have the option of rejecting both forms or indicating uncertainty (and there was some consistency between blank cloze items and "?" preference task responses at the individual level), but as documented earlier, the overwhelming tendency was to choose one of the two responses as correct. Thus, by definition, there are greater numbers of one or both forms on the preference task, but the question of interest was whether the pattern in the choice of forms would be similar in both tasks.

The comparison of progressive responses by group on both tasks (see Figure 7.8) shows that although in most groups there are slightly more progressive responses for the preference task, there is very little difference between the two tasks, and a very similar trend. The preference for simple past, shown in Figure 7.9, is comparable to the cloze for the upper level groups, but greater among most of the lower level groups (group 3's preference for past was the same on both tasks). Again, the trend in the responses is similar.

At first glance, it would appear that the increase in past, and to a degree, progressive, responses on the preference task comes from the learners who had supplied responses on the cloze other than past or progressive (present, base, perfect, blank, other) and who, when confronted with a restricted choice between simple past and past progressive forms only on the preference task, exhibited preferences consistent with the suppliance of the forms by the other learners on the cloze. This interpretation, however, assumes that the learners who had used simple past or progressive on the cloze exhibited the same preferences for the forms with the same items on the preference task. The actual situation is somewhat more complex.

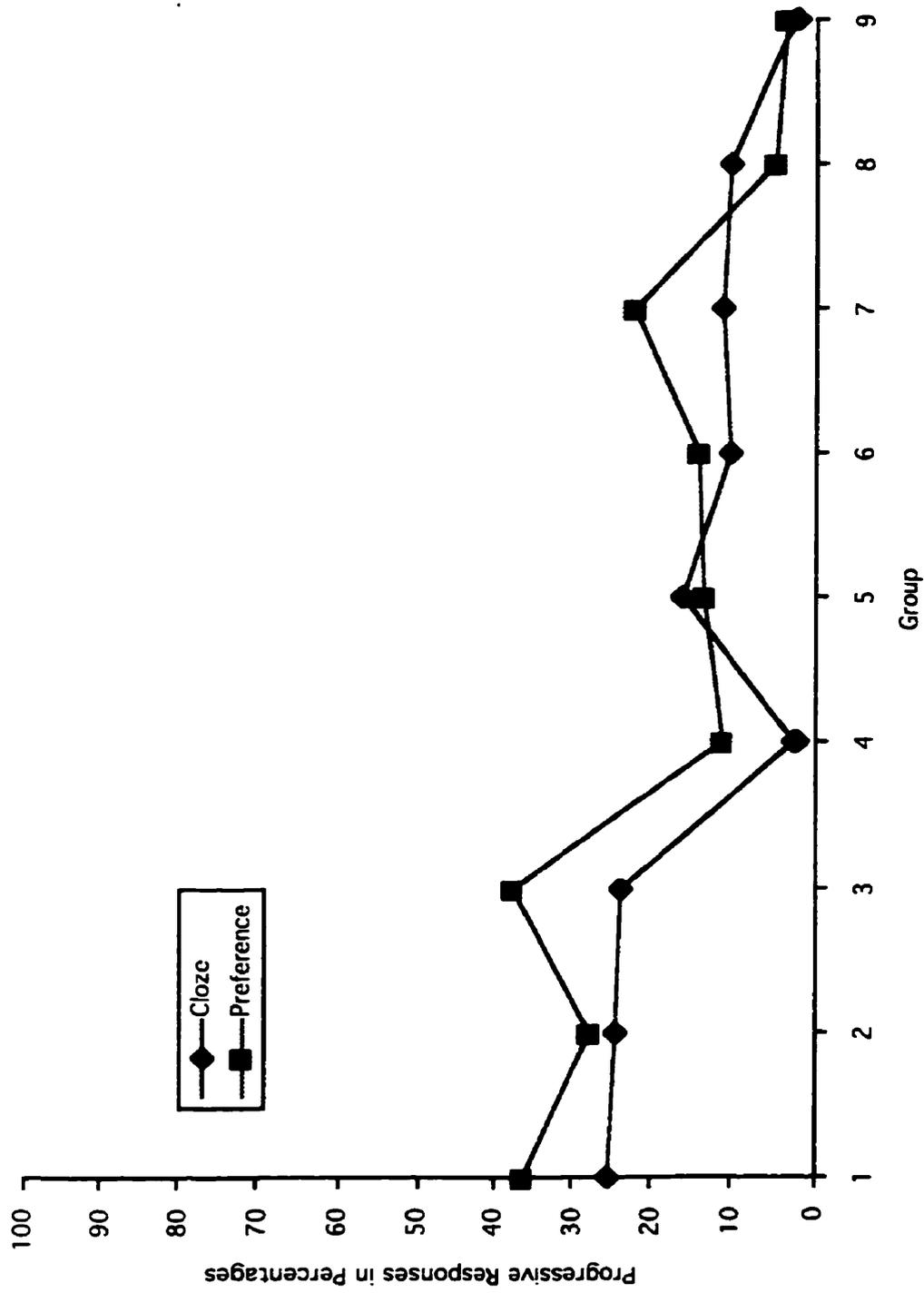


Figure 7.8. NNS use of progressive with activities on cloze and preference tasks

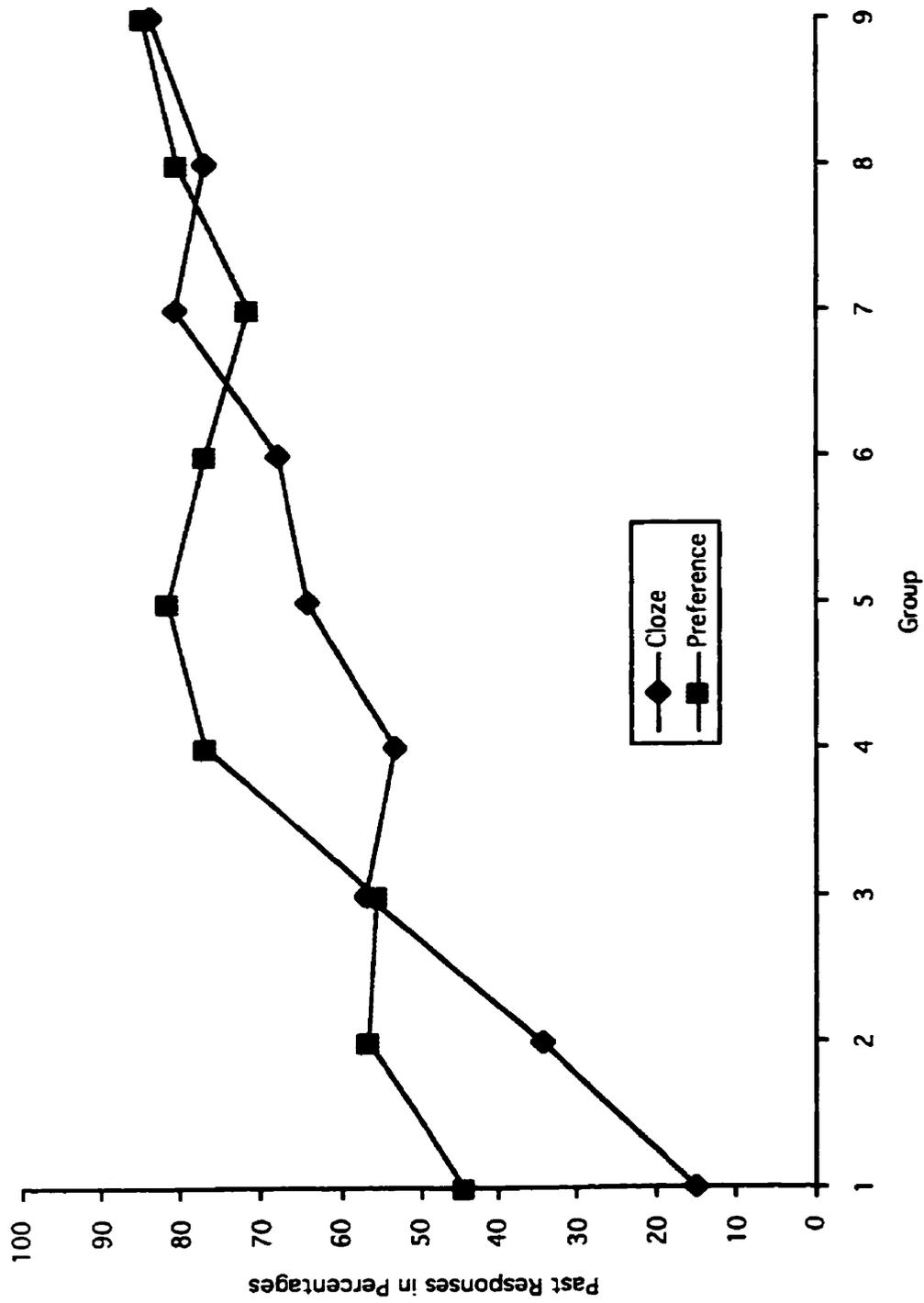


Figure 7.9. NNS use of simple past with activities on cloze and preference tasks

Table 7.6 shows the similarities and differences between the simple past and progressive responses for the same items on the two tasks. On the whole, learners who had produced a simple past response on the cloze tended to prefer simple past for the same item on the preference task as well. However, at the group level, there was much less stability in the simple past responses among the lower-level learners. Approximately 30% of the simple past responses in each of groups 1 through 3 changed to progressive on the preference task.

There was more change in the progressive forms at all levels (although in groups 4, 8, and 9 there were very few instances of progressive for the 9 items on the cloze). In a few cases (groups 2 and 6) learners accepted both simple past and progressive forms for some of the items but overall, the changes were in favour of simple past forms only.

Thus some learners did respond differently on the two tasks, and the changes from the progressive to the simple past were more frequent than the change in the other direction. Yet, as indicated earlier in Figure 7.8, the results show that overall, the progressive responses for the two tasks were quite similar. To understand why this is so, it is necessary to look at the raw numbers for the distribution of the progressive responses on both tasks by group, shown in Table 7.7. The first column gives the number of progressive responses for the 9 items on the cloze. The next three columns show the comparison of the progressive responses on the preference task with the cloze. For example, in group 1, 11 of the 36 progressive responses in the preference task were also progressive for the same items on the cloze, while 5 had been simple past and 20 had been other forms on the cloze. The final 3 columns in the table summarize the shift in use/acceptance of forms on the two tasks: the number of progressive forms on the cloze that changed on the preference task (usually to simple past); followed by the number of non-progressive forms on the cloze (simple past, present, base,

Table 7.6
 Comparison of Preference Task Responses With Cloze for Activities (n=9)

Group	Same on both tasks				Changed from cloze task							
	Past		Progressive		Past to progressive		Progressive to past					
1	8	<i>15</i>	11	<i>25</i>	5	<i>15</i>	12	<i>25</i>				
2	23	<i>31</i>	8	<i>21</i>	8	<i>31</i>	5	<i>21</i>				
3	25	<i>41</i>	6	<i>12</i>	13	<i>41</i>	5	<i>12</i>				
4	44	<i>48</i>	1	<i>2</i>	2	<i>48</i>	0	<i>2</i>				
5	45	<i>52</i>	5	<i>9</i>	5	<i>52</i>	4	<i>9</i>				
6	58	<i>67</i>	5	<i>9</i>	8	<i>67</i>	2	<i>9</i>				
7	47	<i>65</i>	5	<i>9</i>	13	<i>65</i>	4	<i>9</i>				
8	62	<i>69</i>	1	<i>3</i>	3	<i>69</i>	2	<i>3</i>				
9	71	<i>75</i>	1	<i>2</i>	2	<i>75</i>	0	<i>2</i>				
Total	383	<i>463</i>	83%	43	<i>92</i>	47%	59	<i>463</i>	13%	34	<i>92</i>	37%

Note. Figures in *italics* represent total number of past or progressive responses for the 9 activities on the cloze task.

Table 7.7
Comparison of Progressive Responses for Activities on Preference and Cloze Tasks

Group	Cloze Total prog	Preference				Summary of changes from cloze to preference task		
		Same as cloze	Simple past on cloze	Other forms on cloze	Total prog	From prog ^a	From simple past and other to prog	Difference ^b
1	25	11	5	20	36	14	25	9
2	21	8	8	9	25	13	17	4
3	12	6	13	8	27	6	21	15
4	2	1	2	7	10	1	9	8
5	9	5	5	1	11	4	6	2
6	9	5	8	1	14	4	9	5
7	9	5	13	0	18	4	13	9
8	3	1	3	0	4	2	3	1
9	2	1	2	0	3	1	2	1

^aAlmost always changed to simple past on preference task.

^bCompares the number of changes from progressive on cloze with changes to progressive on preference task.

perfect, other, and blank) that changed to progressive on the preference task. The final column gives the difference between changes from progressive on the cloze and changes to progressive on the preference task. Using group 1 as an example again, roughly half of the progressive responses on the cloze (14/25) changed on the preference task. At the same time, however, 25 non-progressive responses on the cloze (past and non-past forms) changed to progressive on the preference task.

To summarize, Table 7.7 demonstrates that in every group although the preference task responses show changes from the progressive on the cloze, there were also changes to the progressive on the preference task from both simple past and other forms on the cloze. When these responses are calculated for the group as a whole on all items, the net result is little change between the tasks in progressive responses for the 9 activities.

Among the lower proficiency groups there was more acceptance of simple past on the preference task than use of simple past on the cloze. There may be two reasons for this. Although learners in the lower level groups did change some of their simple past responses on the cloze task when confronted with the same items on the preference task (usually to past progressive), the proportion of responses that were the same on both tasks was quite high in most groups (see Table 7.8). In addition, there were frequent changes from non-past (and to a lesser degree progressive) responses on the cloze to simple past on the preference task. Less change from the simple past combined with more change from other forms to the simple past resulted in greater numbers of simple past responses overall for the preference task. Only in groups 3 and 7 were there any deviations from this trend, and in both cases this was due to greater preference for the past progressive on the preference task (as was shown in Figure 7.8). The changes from simple past to past progressive and from non-past to simple past were

Table 7.8
Comparison of Simple Past Responses for Activities on Preference and Cloze Tasks

Group	Cloze	Preference				Summary of changes		
		Same as cloze	Prog on cloze	Other forms on cloze	Total	From past on cloze	To past on preference	Difference^a
1	15	8	12	24	44	7	36	29
2	31	23	5	23	51	8	28	20
3	41	25	5	10	40	16	15	-1
4	48	44	0	22	66	4	22	18
5	52	45	4	15	64	7	19	12
6	67	58	2	14	74	7	16	9
7	65	47	4	7	58	18	11	-7
8	69	62	2	7	71	7	9	2
9	75	71	0	5	76	4	5	1

^aCompares number of changes from past on cloze with changes to past on preference task.

virtually equal in group 3. In the upper groups there is little difference between the simple past responses on the two tasks, but in group 7 there were a few more changes from simple past to past progressive than changes to simple past, resulting in slightly higher use of simple past on the cloze for this group (see Figure 7.9 again).

To summarize the findings from the comparison of cloze and preference task responses for the 9 activities, the trends in the use of simple past and progressive were similar in both tasks, but there was greater use of simple past, and to a lesser degree, past progressive on the preference task. This was not simply because learners who had supplied forms other than simple past or progressive now opted for one or the other (and more rarely, both) of the forms. Rather, the increase in the use of the two forms on the preference task reflected complex changes in the suppliance and choices of the forms at the individual level. There was more stability in and change towards the simple past responses. However, learners who had produced non-progressive forms on the cloze (including simple past and the range of other types of forms) found progressive acceptable with sufficient frequency that the results by group with progressive across the sample were very similar to the results from the cloze for the same set of 9 activities.

Qualitative analysis of repeated items

The preference task included the two passages in which *swim*, *run*, and *ride* appeared in the activity and accomplishment categories (see Preference Task passages #5 and #11 in Appendix E). The responses of the sub-set of students who had consistently supplied different forms for these sets of items when they appeared in the two aspectual contexts were examined. Three of the 24 students had not completed the preference task, resulting in a sub-sample of 21 learners'

responses. Table 7.9 compares the preference and cloze task responses for *swim*, *run*, and *ride* in the two contexts.

Table 7.9
Comparison of Cloze/Preference Task Responses for Repeat Items

Student	Cloze	Pref	ACC	Cloze	Pref	ACT
Group 1						
A3	perf	prog	swim	prog	prog	swim
	perf	prog	run	prog	prog	ride
	perf	past	ride	prog	prog	run
B3	perf	prog	swim	blank	prog	swim
	perf	prog	run	blank	prog	ride
	perf	prog	ride	blank	prog	run
B27	perf	past	swim	pres	past	swim
	perf	past	run	pres	prog	ride
	perf	past	ride	pres	past	run
B31	base	past	swim	base	prog	swim
	base	past	run	prog	prog	ride
	base	past	ride	prog	prog	run
B39	perf	prog	swim	other	prog	swim
	base	prog	run	other	prog	ride
	base	prog	ride	prog	past	run
B36	prog	past	swim	prog	past	swim
	prog	past	run	prog	past	ride
	prog	past	ride	prog	past	run
A7	prog	prog	swim	pres	past	swim
	prog	prog	run	pres	past	ride
	prog	prog	ride	blank	past	run
C33	base	?	swim	blank	past	swim
	base	?	run	blank	past	ride
	base	?	ride	blank	past	run
RB1	past	?	swim	blank	?	swim
	past	?	run	blank	?	ride
	base	?	ride	blank	?	run

Table 7.9
continued

Student	Cloze	Pref	ACC	Cloze	Pref	ACT
Group 2						
B34	perf perf perf	past past past	swim run ride	past past past	past past past	swim ride run
B32	past past past	prog prog prog	swim run ride	prog prog prog	past past prog	swim ride run
B1	pres pres pres	past past past	swim run ride	prog prog prog	prog prog past	swim ride run
A5	prog base base	prog ? ?	swim run ride	prog prog past	prog past prog	swim ride run
B37	past past past	past past past	swim run ride	prog/past prog/past base	prog prog prog	swim ride run
Group 3						
B25	past past past	NA	swim run ride	prog prog pres	NA	swim ride run
A8	prog prog prog	prog prog prog	swim run ride	prog prog prog	prog prog prog	swim ride run
C1	prog prog prog	NA	swim run ride	past past prog	NA	swim ride run
Group 4						
B41	past past past	past past past	swim run ride	blank blank blank	prog prog prog	swim ride run
B13	past past past	past past past	swim run ride	past base pres	past past past	swim ride run
B35	past base past	past past past	swim run ride	perf base perf	both both both	swim ride run

In group 1, 8 of the learners had supplied different forms for all three verbs in the two categories on the cloze. On the preference task, only 2 learners showed the same complete dissociation between the items in the two passages: B31 chose progressive for activities and past for accomplishments, and C33 past for activities and "?" for the accomplishments. Several of the learners chose forms that were different from the ones they had supplied on the cloze, often opting for progressive (A3, B3, B39, A7), sometimes with accomplishments as well as with activities. Note that RB1's preference task response is consistent with the cloze responses for the same items - blank on the cloze and "?" on the preference task.

In group 2, there is more evidence of the different treatment of the verbs in the two passages. Four of the five students (B32, B1, A5, B37) preferred progressive with all or most of one set of items (usually activities) and something different for the others (usually past). Like C33 in group 1, A5 expresses uncertainty when the verbs appear as accomplishments, but expresses a preference (twice for progressive, once for simple past) when they are activities. On the preference task, B37 reverts to the original cloze choice (progressive), which had been crossed out and replaced by simple past.

A8 from group 3 had supplied progressive for both sets of items on the cloze, and did not change on the preference task. The four learners from group 4 stayed with their choice of past on the cloze for accomplishments, but changed their blank / perfect activity responses for progressive. B13 had produced simple past for the activities on the cloze, and stayed with this choice on the preference task. B35 was one of the rare learners to find both forms acceptable, but did so for the activities only, preferring simple past for the accomplishments.

The responses from the four upper level learners from groups 5 through 7 who had produced different forms for the verbs in the two aspectual contexts are not summarized in Table 7.9 because they all chose simple past for both sets of

verbs. The responses of these learners on the cloze had included perfect, present, and progressive forms.

In summary, among the lower groups on the preference task (groups 1-4) there was evidence of a dissociation between activities and accomplishments, although it was not as marked as on the cloze task where the same learners were called upon to supply the forms. Among the more proficient learners, a restricted choice between simple past and past progressive resulted in learners opting for simple past for the verbs regardless of aspectual category. In doing so, they showed more target-like behaviour (as defined by the NS responses) than they had done on the cloze task. The one important difference between NS and NNS behaviour was the extreme reluctance of the latter to accept both progressive and past responses for any given item. Learners at all levels appeared to take a one-form/one-meaning approach to the task, thereby exhibiting interlanguage behaviour consistent with Andersen's (1984) One to One Principle. This interpretation of the findings will be discussed in greater detail in the following chapter.

CHAPTER 8 - DISCUSSION OF STUDIES 1 AND 2

In this chapter the results from Studies 1 and 2 are interpreted in light of the original research questions, summarized here as follows:

- Among francophone learners of English, what roles do lexical aspect and L1 influence play in the acquisition (i.e., the distribution and development) of tense/aspect markers in past tense contexts?
- To what degree are any observed effects from lexical aspect and/or L1 influence mediated by proficiency?

Each section includes a summary of the relevant findings, which are restated at the beginning of the final chapter in the form of responses to each of the research questions posed in chapter 2.

The variability among learners, both within and across tasks, is also discussed. The chapter concludes with some comments on the proposed explanations for the aspect hypothesis, based on the findings from the two studies.

Lexical Aspect and Simple Past

Telics

The results from Study 2 for the use of past morphology are partially consistent with Bardovi-Harlig and Reynolds' study and Study 1, in which the original version of the cloze instrument was used. All three studies found a significant effect for lexical aspect, such that the distribution of simple past forms was biased in favour of appropriate use with telics (accomplishments and achievements). In contrast to Bardovi-Harlig and Reynolds' study, Study 2 and Study 1 found that the lexical aspect effect was not mediated by proficiency with past. The lack of interaction in Study 1 or Study 2 between proficiency and lexical aspect showed that even learners who had become quite proficient in their use of past tense morphology continued to have relatively more success with telics. This

points to the robustness of the influence of lexical aspect, especially when the interpretation of the interaction effect in Bardovi-Harlig and Reynolds is taken into account. As Bardovi-Harlig and Reynolds point out, it is quite likely that the interaction was caused by the performance of one level (Level 4) within one aspectual class: activities. Level 4 showed an increased use of progressive with activities, compared to the other levels (see Figure 4.2). However, the cloze task was administered at the end of a term of study, after Level 4 students had been receiving instruction on the past progressive (Bardovi-Harlig & Reynolds, p. 113, p. 116). The data in both Study 1 and 2 were collected on the first day of the intensive English program in order to control for the possibility of recent instructional effects.

In both Study 1 and Study 2 there were no significant differences between accomplishments and achievements in the use of simple past. The alternative responses to simple past that the learners produced for items in the two aspectual classes also followed a similar pattern. These results suggest that learners were more influenced by the general telic quality (inherent end point) of a situation rather than by whether it was a punctual event (achievement). Yet, in Study 2, there was a subtle difference in the use of past morphology between the two types of telics. Overall, learners were significantly more successful with achievements than they were with activities, whereas the difference between accomplishments and activities was not significant. In Study 1, however, the differences between both types of telics and activities was significant. Figure 6.1 shows graphically that the difference in the findings for accomplishments in the two studies may be accounted for by the behaviour of the lowest-level learners. Study 2 included students with more limited knowledge of past morphology than Study 1, and it was these students (groups 1 and 2) in Study 2 that showed greater success with achievements than with any other aspectual class. The

response patterns for accomplishments and achievements for the remaining groups, however, are similar, and are also comparable to the patterns observed for the 6 groups in Study 1 (compare Figure 4.1 from Study 1 and Figure 6.1 from Study 2).

Study 2, therefore, provides evidence in support of the findings from studies of other learners of English in which the early use of past morphology was more strongly associated with achievements (Bardovi-Harlig & Bergström, 1996, for written production, and Bardovi-Harlig, 1998; Robison, 1995; Rohde, 1996, for oral production). The findings from Study 2, however, suggest that the association of past morphology with punctual events may be confined to very early use of past markers, as once learners had some limited control over past morphology (i.e., the lowest level groups in both Bardovi-Harlig & Reynolds and Study 1), they were equally successful with accomplishments and achievements. At the same time, one needs to be cautious in interpreting these findings as evidence of emergent use of verb morphology. Although Study 2 managed to include greater numbers of learners with limited knowledge of past morphology than previous cross-sectional studies had done, there were still relatively few learners represented in the lowest end of the range of past tense scores. Out of 108 students, only 4 scored below 20% appropriate use of simple past, compared with 17 who were unable to complete the exercise and who were thus not included in the sample. As mentioned in the discussion of the findings of Study 1 (see chapter 4), there appears to be a "floor" effect with this task, such that included in the knowledge of English required to complete the task is some familiarity with simple past morphology.

Atelics

As for the spread of past within the atelic category, in contrast to the findings from the cloze instrument in Study 1 and Bardovi-Harlig and Reynolds,

and to the findings from the written narratives in Bardovi-Harlig and Bergström (1996), Study 2 found that statives rather than activities were the most challenging for the learners. Learners did struggle with activities (indeed, the post-hoc test found no significant difference between stative and activity means for the sample as a whole) until they became quite proficient in their use of simple past (i.e., upon achieving approximately 80% appropriate use - see Table 6.3 and Figure 6.1), but overall, it was the stative category that presented the most persistent challenge. The spread of past from telics through activities to statives is predicted by the aspect hypothesis, but previous cross-sectional studies of English had not found strong support for statives as the least prototypical category for simple past. There are three methodological reasons which may explain why Study 2 yielded evidence supporting the prediction.

The first has to do with the removal, in Study 2, of the 3 activity items for which learners had produced disproportionate percentages of progressive responses in Study 1. The item analysis of cloze and preference task responses presented in chapters 4, 6, and 7 (see Figures 4.7, 6.7, and 7.2) showed that the result of this change was greater homogeneity in the distribution of the progressive responses among the verbs in the activity category. The magnitude of the progressive effect was also reduced, while the rate of success with simple past with activities increased. This methodological change may explain, at least in part, why learners had less trouble with activities in Study 2, when compared with the francophone learners in Study 1 and the ESL learners of various L1 backgrounds in Bardovi-Harlig and Reynolds.

As for the comparison with the ESL learners in Bardovi-Harlig and Bergström (1996), the greater success with simple past with statives observed in that study may simply reflect greater success with *be*. As discussed in chapter 2, in learner-generated texts, *be* tends to dominate the stative category and to occur

as a tensed form. Although Bardovi-Harlig and Bergström report on the limited numbers of state verbs other than *be* or *have* in the French data only, in a subsequent study of L2 learners of English drawn from a similar population in which the same task was used, Bardovi-Harlig (1998) reported that *be* accounted for most of the use of past tense in the stative category in both the written and oral narratives (75% for written, 89% for oral). The finding in Study 2 that learners had the least success with statives was based on a broader sampling of the stative category - 13 stative types - which did not include lexical *be*.

Finally, the decision to take blank responses into account may also explain the different findings for activities and statives. Study 2 found that statives accounted for more instances of items left blank than any other category (see Distribution of Simple Past in chapter 6), but, as explained in chapter 4, Bardovi-Harlig and Reynolds did not treat blank items as a response category in their analyses. Nor was it possible for a learner to leave an item "blank" in the narrative task used in Bardovi-Harlig and Bergström's (1996) study. This would appear to explain the lower success with statives in Study 2. In Study 1, though, blanks were also analyzed, and the results showed that both activities and statives attracted comparably high percentages of blank responses (see Distribution of Simple Past in chapter 4). However, one of the consequences of the revisions to the cloze instrument was that the learners in Study 2 manipulated more stative types (13 in Study 2 versus 8 in Study 1, an increase of 60%), and they were also presented with equal numbers of types from both categories (14). In Study 1 there were slightly more activity (11) than stative (8) types. It may be that the balancing of the items across the lexical aspectual categories permitted the observation that the distribution of blank items was more concentrated in the stative category.

The interesting question, of course, is why learners were more likely to leave a stative item blank. There are two possible explanations for the behaviour (there may in fact be more, but two are suggested by the data). Although considerable care was taken to choose state verbs believed to be known to the participants (based on familiarity with the student population, consultation with language teachers, and pilot-testing), some learners may simply have been unsure of the meaning of the lexical item. Although neither Study 1 nor Study 2 included measures designed to probe learners' reasons for producing the forms that they did¹ (which, in the case of blanks, meant not producing any form at all), previous research has consistently shown that learners do not use many types of statives. It may be, therefore, that learners have less control or less productive knowledge of these types of verbs or predicates. The rarity of blanks within the achievement category provides some indirect support for this interpretation. Previous research in which learner-generated texts were analyzed (see chapter 2) found disproportionately high numbers of achievements in both written and oral production, and this was the aspectual category on the cloze task in both Study 1 and 2 in which learners were least likely to leave an item blank.

A second related explanation for the higher frequency of blanks with statives is more in keeping with the predictions of the aspect hypothesis. Some learners may have left more statives blank not because they were completely unfamiliar with the items, but because they were uncertain of the appropriate inflection in the past time contexts presented by the cloze passages - either because the use of past with statives is less frequent in the input and in their own output, or more marked (less prototypical), or both. The analysis of the repeated items across the activity and accomplishment categories (see Table 6.12) lends some indirect support to this interpretation, as there were cases of learners

¹ See, for example, Liskin-Gasparro (1997).

supplying the target item when it appeared as an accomplishment (appropriately inflected for simple past, in some cases) but leaving the same verb blank when it appeared as an activity. This points to limitations in the depth of the learners' knowledge of the semantic properties of the verbs, as their understanding of the items appeared to be more solid in certain contexts.

In other words, patterns in the L2 acquisition of tense and aspect may be influenced by a distributional bias in the learners' own output, as opposed to, or in addition to, any distributional bias in the NS output to which learners are exposed. In the cloze task, learners may have struggled more with verb morphology with statives in part because they typically do not use many types of statives in their own production. This interpretation points to the importance of considering lexical acquisition in tandem with the acquisition of tense/aspect morphology. A similar issue was raised by Bardovi-Harlig (1998) who hypothesized that the expansion of verb morphology across aspectual categories may involve the learning of new lexical verbs and their arguments. Bybee (1991) also refers to the role type/token frequencies may play in the formation of schema such as verb paradigms.

To summarize, the findings on the acquisition of tense/aspect markers by francophone learners of English provided further evidence in support of the robustness of the past/telic association found in previous cross-linguistic research (including L2 learners of English from different L1 backgrounds). The studies also provided new evidence that suggests that the L2 acquisition of tense/aspect markers in English follows the prediction of the aspect hypothesis for the spread of past: from telics to activities to statives. There was also some evidence that suggested that early use of simple past was most successful with punctual events (achievements), although the small number of low-proficiency learners (and, some would argue, the cross-sectional nature of the research

design) do not permit generalizations about the emergent use of past morphology.

Lexical Aspect and Alternatives to Simple Past

Both Study 1 and Study 2 found that the distribution of progressive markers was biased in favour of activities, and there was more use of base and present forms with statives. The studies showed, therefore, that francophone learners of English are also influenced in their use of other tense/aspect forms in ways that are consistent with the predictions of the aspect hypothesis and with previous research investigating the L2 acquisition of English.

Present

Of particular interest is the finding in Study 2, in which all target items were presented in 3rd person singular contexts, that it was an inflected form - the present - that was the most commonly supplied alternative form to simple past with statives.² Bardovi-Harlig and Bergström's (1996) study of written narratives by learners of a variety of L1 backgrounds yielded a similar finding, and Study 2 extended the findings, showing that the pattern obtained across a greater range of stative types, among a different population of learners. This association between present and stative is a relative effect, however. Not only were the standard deviations very high (as they were for all response categories, an issue discussed in more detail below), but present was also a consistently frequent response for activities among the first 6 of the 9 groups; in fact, in some groups the percentage suppliance of present for statives and activities was virtually the same. However, relative to the other responses within the categories, present was produced more frequently with statives, and progressive with activities.

² This was true even for the stative *belong*. Although it was left blank much more frequently than any other item, it was also among the statives for which the inflected present was supplied the most frequently (see Figure 6.8).

Progressive

One of the goals of Study 2 was to probe the strength of the association between activities and progressive forms that had been observed in previous research. This was done in three ways: by revising several of the cloze passages in which activity verb items were presented, by adding a subset of verbs that were repeated in activity and accomplishment categories, and by including a preference task that specifically targeted progressive responses with activity items. Although the revisions to the cloze reduced the magnitude of the effect for progressive for activities (compared with the findings from Study 1 and Bardovi-Harlig & Reynolds), the francophone learners nevertheless showed a greater preference for progressive with activities than with any other aspectual category. Moreover, when confronted with a restricted choice between simple past and past progressive on the preference task, learners were also more willing to accept past progressive with activities than with telics. These findings are consistent with previous research in which the original cloze instrument was used (Bardovi-Harlig & Reynolds; Study 1) and with research in which oral and/or written production was examined (Bardovi-Harlig, 1998; Bardovi-Harlig & Bergström, 1996; Rohde, 1996; Robison, 1995; see also Shirai & Kurono, 1998). The item analyses of the responses on the cloze and preference tasks confirmed that the use of progressive in Study 2 occurred across a range of verbs within the activity category.

There was also evidence from the preference task suggesting that the association made by learners between progressive markers and activities was mediated by proficiency (see Figures 7.5 - 7.6). Learners at the extremes of the proficiency range (defined as overall appropriate use of simple past) appeared to be less influenced by lexical aspect in their acceptance of progressive with activities and telics: the lowest level group showed virtually no difference in their

preferences for progressive and simple past for activities and telics³, whereas the highest level group found progressive equally unacceptable for both lexical aspectual categories, thereby exhibiting more target-like behaviour, as defined by the NS responses to the same items.

Although there was less use of progressive with statives than with any other aspectual category, there was nevertheless more use of the progressive marker with state verbs in Study 2 (and to a lesser degree, Study 1) than has been reported in previous research.⁴ It occurred with the greatest frequency among the lower levels in Study 2, accounting for over 15% of the responses in group 1, and over 11% of the responses in group 2. While this could be interpreted as evidence that L2 learners, unlike L1 learners, overgeneralize the use of progressive to stative contexts, the analysis of verbs attracting the highest suppliance of progressive suggests otherwise. There were 3 statives that accounted for a disproportionate percentage of the progressive effect, and they are all verbs that can also occur in activity contexts with the progressive: *look* (2), *smell*, and *think* (contrast *It smells/looks good* with *I'm smelling/looking at it*; *They think it's a good idea* with *They're thinking about your suggestion*).⁵ Given the paucity of stative types in learner production in general, the learners may have been more familiar with the items in activity situations, where they would presumably have encountered the verbs in the progressive (in the input and/or in their own output). If one accepts this interpretation, the inappropriate suppliance of progressive in the stative situation would seem to demonstrate the limits of the learners' lexical knowledge

³ Note that because 5 of the 6 telics on the preference task were accomplishments, the results should perhaps be interpreted as more representative of behaviour with accomplishments than of behaviour with telics in general.

⁴ Robison's (1990) case study of an adult Spanish speaker of English is the only study to have found frequent use of progressive with statives.

⁵ These 3 verbs did not appear on the cloze in Study 1.

with a few verb types, rather than any generalized behaviour with progressives and statives.

Lexical Aspect and Variability

The interpretation of the findings needs to acknowledge the high degree of variability among learners for the response categories, as evidenced by the magnitude of the standard deviations, and by the changes in simple past and progressive responses from the cloze to the preference task. Although the standard deviations are lower in Study 1 and Study 2 (due to the combination of the homogeneity of the L1 backgrounds and the regrouping of learners for the analyses according to proficiency with simple past) than they were in Bardovi-Harlig and Reynolds' study, they were still high. Similarly, on the preference task, the analyses revealed that the overall patterns masked considerable instability in the response of learners at the lower levels in particular. These findings point to the importance of viewing the influence lexical aspect has on the L2 use of tense and grammatical aspect as a relative effect.

A further example of the need to consider lexical aspect as a relative influence comes from the analysis of the responses to the repeated items. It is difficult to know how to interpret the findings for the verbs that were repeated in the activity and accomplishment categories. There were clear dissociations in the responses when the same verbs appeared in the different aspectual categories, particularly among the lower level learners. The patterns in the distribution of the forms supplied reflected the predictions of the aspect hypothesis and/or L1 influence to a certain degree (i.e., there was somewhat more progressive with activities and past or perfect with accomplishments), but they did not always do so. They did, however, show consistent dissociations at the individual level - including cases where learners produced different variants of the progressive form for the same item when it appeared in a different aspectual class, or left

items blank in one aspectual context but produced forms for the same items in the other. What makes this finding difficult to interpret is that learners' responses for the same item repeated in the same lexical aspectual category also varied, albeit to a somewhat lesser degree. The analysis of the repeated items within categories was based on a very small number of items (4, one repeated item per lexical aspectual category), but it does seem to suggest that, especially among the lower-level learners, the use of verb morphology was sensitive to any change in context, not necessarily only those changes that occurred across aspectual classes.

At the same time, the changes in learner behaviour with the same item from context to context indicated that learners were not simply making use of formulaic chunks in their responses. The cloze task appeared to be successful in getting learners to process each item separately, thereby eliciting a representative range of interlanguage behaviour which includes, by definition, some variability.

L1 Influence

Study 2 yielded findings confirming the influence of L1 found in Study 1: for francophone learners of English, the perfect (similar in form but not function to the French *passé composé*) was the most common alternative to simple past for telics. In other words, the category that was the best case context for learners' attempts at simple past (telics) was also the category in which transfer of the form perceived to be the equivalent of past (the perfect) was the most evident. There is indeed a very strong association between "past" and telics.

The L1 influence does not appear to over-ride the effect of lexical aspect; rather, it occurs within the effect. Although perfect was one of the alternatives to simple past for francophone learners for all aspectual classes, it never rivaled the associations predicted by the aspect hypothesis for present/base forms for statives or for progressive with activities. Although it was the main alternative

for simple past produced in the telic category in both Study 1 and Study 2, it did not rival the use of past with telics.

In addition, the L1 influence appeared to be mediated by proficiency, in that the use of the perfect increased (relative to the use of other forms within each group) once learners began to develop some productive use of simple past in English (see Figures 4.5 and 4.6 in Study 1, and Figures 6.4 and 6.5 in Study 2).

These findings are consistent with the literature on developmental sequences in SLA. The effect of L1 on the use of perfect in English operated within the predictions of the aspect hypothesis, and complemented rather than contradicted the findings from studies of learners of English from other L1 backgrounds. In addition, the L1 effect also interacted with development. Once francophone learners were able to use the simple past with some success, it was then that the "crucial similarity", to borrow an oft-cited term from Wode (1976/1978, p. 116), between an L1 form (in this case, the *passé composé*) and an L2 form (the present perfect) appeared to have the greatest influence on the francophone's performance.

In this study, the L1 influence resulted in inappropriate uses of the perfect in simple past contexts. The studies reported on here were not designed to investigate appropriate uses of perfect. It is conceivable, however, that the influence may also be facilitative (Zobl, 1982), given that there is some overlap between the functions of *passé composé* and the perfect (see chapter 2). Bardovi-Harlig (1997)'s longitudinal study of the emergence of present perfect among 16 adult university learners from varied L1 backgrounds found that present perfect emerged only after simple past was well-established (a mean group rate of 85.9%). Whether L1 influence plays a role in the emergence and appropriate use of the perfect remains an empirical question.

At first glance, the relatively low frequency of use of the perfect by francophones would appear to be at odds with the perception of language teachers who perceive the misuse of the form to be a pervasive phenomenon in the interlanguage of this population of learners. One possible interpretation of the apparent mismatch between perception and evidence is that the inappropriate use of perfect is more salient and/or irritating than pervasive. There is another plausible explanation, one that reconciles the perception of the teachers (who, after all, have formed their impressions through extensive experience with francophone learners of English) with the empirical evidence. Both Study 1 and Study 2 showed that the inappropriate use of perfect was most common with telics. Previous research has shown that L2 learners of English from a variety of L1 backgrounds have a tendency to produce more telics (achievements in particular) than atelics. Thus, the inappropriate use of perfect in actual learner production (as opposed to in controlled tasks such as the cloze) may, in fact, occur more frequently than these data suggest. It may not be pervasive in that it may not occur with equal frequency across all four lexical aspectual categories (as these data indicate), but it may nevertheless be frequent, given its tendency to occur with telics in the production of francophone learners of English.

Explanations for the Aspect Hypothesis

Although the research reported on here was not designed to investigate the degree to which learner associations between emergent and developing verb morphology and lexical aspect reflect a distributional bias in the input (Andersen, 1991), and/or behaviour consistent with a prototypical, one form/one meaning account (Andersen & Shirai, 1996; Andersen, 1984), Study 2 permitted observations relevant to these postulated explanations for the aspect hypothesis.

The reluctance of learners to accept both past progressive and simple past forms for the target items on the preference task is consistent with a prototypical, one form/one meaning explanation of interlanguage behaviour. Even though learners showed that they entertained both simple past and (past) progressive forms as possible responses for the same items (i.e., producing one of the two on the cloze, and preferring the other on the preference task), they were not prepared to indicate this choice directly through choosing the "both" option for the target items. At the same time, the fact that individual learners (especially among the lower levels) changed their responses from the cloze to the preference task as frequently as they did suggests that the association between a given form and its meaning may actually be quite unstable.

There are two observations that are relevant to the distribution of tense/aspect markers in the input NNS's are exposed to. The first is anecdotal. In constructing items for the cloze, it was relatively easy to find unambiguous obligatory contexts for simple past for telics. It was much harder to come up with passages containing activities where the simple past would be obligatory - often a progressive would be acceptable, albeit with a slightly different meaning. Similarly, with states, many early examples had to be rejected because although a situation was marked for past, it was often possible to use present to refer to an ongoing state (She *rented* an Agatha Christie film because she *loves* solving mysteries.).

The second observation concerns the NS responses to the target items on the cloze in Study 2 (presented in Table 6.9). The percentage of agreement among the NS's for the items was very high, but in the relatively rare instances when they did not supply past, the NS use of other forms was remarkably similar to NNS behaviour. There were only 13 progressive responses produced by the NS's (out of a total of 1680 responses overall), but 10 of the 13 occurred with activities

(5 different verbs produced by 8 different NS's). There were even fewer present responses - 4 in total - but all 4 occurred with states (3 different verbs by 4 different NS's). Of the 5 perfect responses, 4 were supplied with achievements (3 different verbs by 4 different NS's). Although the numbers are small, they show that NNS's are responding to associations between lexical aspect and tense and grammatical aspect that are consistent with NS knowledge. The NNS's task, however, is to acquire mental representations of the grammatical forms that are consistent with a much wider range of meaning. One goal for future research is to explore the kinds of pedagogical tasks that might help them do this.

CHAPTER 9 - CONCLUSION

The two cross-sectional studies reported on here were designed to explore the relative influences of lexical aspect and L1 knowledge on the L2 acquisition of verb morphology. The analyses examined the degree to which francophones' appropriate and inappropriate use of tense / aspect markers in past contexts supported the predictions of the aspect hypothesis, and the degree to which it showed influence from French, their L1. This final chapter summarizes the findings for each of the research questions posed in chapter 2, identifies some of the limitations of the studies, and discusses the implications of the findings for both future research and L2 pedagogy.

Summary of Findings

- Did the francophone learners use the simple past more appropriately with telics?

In both studies, francophone learners were significantly more successful in using past morphology with telics (accomplishments and achievements). As this acquisitional pattern has also been observed among other L2 learners of English and learners of other L2's, the studies provide confirming evidence that of all the predictions of the aspect hypothesis, the association of past / perfective markers with the prototypical telic situation is indeed the most robust.

- Among the telics, did appropriate use of past spread from achievements to accomplishments?

There was some evidence that very early use of past tense morphology occurred more with achievements, but once learners began to use past morphology with even limited success, they did so with equal appropriacy with

both achievements and accomplishments. This suggests that punctuality (the feature distinguishing achievements from accomplishments) plays a very limited role in interlanguage past tense marking.

- Among the atelics, did appropriate use of past spread from activities to statives (as predicted by the aspect hypothesis) or did learners have greater difficulty with activities (as some empirical studies of ESL have shown)?

There was evidence that statives were the most challenging for learners: once learners were able to use past morphology appropriately in most contexts, the inappropriate uses were most likely to occur with statives. Statives were also the items most often left blank, perhaps suggesting that part of the challenge in using verb morphology with this class is lexical unfamiliarity.

- Was there a difference among the forms that compete with simple past? If so, were the patterns consistent with the findings in support of the aspect hypothesis (progressive with activities, base / present with statives), did they reflect L1 influence, or both?

In associating present / base forms more frequently with situations that are static (statives), and *ing* with those that are dynamic and unbounded (activities) (in addition to associating regular and irregular markers of past with telics), francophone ESL learners in this study showed patterns of prototypical behaviour that were similar not only to other learners of English that have been studied (including some who had engaged in exactly the same task) but also to learners of several other L2's. At the same time, they also showed evidence of L1 influence in their inappropriate use of perfect (a French-influenced form) in contexts where simple past was required, a finding that has not been reported in previous research. The L1-influence occurred within the lexical aspect influence,

and was interpreted as further evidence for the strength of the association between telics and past morphology: the transfer of a form which marks past time in the L1 was observed most frequently within the prototypical category for past (telics) in the L2.

To summarize, the most robust finding from both studies was the telic/atelic split in the appropriate use of simple past. There was also some evidence consistent with the predictions of the aspect hypothesis for the spread of past from achievements to accomplishments, and then from activities to statives, and for the alternative forms supplied with activities and statives.

- Were the effects of lexical aspect and L1 influence mediated by proficiency?

The influence of lexical aspect on the appropriate and inappropriate use of verb morphology was evident among learners at every level of proficiency¹ (the statistically significant effect for lexical aspect did not interact with the proficiency factor), but the type of influence did vary with proficiency. Lexical aspect explained what lower level learners were getting right (simple past with telics) and where higher level learners continued to have difficulty (simple past with statives). The trends in associations between tense/aspect markers and lexical aspectual categories showed similar patterns among all but the most proficient learners, although the magnitude and the strength of the associations did vary. The L1 influence was also mediated by proficiency (i.e., was developmentally constrained), in that the use of perfect with telics was more evident once learners had acquired some productive use of past morphology.

¹ Proficiency was defined in both studies as appropriate use of past morphology in past tense contexts.

Limitations of the Research and Future Directions

There are several issues raised by the findings of the two studies that will be important to address in future research. Some were mentioned in the previous chapter, notably the difficulty of obtaining data from lower level learners with the type of cloze instrument used in this study, the absence of measures designed to probe learners' explanations for their response choices, and the lack of contexts for appropriate uses of non-past forms such as progressive and perfect.

Another issue is the nature of the cloze instrument itself. When compared to tasks which elicit learner-generated production, the strength of this task, as it is presently designed, is that it allows for a much broader and more balanced sampling of the verb types across the lexical aspectual categories, and for control over the contexts in which the items are presented (i.e., simple past, 3rd person singular). However, the cloze and the related preference task used in Study 2 are controlled elicitation tasks which require the learners to take someone else's perspective rather than expressing their own (Blyth, 1997). As grammatical aspect by definition involves expressing perspectives on how situations unfold, it is important to know how learners perform in freer production tasks, to verify whether the cloze task performance was fully representative of the learners' ability to use tense/aspect markers. Stevens (1984), for example, who replicated Bronckart's (1976, cited in Stevens) elicited oral production task with young French immersion students, found that the children used a greater range of tense/aspect markers when engaged in a freer oral production task. Another example of task affecting use of tense and aspect comes from Bardovi-Harlig (1998) who found differences in appropriate use of past when the adult ESL participants of that study engaged in oral and written versions of the same narrative task. The students who participated in the studies reported here were

not tested on oral production, but they were asked to produce written narratives as part of a larger study. It will thus be possible in a follow-up study to compare the results from the more controlled cloze and preference tasks with the findings from the written narrative. Preliminary results (Collins, 1998, 1999) suggest that there is indeed considerable variation in the performance of the same students on the different tasks.

The present research was not designed to investigate explanations for the aspect hypothesis, such as whether the patterns in the L2 use of tense/aspect reflected frequency distributions of the target forms in the classroom input provided by the teacher and/or the materials that the learners manipulated. Although this study did provide some insights into L1 influence on the L2 acquisition of tense and aspect, it will be important in future research to explore the ways in which L1 influence interacts with lexical aspect, by isolating other L1 groups and comparing their performance on the revised cloze instrument with that of the francophone learners in Study 2.

It has been suggested that the evidence in support of the phenomenon of learners associating verb morphology with lexical aspect constitutes a universal of language acquisition (Shirai & Kurono, 1998). While the research in the last decade has certainly responded to Meisel's (1987) criticism of the lack of quantified findings, notably through the use of large-scale cross-sectional research designs, it is not clear that we are at the point of being able to assign to the aspect hypothesis the status of language acquisition universal. Most of the large-scale, cross-sectional research that has been published to date has investigated acquisition among university-educated adult learners of English, French, and Spanish in North America. The two studies reported on here were no exception. Until a greater variety of languages, learners, and contexts have

been investigated, and until SLA researchers are successful in complementing the cross-sectional work with carefully designed longitudinal studies in the tradition of the L1 acquisition research, it is premature, in my estimation, to speak of universals.

Pedagogical Implications

Although I have spent a good many years in language classrooms - or perhaps because I have - I am cautious in making specific pedagogical recommendations based on the descriptive findings from one population of learners in a specific classroom context. In taking this position (see also Lightbown, 1985), I am reminded of a comment attributed to David Lack, the well-known British ornithologist, as recounted in Joseph Weiner's (1994) *The Beak of the Finch*. "Someone asks Lack a question about the tits in Wytham Woods. 'Well, I can't answer that question', Lack says, 'because I have only seventeen years' data'" (p. 299).

The research reported here did not examine how tense and aspect are actually taught in classrooms, or the differential effects on acquisition of different instructional approaches. There has actually been very little work done in this area. Thus one of the implications for pedagogy of the findings of the two studies is the realization that we need more research focused on pedagogical practices relevant to the teaching and learning of tense and aspect in a second language, research that is informed by the findings of descriptive studies of acquisitional patterns within and across learner populations.

There are findings from the studies that suggest certain pedagogical avenues that might be explored, both in future research and in classroom teaching. That the perfect posed problems with certain types of verbs in certain

situations (telics), once francophone learners had achieved a certain threshold in their productive use of past, has potential implications for both the timing and the focus of pedagogical tasks designed to target the inappropriate use of perfect in past contexts. Another issue is the nature of pedagogical tasks. Many of the kinds of exercises students typically engage in when learning tense and aspect involve "fill-in-the-blank" sentence-level production which primarily involve the manipulation of form. Yet there were times where the students in the studies clearly knew the appropriate *form* of the past, but when confronted with a change of context, either provided different forms or, in some cases, no form at all. It was thus the *use* of the form in the appropriate contexts that posed the greatest challenge (see also Bardovi-Harlig, 1992; Bardovi-Harlig & Bofman, 1989), indicating that greater use of pedagogical activities which provide learners with exposure to relevant contrasts in contexts may be of potential benefit. Bardovi-Harlig (1995b), for example, reports some success when learners are presented with situations contrasting simple past and past progressive with activities.

The differences between NS and NNS use of tense and aspect also have important consequences for pedagogical practices. Although relatively infrequent, NS's did occasionally produce habitual past for activities, or add a modal (i.e., *had to*) to a target item. There was not a single instance of this among the NNS's, and yet there were some learners who had very productive systems of past morphology, producing past appropriately over 90% of the time. NNS's at all levels of proficiency were also remarkably intolerant of ambiguity, as evidenced by their reluctance to consider, on the preference task, that two forms might be possible in a given context. This indicates that learners operate with an interlanguage tense/aspect system that does not allow them to make adequate use of the grammatical markers to express nuance and shades of meaning. It will

be important in future research to explore the kinds of input and output opportunities that might promote the development of this knowledge.

Indeed, one of the long-term goals of the research undertaken here is the development of pedagogical tasks that might help L2 learners make the appropriate form, meaning, and function connections required for successful comprehension and productive use of the tense/aspect system of English. The next step in this research programme is to go back to the classroom to document and interpret current pedagogical practices in light of the understanding gained from the two studies presented in these pages.

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Appendix A

Instructions for Cloze and Sample Passages (permission granted by Bardovi-Harlig & Reynolds, personal communication)

Directions: Below are several passages from which some words have been removed. Read each passage quickly to get its general meaning. Then go back to the beginning and write the missing word or words in the blank, using the word before the blank. If you are not sure of an answer, leave it blank and continue on to the next question. Once you have turned a page, please do not go back and change your answer.

Example: Right now we (have) are having a heat wave. The temperature (be) has been 35°C for three days.

1. In 1932 my grandfather (own) _____ the first car in town. He (buy) _____ it because he (want) _____ to go fast. He still (like)* _____ to go fast. Last week he got a ticket for driving too fast!

*distractor item

2. In December, 1991, my college (have) _____ a big holiday party. It (snow) _____ that night and the roads (be) _____ very dangerous. We (arrive) _____ late because of the snow. During the party some people (sing) _____ and others (dance) _____. Everyone at the party (enjoy) _____ it very much.

Appendix B

Target Verbs for Simple Past Contexts (from Bardovi-Harlig & Reynolds, 1995)
(number of verbs)

States (9) ^a	Activities (12)	Accomplishments (11)	Achievements (14)
be	dance	buy	arrive
belong	eat at home	change apartments	break
enjoy (2)	go (attend)	change the story	die
know	live (2)	eat breakfast	discover
need	ride	finish	drop
own	sing	give	explode
seem	snow	go to class	fall out
want	swim	marry	find
	tell	move	happen
	work	rent	kill
	worry	write	lose
			start
			take off
			turn off

^a Bardovi-Harlig and Reynolds report 10 states (p. 112), with *need* occurring twice (p. 130). However, in one of the cases, *need* occurs with an adverb of frequency. As stative verbs and activities occurring with frequency adverbs were analyzed separately in their study, there are in fact 9 states.

Appendix C

Calculations for Tukey HSD: Study 1

There is some controversy over the error term that should be used in post-hoc analyses of the results from a repeated measures MANOVA (Gravetter & Wallnau, 1985, p. 465). It is not possible to do a post-hoc analysis with computerized statistical packages such as SYSTAT. For this study, the Tukey HSD was calculated according to the formula found in Kirk (1982, p. 116), using the MSE from within subjects. The formula and the source table from which the MSE was taken are found below. The means for the 4 lexical aspectual classes were: achievement = 70.12; accomplishment = 71.04; stative = 58.10; and activity = 47.98. Only the accomplishment and achievement (telic) means differ by < 6.035; all other pairwise comparisons yield significant differences.

$$\begin{aligned}
 q_{\alpha, J, v_e} \sqrt{\frac{\text{MSE}}{n}} & \quad \alpha = .05 \\
 & \quad \text{where } J = 4 \quad (\text{using } v_e = 120) \\
 & \quad \quad \quad v_e = 192 \\
 \\
 & = 3.69 \sqrt{\frac{187.22}{70}} \\
 & = 3.69 \sqrt{2.67} \\
 & = 3.69 \times 1.635 \\
 & = 6.035
 \end{aligned}$$

Source of Variation	SS	df	MS	F	p
<i>Between Subjects</i>					
Group	82242.36	5	16448.37	261.19	0.001
Error	4030.34	64	62.97		
<i>Within Subjects</i>					
Lexical Aspect	26924.45	3	8974.82	47.94	0.001
Lexical Aspect x Group	3301.20	15	220.08	1.18	0.29
Error	35946.98	192	187.22		

Appendix D

Revised Cloze Task

Name: _____ Teacher's Name: _____

Native Language: _____

Where did you grow up? (city and country) _____

Where did you study/practise English before this course? _____

Directions: Below are several passages from which some words have been removed. Read each passage quickly to get its general meaning. Then go back to the beginning and write the missing word or words in the blank, using the word before the blank. If you are not sure of an answer, leave it blank and continue on to the next question. Once you have turned a page, please do not go back and change your answer.

Example: Right now we (have) are having a heat wave. The temperature (be) has been 35°C for three days.

1. This watch is very special so I don't wear it very often. My mother (give) _____ it to me for my sixteenth birthday. It (belong) _____ to her grandfather.
2. My grandfather (grow up) _____ in the middle of a big city. It was a poor, but friendly neighbourhood. He (know) _____ everyone on his street. He (go) _____ to the same school as all the other children. He (marry) _____ his best friend's sister and they had eight children.
3. Did you know George when he was in college?
Not very well. He (stay) _____ in his room and (study) _____ a lot. He didn't go out with other students very often, but sometimes he (like) _____ to go see a movie with us on the week-end.
4. I'm not surprised to hear that restaurant closed. The food there (taste) _____ so bad, and it was expensive too. Since January, we (eat) _____ at the new place up the street. It's good, and much cheaper!
5. Bill was a participant in a triathlon here last summer. He didn't win but he (seem) _____ satisfied at the end of the race. He (swim) _____ a kilometer, (run) _____ 5 kilometers and then (ride) _____ his bicycle 10 kilometers. Maybe next year I (participate) _____, too.

GO TO THE NEXT PAGE

Name: _____ Teacher's Name: _____

6. Since the revolution the economy of my country (improve) _____. Now more children can go to school, and more people (have) _____ jobs.
7. My English teacher (go) _____ to Paris in 1980 to study French. In class yesterday she (tell) _____ us a funny story about her first day in France. Tonight for homework, all the students (write) _____ a story about a funny language learning experience. Tomorrow we (read) _____ our stories to the rest of the class.
8. The doctor is very slow today. Julia (wait) _____ for two hours. She hopes it will be her turn very soon. She (drop) _____ a big box on her foot this morning and she thinks her foot is broken.
9. Let me introduce you to my good friend Sarah. She (stand) _____ over there by the window. She (wear) _____ a red dress. I (know) _____ her since elementary school.
10. In 1896 a prospector (discover) _____ gold in the Yukon and started a gold rush. Everyone (think) _____ it was possible to find gold and get rich. Today, people continue to visit the Yukon and (search) _____ for gold.
11. Tom lived next to a bakery last year. The bread (smell) _____ so delicious that he always bought a loaf in the morning, and (eat) _____ some of it while he was walking to school.
12. Last night Louise (work) _____ very hard. She (write) _____ two papers and (finish) _____ all of her grammar homework.
13. Did you see Bob at the library last night?
Yes. He (sit) _____ in the study area near the elevator until about 11:00 p.m. He (look) _____ very busy, so I didn't talk with him for very long.

GO TO THE NEXT PAGE

Name: _____ Teacher's Name: _____

14. Do you have any plans for the summer?
Yes, my boyfriend and I (drive) _____ across Canada to Vancouver. My sister lives there and we (visit) _____ her for a couple of weeks. It (be) _____ a great opportunity to practise English.
15. When he was in first year university, Pierre (eat) _____ in the cafeteria most of the time. The following year, Pierre (change) _____ apartments. His new apartment was near a good grocery store so he (cook) _____ at home. The apartment was a little expensive, so he (move) _____ again last year. Now he (live) _____ near three fast food restaurants so he never cooks anymore!
16. I went for a walk around midnight last night. It (snow) _____ earlier in the evening. It was very silent and everything (look) _____ calm and peaceful.
17. When I was a baby, I didn't fall asleep easily. To help me fall asleep, my father (sing) _____ to me. Maybe this is why I always (listen) _____ to music when I go to bed now!
18. My parents' vacation in Florida didn't start off very well. It (rain) _____ for the first 6 days! After that, the weather was nice so my mother (swim) _____ in the ocean and my father (ride) _____ his bicycle along the beach. Sometimes my mother (run) _____ along the beach beside him. They (plan) _____ to go back to the same place next year.
19. Did you listen to the news on the radio? Something terrible (happen) _____ in our apartment building last night. A boy (fall out) _____ the window and (die) _____.
20. Poor Tom! He (lose) _____ his notebook the day before a big exam. He (panic) _____ because he (need) _____ it to prepare for the exam. He finally (find) _____ it under the seat of his car at about 11:00 p.m.

GO TO THE NEXT PAGE

Name: _____ Teacher's Name: _____

21. One year my parents went to another country. That year my younger brother (live) _____ with my grandmother. He (enjoy) _____ it very much because she (tell) _____ him good stories. One day when she (tell) _____ a very scary story, a bad thunder storm (start) _____ and he was really afraid. When she saw how scared he was, she (change) _____ the story into a funny one and he (feel) _____ much better.
22. Barbara came over to my place for supper last night. She (wash) _____ the dishes when she (drop) _____ my favourite dish and (break) _____ it.
23. There has been an increase in terrorist attacks in Europe. Just two days ago in London a bomb (explode) _____ and (kill) _____ ten people. The police (look) _____ for two men in a red van.
24. In 1932 my grandfather (own) _____ the first car in town. He (buy) _____ it because he (want) _____ to go fast. Today, he still (like) _____ to drive fast. Last week he got a ticket for driving too fast! It was the third time this year that he (have) _____ a speeding ticket.
25. Last weekend John (rent) _____ his favourite video. So many of his friends called while he (watch) _____ it that he got angry and (turn) _____ it off.

END

Please make sure your name is on every page

Appendix E

Preference Task

Instructions

In this exercise you will read 11 short texts that contain sentences like the following:

*I really like playing cards, but I **AM/ARE** not a very good player.*

You must evaluate the correctness of the two options, **AM/ARE** . You do this in one of four (4) possible ways:

- i) You circle one of the two options because you think just one is right:

*I really like playing cards, but I **AM/ARE** not a very good player.*

OR

- ii) You circle both of the options because you think both are right:

*My father really likes playing cards, but he **ISN'T/IS NOT** a very good player.*

OR

- iii) You circle nothing and mark **X** because you think both options are wrong:

*I really like playing cards, but I **IS/ARE** not a very good player.*

OR

- iv) You write ? because you really do not know the answer.

Only use the ? option if you really do not know. If you think both are right, circle both. If you think both are wrong, mark X. If you think only one is right, circle just that one.

You may find some of the choices a little bit difficult, but this is normal. Read each text carefully, but don't spend too long making each decision. Try your best, and continue on to the next set of choices. When you have finished a text, please do NOT go back and change your answer.

1. My grandfather grew up in **THE**₁ / A middle of a big city. It was a poor, but friendly neighbourhood. **SHE**₂ / IT knew everyone on his street. He went to the same school as all the other children. He **MARRIES**₃ / MARRIED his best friend's sister and they had eight children.

GO TO THE NEXT PAGE

2. In December, 1991, my college had a big holiday party. It SNOWED / WAS SNOWING⁴ that night and the roads were very dangerous. We arrived late because of the snow. During the party some people WERE DANCING / DANCED⁵ and others SANG / WERE SINGING⁶. Everyone at the party enjoyed it very much.
3. Do you have any plans for the summer?
- Yes, my boyfriend and I ARE / IS⁷ going to drive across Canada to Vancouver. MY / HIS⁸ sister lives there and we are going to visit her for a couple of weeks. It will be a great opportunity FOR PRACTISING / TO PRACTISE⁹ English.
4. Poor Tom! He lost THEIR / HER¹⁰ notebook the day before a big exam. He WAS PANICKING / PANICKED¹¹ because he needed it to prepare for the exam. He finally found it under the seat of HIS / MY¹² car at about 11:00 p.m.
5. My parents' vacation in Florida didn't start off very well. It RAINED / WAS RAINING¹³ for the first 6 days! After that, the weather was nice so my mother WAS SWIMMING / SWAM¹⁴ in the ocean and my father RODE / WAS RIDING¹⁵ his bicycle along the beach. Sometimes my mother WAS RUNNING / RAN¹⁶ along the beach beside him. They plan to go back to the same place next year.
6. My English teacher GOES / HAS GONE¹⁷ to Paris in 1980 to study French. In class yesterday she TOLD / WAS TELLING¹⁸ us a funny story about her first day IN / TO¹⁹ France. Tonight for homework, all the students are going to write THE / A²⁰ story about a funny language learning experience. Tomorrow THEY / WE²¹ are going to read our stories to the rest of the class.

GO TO THE NEXT PAGE

7. Last night Louise **WAS WORKING / WORKED**²² very hard. She **WROTE / WAS WRITING**²³ two papers and **WAS FINISHING / FINISHED**²⁴ all of her grammar homework.
8. Since the revolution the economy of my country **HAS BEEN IMPROVING / HAS IMPROVED**²⁵. Now more children can go **TO / AT**²⁶ school, and more **PEOPLES / PERSONS**²⁷ have jobs.
9. When he was **AT / IN**²⁸ first year university, Pierre **ATE / WAS EATING**²⁹ in the cafeteria most of the time. The following year, Pierre changed apartments. His new apartment was **BESIDE / NEAR**³⁰ a good grocery store so he **WAS COOKING / COOKED**³¹ at home. The apartment was a little expensive, so he moved again last year. Now he lives near three fast food restaurants so he never **COOKED / COOK**³² anymore!
10. One year my parents went to another country. That year my younger brother **LIVED / WAS LIVING**³³ with my grandmother. He enjoyed it very much because she **WAS TELLING / TOLD**³⁴ him good stories. One day when she **TOLD / WAS TELLING**³⁵ a very scary story, a bad thunder storm started and he was really afraid. When she saw how scared he was, she **CHANGED / HAS CHANGED**³⁶ the story into a funny one and he felt much better.
11. Bill was a participant in a triathlon here last summer. He didn't **WIN / WON**³⁷ but he seemed satisfied at the end of the race. He **WAS SWIMMING / SWAM**³⁸ a kilometer, **RAN / WAS RUNNING**³⁹ 5 kilometers and then **WAS RIDING / RODE**⁴⁰ his bicycle 10 kilometers. Maybe next year I'll participate, too.

Appendix F

NS Consent Form

CONSENT FORM TO PARTICIPATE IN RESEARCH

I agree to participate in research being conducted by Laura Collins as part of her doctoral research under the supervision of Dr. Patsy M. Lightbown of Concordia University, Montreal.

PURPOSE

I have been informed that the purpose of the research is to investigate how French-speaking adults learn English as a second language. The researcher is interested in studying how this group's use of English differs from native speaker use. In this study, French-speaking learners of English and native English-speakers will do the same three tasks in English, and their responses will be compared. I understand that the researcher will not be evaluating my English, rather she will be using my responses to establish what typical English-speakers do in the contexts she has established. My participation in this study will help advance the understanding of how languages are learned.

PROCEDURES

I will do three written exercises during regular class time. It will take approximately 90 minutes to complete all three.

The researcher will know my name in order to match the three exercises, but my name will not be revealed to anyone else.

CONDITIONS OF PARTICIPATION

I understand that there are no negative consequences for deciding not to participate in this study.

I understand that my participation in this study is confidential. The data from the study may be published, but the researcher will not disclose my identity.

I have carefully read the above and I agree to participate in this study.

NAME (please print) _____

SIGNATURE _____

DATE _____

Appendix G

NNS Consent Form (English version)

CONSENT FORM TO PARTICIPATE IN RESEARCH

I agree to participate in research being conducted by Laura Collins as part of her doctoral research under the supervision of Dr. Patsy M. Lightbown of Concordia University, Montreal.

PURPOSE

I have been informed that the purpose of the research is to investigate the development of English by adult francophone learners. The researcher is an experienced teacher of English who would like to develop pedagogical materials based on a better understanding of the problems French-speaking learners have when learning English. My participation in this study will help advance the understanding of how languages are learned.

PROCEDURES

Three written exercises will be photocopied and analyzed by the researcher. These exercises were done as practice exercises during regular class time, but none will contribute to my final mark in the course.

The researcher will know my name in order to match the three exercises, but my name will not be revealed to anyone else.

CONDITIONS OF PARTICIPATION

I understand that there are no negative consequences for deciding not to participate in this study.

I understand that my participation in this study is confidential. The data from the study may be published, but the researcher will not disclose my identity.

I have carefully read the above and I agree to participate in this study.

NAME (please print) _____

SIGNATURE _____

DATE _____

Appendix H

Target Verbs for Simple Past Contexts (revised version of Bardovi-Harlig & Reynolds, 1995) (number of verbs)

States (14)	Activities (14)	Accomplishments (14)	Achievements (14)
belong	cook	buy	break
enjoy	eat bread	change the story	die
feel	eat in the cafeteria	change apartments	discover
know	go (attend)	give	drop (x2)
like	live	go to Paris	explode
look	panic	grow up	fall out
look	ride	marry	find
need	run	move	finish
own	sing	rent a video	happen
seem	stay	ride 10 km	kill
smell	study	run 5 km	lose
taste	swim	swim a km	start
think	tell stories	tell a story	turn off
want	work	write	

Appendix I

Calculations for Tukey HSD: Study 2

$$\alpha = .05$$

$$J = 4$$

$$v_e = 246$$

HSD (using $v_e = 120$)

$$\begin{aligned} &= 3.69 \sqrt{\frac{190.93}{91}} \\ &= 3.69 \sqrt{2.0981318681} \\ &= 3.69 \times 1.448 \\ &= 5.3449 \end{aligned}$$

The means for the 4 lexical aspectual classes were: achievement = 70.25; accomplishment = 67.11; activity = 62.87, and stative = 58.71. The pairwise comparisons yielding significant differences (i.e., > 5.345) are achievements with statives and activities, and accomplishments with statives. There are no significant differences between accomplishments and activities, or between statives and activities.

Source of Variation	SS	df	MS	F	p
<i>Between Subjects</i>					
Group	173688.14	8	21711.02	231.85	0.001
Error	7678.56	82	93.64		
<i>Within Subjects</i>					
Lexical Aspect	6972.14	3	2324.05	12.17	0.001
Lexical Aspect x Group	3416.92	24	142.37	0.75	0.80
Error	46967.63	246	190.93		