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**La morphologie temporo-aspectuelle chez des apprenants avancés
d'anglais langue étrangère : Une étude des facteurs sémantiques,
discursifs et inter-linguistiques**

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Per al Pere

稲妻に悟らぬ人の貴さよ
松尾芭蕉

*Devant un éclair
l'homme qui ne comprend pas
est bien admirable !*

Bashou, Cent onze haiku

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List of Abbreviations

ACC = accomplishments

ACH = achievements

ACT = activities

AH = the Aspect Hypothesis

ATT = age at test time

BACK = backward move

DH = the Discourse Hypothesis

EFLs = foreign language learners of English

ET = event time

FL = foreign language

FLLs = foreign language learners

FWD = forward move

IPFV = the imperfective past

PAST = the simple past

PERF = the present perfect

PERIPH = periphrasis

PFV = the perfective past

PFV: PERI = pret rit perfet periphrastic

PFV-PC/PS = the perfective past - pass  compos /pass  simple

PPERF = the past perfect

PPROG = the past progressive

PQP = plusqueparfait/plusquamperfet

PRES = the simple present

PROG = the present progressive

RT = reference time

SIDE = sideways move

SL = second language

SLL = second language learner

ST = speech time

XIV

ST = states

This dissertation is written using the MLA citation and reference conventions (Gibaldi 1998).

Introduction

*“The language or languages that we learn in childhood are not neutral coding systems of an objective reality. Rather, each one is a subjective orientation to the world of human experience, and this orientation **affects the ways in which we think while we are speaking.**”*

(Slobin 1996: 91, author's bold)

The advanced learners have been in the scope of L2¹ research for some years, but not always analysed from the same perspective. The advanced learners were initially studied not so much for what they were but, rather, for what they were not. Numerous researchers tried to pin down the fine differences remaining between very proficient learners of a language and its native speakers (Coppieters 1987; Long 1990; Johnson and Newport 1991; Birdsong 1992; White and Genesee 1996; Bongaerts 1999, among others). Evidence was found that even those individuals who become indistinguishable from a native speaker in their use of the learnt language differ from the latter in their intuitions on the grammaticality of certain structures. The ultimate frontier seems to lie at the level of the underlying grammar, not perceivable “(...) in readily detectable forms in the speakers' use of the language (their performance)” (Coppieters 1987: 545).

It is only recently that L2 research has become interested in the characteristics of the advanced learner *per se*, in what distinguishes the performance of these learners from that of learners at earlier stages of L2 development and from native speaker language (Bardovi-Harlig and Bofman 1989; Bartning 1997, 2009; Lambert 1997; Kihlstedt 1998; von Stutterheim and Lambert 2005; Carroll and Lambert 2006). In this approach, the advanced learner is no longer measured against the benchmark of the native speaker in terms of language competence, but scrutinised for patterns of language use and how these observable patterns differ from those produced by less proficient learners and/or native speakers in similar communicative circumstances. We want to know more about how the advanced learners use the L2 in complex communicative tasks and to what extent they are able to exploit the different linguistic devices to communicate efficiently.

¹ We use L2 as a generic label to refer both to second and foreign language.

Two areas of interest have arisen from the research carried out on the advanced learners from this new perspective. One area is concerned with the nature of the form-function mappings made by such learners in discourse. It seems that the advanced learners differ from native speakers in the use of certain marked or peripheral forms and, especially, in the functions linguistic forms have in discourse, more limited or simply not found among those they receive in native speaker discourse. Corpus-based research has provided insight into the L2 discourse competence of the advanced learners, namely into how forms are deployed in discourse to convey the speaker's communicative intentions by means of cohesive and coherent productions. In this approach, the native speaker norm is not some pre-set standard but needs to be constantly redefined in context, in relation to the discourse types under study.

The second area of interest has to do with the way the advanced learners remain bound, in subtle ways, by certain information selection and organisation patterns which inform their choice of linguistic devices in the L2 and which are unconsciously transferred from their L1. Studies on highly proficient learners (Lambert 1997; Leclercq 2007) have shown that, even when using a range of linguistic devices similar to the native speakers', learner discourse comes across as non-nativelike because it is structured by a perspective on the extra-linguistic world which belongs to the learners' L1. This perspective builds on certain grammaticalisation patterns available in the learners' L1 (Slobin 1996). Therefore, bridging the near-nativeness gap with regard to L2 use also involves determining the nature of this L1 perspective and the L2 domains it affects.

The description of the advanced L2 variety is still in its early days. Research on the advanced learners is in need of studies tapping into multiple L1-L2 combinations and different L2 domains by means of an array of L2 production tasks.

Our dissertation is a small contribution to this effort to define the advanced learner variety. We focus on the domain of tense-aspect morphology in oral picture book narratives elicited from advanced French and Catalan learners of English with an instructional background. Our aim is two-fold. On the one hand, we would like to understand where the advanced learners stand with respect to the developmental route traced for the earlier L2 stages in the domain of verb morphology. This route takes into account two factors which have been shown to influence the choice of tense-aspect

morphology in early learner language: the inherent semantic properties of the predicates (the Aspect Hypothesis) and the function these predicates have in discourse (the Discourse Hypothesis). As it stands today, the relevance of these factors in the use of tense-aspect morphology by advanced learners seems to have been only marginally explored.

On the other hand, we want to determine the extent to which the particular L1-L2 combinations in our study may have a bearing on the way advanced learners use verb morphology in correlation with other linguistic devices to encode a certain temporal perspective on simultaneity scenes in narrative discourse. The interest in learners of English with Catalan and French as mother tongues is motivated by the fact that the three languages encode tense and aspect morphologically, but with a number of fine dissimilarities, which may give rise to different L2 “rhetorical styles” (Slobin 1996) or “*modes de dire*” (Lambert 1997).

In the present study, we will specifically address the Aspect and Discourse Hypotheses in advanced English L2. We will do so by means of a corpus of oral narratives elicited using the picture book *Frog, where are you?* (Mayer 1969). Tense-aspect marking will be analysed from three perspectives: (1) developmental, by looking at how the distribution of tense-aspect morphology varies between learners at lower and higher stages of “advancedness”; (2) endstate, by scrutinising to what extent the distributional patterns observed in L2 converge with or deviate from those in native speaker production; (3) cross-linguistic, by looking for possible L1 influences in the use of tense-aspect morphology to encode a specific type of temporal information, namely the relation of simultaneity.

The research questions we set out to answer in the following pages are as follows:

1. *To what degree do the inherent semantic properties of predicates condition the use of tense-aspect morphology in oral narratives by advanced English L2 learners?*

We would like to see whether the distribution of verb forms in advanced English L2 is skewed towards certain predicate types (the Aspect Hypothesis) and to what extent this bias fits in with the developmental trends observed in the earlier stages of English L2 learning and with the patterns found in English L1.

2. *How do advanced English L2 learners use tense-aspect forms to encode temporal relations in narrative discourse (the Discourse Hypothesis)?*

We are interested in the correlations between verb forms and different types of narrative information in advanced English L2, and to what extent these correlations match the ones observed in native speaker production. This question focuses on the form-function mappings in the domain of tense-aspect morphology in English L1 and English L2 picture book narratives.

3. *How does L2 tense-aspect morphology interact with other morphosyntactic devices when encoding a specific temporal relation, namely that of simultaneity, and to what extent is the expression of simultaneity in English L2 influenced by certain form-function coalitions and information selection patterns in the learners' L1?*

We would like to determine the range of linguistic devices which are used, in correlation with tense-aspect morphology, in the expression of simultaneity in English L2 and to what extent the observed patterns in English L2 match the ones in native speaker production. A cross-linguistic comparison with the choices made by native speakers in Catalan and French L1 will be used to give us a better insight into the subtle imprint of the mother tongue on the learners' expression of simultaneity in English L2.

The dissertation is structured in 10 chapters. Chapter 1 attempts a definition of the advanced learner and an overview of some of the main phenomena observed in the domain of morphosyntax in the advanced English L2 variety. Chapter 2 reviews the literature available to date on the Aspect and Discourse Hypotheses in English L2, with a focus on data from instructed learners, both in second and foreign language settings. Chapter 3 delimits some areas of potential difficulty for Catalan and French learners of English in the domain of tense-aspect morphology due to certain (dis)similarities between source and target languages in this domain. In Chapter 4, we review some of the main criteria for interpreting temporality in narrative discourse and propose a hierarchy among these criteria. In Chapter 5, we define the concept of narrative move

and illustrate the analytical approach to temporality in narrative discourse adopted in the present study. Chapter 6 contains the research methodology. The corpus-based analysis is carried out throughout chapters 7, 8 and 9. Chapter 7 is concerned with the Aspect Hypothesis, Chapter 8 deals with the Discourse Hypothesis and Chapter 9 is dedicated to the analysis of the expression of simultaneity, in an attempt to take the inquiry into tense-aspect morphology beyond the domain charted by the Aspect and Discourse Hypotheses. Finally, Chapter 10 reviews the main findings of the study, its limitations and the several paths for future research which lie ahead.

Alongside its research rationale, this dissertation also stems from the writer's first-hand knowledge, as an English as a foreign language teacher, of the efforts learners of all sorts make to pierce through the learning ceilings at the different stages of English L2 development. We need to understand these learners better to be able to lead them along the ragged, but so gratifying, road of learning a new language. The following pages are our own quest for this understanding.

Chapter 1: The Advanced Foreign Language Learner

The advanced foreign language learner (from now on the advanced FLL) is commonly defined as a proficient user of a language other than their mother tongue, who has received extensive instruction in the target language mainly in their home country as well as some sort of formal recognition of their linguistic command, *e.g.*, a language specialist university degree or other forms of accreditation such as official examinations, comprehensive level tests, native speaker judgement, etc. (Bartning 1997, 2009).¹ Consequently, the advanced FLLs can be said to have generally learnt the target language in adverse environments – more often than not exposed to non-native speaker input of that language, in the de-contextualised setting of the classroom and with limited and discontinuous periods of exposure to target language input (Muñoz 2006, 2008). The advanced FLL is an experienced learner, with an extensive amount of both declarative and procedural knowledge of the target language and, in most cases, with a sophisticated metalinguistic repertoire.

Krashen (1981, 1993) once claimed that formal instruction plays only a peripheral role in the development of communicative competence in a second or foreign language, which is acquired, and not learned,² through the process of comprehensible input received in natural communication. The advanced FLL is the proof that instruction, in combination with other factors such as mother tongue background, motivation, instructional approach, exposure to relevant non-instructional input, can lead to communicative competence in acquisition-poor environments like the foreign language classroom.

1 Extensive tuition is certainly not a *sine qua non* condition for becoming a proficient user of the target language. Studies such as Ioup *et al.* (1994) have shown that exceptionally talented individuals can attain nativelike proficiency in the target language without any tuition. Nevertheless, the majority of research available on advanced FLLs deals with highly instructed subjects.

2 For Krashen (1981), acquisition leads to unconscious and implicit knowledge of the language which is essential for the communicative competence, whereas language learning is only marginally relevant in that it provides learners with conscious or explicit knowledge of certain target language rules. Krashen argued for what has come to be known as the focus on meaning instruction, commonly used in immersion or in content-based second or foreign language programmes. In this approach, no explicit attention is paid to the linguistic code of the target language. The focus is exclusively on the message and learners experience the target language through communicative activities. This is opposed to the more traditional instruction in which time is spent working on linguistic structures in isolation and following an order imposed by a textbook. Nevertheless, the Canadian immersion programmes showed that naturalistic learning in the classroom does not typically result in high level of grammatical competence (Genesee 1987). This has made researchers advocate a hybrid approach, the so-called focus on form, in which there is incidental attention to language forms in the context of meaningful communication (Long 1991).

What is more, recent studies such as Norris and Ortega (2000) or Ellis (2002) argue that formal instruction contributes not only to the development of explicit but also implicit knowledge of the target language. Carrying out a meta-analysis of 11 studies measuring implicit knowledge of the target language on the basis of performance in free-production tasks (especially oral narratives, picture descriptions, role-plays, etc.), Ellis (2002) found that instruction can lead to acquisition provided that it is directed at simple morphological features (*e.g.*, verb forms, articles, formulaic items) which receive an extensive treatment in time. Limited instruction directed at complex structures (*e.g.*, passives) can also be effective, provided that the target structures are available through exposure outside the classroom.

While the advanced FLL is undoubtedly a “success story” of formal instruction, several caveats should be made with respect to the positive effect of instruction on language learning/acquisition. First, the order in which language structures are internalised or acquired by the learner has been shown to have little in common with the order in which structures and rules are presented in instruction (Ellis 1989). Instruction directed at a particular structure will not result in acquisition unless the learner is psycholinguistically ready to incorporate this structure (Pienemann’s (1984, 1985) Teachability Hypothesis).³ Premature instruction of a given structure does not have durable effects and can even have a negative impact on the learning/acquisition process resulting in avoidance of the use of the form (Pienemann 1986).

When interlanguage systems developed in classroom settings are rooted in rote learning of forms and rules that are presented to learners in a decontextualized way, the frequency and accuracy of use of these forms and rules in learners’ language tends to decline once the focus of instruction shifts to a new item (Lightbown 1983). Rote learning is not sustainable in time and its effects wear off unless classroom activities also involve communicative use of the target language.

³ In a study involving 10 Italian children (aged 7-9) learning German, Pienemann (1984) found that instruction of a word order rule like finite verb/subject inversion only resulted in acquisition with those children who had already acquired another word order rule, namely non-finite verb in clause-final position. The influence of instruction seems to be restricted to those items which the learner is ready to process. The processability or, in Pienemann’s terms, the learnability of a given structure does not depend on arbitrary criteria like a textbook syllabus, but on certain psycholinguistic prerequisites shared with naturalistic L2 development.

“By forcing learners to repeat and overlearn forms which have no associated meaning to contrast them with any other form(s), we may be setting up barriers which have to be broken down before the learners can begin to build up their own interlanguage systems” (1983: 239).

Before pursuing with the definition of the advanced FLL, two aspects need to be clarified with respect to FLLs in general. Firstly, FLLs differ from uninstructed or naturalistic learners in the rate of learning and the quality of the ultimate attainment.⁴ FLLs appear to learn at a faster rate, reaching higher levels of linguistic competence than their uninstructed counterparts (Long 1983; Doughty 2003). While both populations have been shown to follow the same developmental route with respect to certain grammatical morphemes and syntactic features such as negation, question formation and word order (Pienemann 1986; Ellis 1989), instructed learners make faster progress toward the target language due, among other things, to exposure to enhanced input (Sharwood Smith 1993) and increased awareness of certain target language features (Doughty 2001; Schmidt 2001; Ellis 2002; DeKeyser 2003). Some of these features may have little communicative relevance, yet they constitute target language norms which contribute, at least potentially, to a more qualitative output in the target language.

FLLs also need to be distinguished from second language learners (from now on SLLs). We seem to know more about the latter because very proficient SLLs have been used as a testing ground for what is commonly referred to as the ultimate attainment in L2 development (see Birdsong 2004 for a review of the extensive literature available on this issue). Two observations from ultimate attainment research have often been extended to FL learning, namely the existence of an initial rate advantage of older learners over younger learners and an ultimate attainment advantage of early starters over late starters.

Recent longitudinal studies in FL settings like the Barcelona Age Factor project (Muñoz 2006) have provided evidence only for the older learners' rate advantage over

⁴ In L2 research, the ultimate attainment represents the stable outcome of the acquisition or learning process, “(...) irrespective of degree of approximation to the native grammar” (Birdsong 2004: 85). Near-nativeness is only one of the possible outcomes of this process, which can also plateau at other, less proficient stages. According to Selinker (1972), the “imperfection” of the ultimate attainment is the result of a double fossilisation: on the one hand, the learners' permanent retention of non-targetlike rules and forms in their interlanguage, irrespective of the amount of instruction in or exposure to the target language; on the other, certain maturational constraints which trigger a gradual loss in the ability to learn another language beyond the limit of certain sensitive periods (also Long 1990).

younger learners. The Barcelona Age Factor project showed that, after the same amount of instruction (726 hours), FLLs who started English early, *i.e.*, at age 8, caught up with those who started late, *i.e.*, at age 11, in terms of listening comprehension skills, yet the late starters outperformed the younger starters in terms of morphosyntactic mastery. According to Muñoz (2006), onset age⁵ is relevant in FL learning in that it appears to affect the rate of morphosyntactic development to a greater extent than that of comprehension skills. Older learners in classroom settings are faster and better learners than younger ones because their superior cognitive development “allows them to take greater advantage of the explicit teaching process in the classroom” (2006: 33). Younger learners, on the other hand, are more responsive to implicit learning, which takes longer to bear fruit and requires exposure to abundant target language input.

What seems to be the main asymmetry between SLLs and FLLs is the access to “*significant exposure*” (Muñoz 2008: 585, author’s italics). Due to their immersion in the L2 context, the former are able to make a meaningful use of the target language, *i.e.*, deploy their declarative and procedural knowledge of the target language in a variety of situations and in interaction with native speakers of that language. The latter very often have access to what Muñoz calls “*insignificant exposure*” (585, author’s italics), that is exposure to a de-contextualised target language, which is not able to provide the stimulus for authentic interaction that living in contact with the target language provides. The lack of such a stimulus slows down the development of procedural target language knowledge in FLLs and, with it, the attainment of nativelike fluency (Towell *et al.* 1996).

After this terminological detour, we return to the definition of the advanced FLL. For the present study, the advanced FLL is considered to correspond to the levels C1 and C2 in the Common European Framework of Reference for Languages (2001). These levels are described holistically in Table 1 below:

⁵ According to Muñoz (2006, 2008), the learners’ chronological age at test time (ATT) is an equally important parameter to be taken into account in FL research. There is a strong correlation between ATT and cognitive development and, as such, ATT may influence the test-taking skills of the learners, favouring the older learners. ATT is also associated with the motivation to learn a foreign language, which is known to fluctuate from one age to another. For instance, adults who voluntarily enrol in a language course are often more motivated than children who learn the target language as part of the obligatory school curriculum.

Proficient User	C2	<p>Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.</p>
	C1	<p>Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed texts on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.</p>

Table 1.1 The Proficient User – the Common European Framework of Reference for Languages

Beyond the broad-brush description of the productive and receptive language skills of the proficient language learner in the Common European Framework for Languages (2001), we are still in need of an in-depth description of the L2 competence of advanced FLLs. In a functional approach to language learning, which we adopt in our dissertation, L2 competence is charted on the basis of systematic patterns of target language use.⁶ The function of language is communication and a learner's L2 competence is reflected in how s/he performs in communicative situations. The native speaker “norm” consists, in a functional framework, of the preferred choices native speakers make with respect to the linguistic repertoire used in a specific communicative situation. The development of L2 competence is understood, hence, as a gradual progression towards these patterns, though without assuming that learners consciously have the native speaker norm as a target.⁷

⁶ This differs from the formalist approach to language learning adopted, for instance, in the studies on the ultimate attainment in which L2 competence was defined as the underlying knowledge of the target language, manifest in the learners' on the grammaticality of a series of L2 structures (Coppieters 1987; Johnson and Newport 1989; White and Genesee 1996; Birdsong 1992; Montrul and Slabakova 2003).

⁷ Birdsong (2005) warns against the fallacy in measuring bilingual competence against the standard of monolingual competence. Bilingualism has at least two types of effects on the L2 of a speaker – there are cognitive costs associated with maintaining two languages simultaneously, and there is a specific L1 effect whereby performance in a given L2 is affected by certain properties of the learner's L1 (for instance, phonological differences between the sound system of English and Spanish affect the pronunciation of bilinguals of this combination). According to Birdsong (2005), certain non-standard L2 features are an inevitable consequence of bilingualism and not always “(...) indicative of defective

The rise of corpus linguistics in the late 1980s/early 1990s has allowed the study of the systematic patterns in learner language and has revealed the existence of the so-called learner varieties. Learner varieties were first established with respect to naturalistic adult SL learning on the basis of the data collected by the European Science Foundation (ESF) project from migrant workers (Perdue 1993; Dietrich *et al.* 1995; Klein and Perdue 1997) and only later extended to learners in FL contexts (Hendriks 2005). From this perspective, the L2 learning process is understood as a continuum made up of successive stages or learner varieties which are not imperfect imitations of the target language but self-standing systems, characterised by a particular lexical repertoire and by certain organisational principles.⁸ These varieties are constantly reorganised to incorporate new features the learners uncover from the input, and this goes on until the balance characteristic of the target language is reached.

The interest in the advanced FLL variety is relatively recent (Bardovi-Harlig and Bofman 1989; Granger and Tyson 1996; Granger 1997; Bartning 1997, 2009; Lambert 1997; Kihlstedt 1998, 2002; Labeau 2009, among others). In probably the first overview of empirical findings of L2 production by advanced FLLs with different L1s, Bartning (1997) established that the advanced FLL variety starts at some stage beyond the development of inflectional morphology and subordination and ends with near-native or quasi-bilingual use of the target language, observed for instance with some exceptional learners (Montrul and Slabakova 2003; von Stutterheim and Lambert 2005). Making reference to more recent corpus research, Granger (2008: 257) defines the advanced FLL variety as “(...) the result of a highly complex interplay of factors: developmental, teaching-induced and transfer-related, some shared by several learner populations, others more specific”.

The description of the advanced FLL variety for English L2 (from now on the advanced English L2 variety) is “in the making”, particularly when compared to the systematic study of this variety in French L2 carried out by the InterFra project at the University of Stockholm (see Bartning 1997, 2009 for a review of the characteristics). The data available so far come mainly from written production (the International

language learning mechanisms” (324).

⁸ Given their internal systematicity, learner varieties are not understood as defective versions of the native speaker variety but rather as autonomous linguistic systems (see Klein and Perdue 1997 for a discussion).

Corpus of Learner English, Granger 2003) and oral film retellings or picture descriptions (the Structure of Learner Varieties project, Hendriks 2005).⁹

In the remaining part of this chapter we are going to focus on the morphosyntactic description of the advanced English L2 variety. This leaves out of the focus of our discussion important domains, particularly active in the advanced FLL variety, such as lexical expansion (see Cobb 2003 for a discussion). We shall proceed in two steps. First, we are going to locate the advanced English L2 variety with respect to the development of the morphosyntactic domain in English L2 in FL settings (section 1.1). Secondly, we are going to review some of the morphosyntactic phenomena which characterise the advanced English L2 variety on the basis of several empirical studies available in the literature (section 1.2). This will allow us to delimit the research domain of the present study.

1.1 Becoming an Advanced FLL of English: A Learning Route in Instructional Settings

It is only recently that researchers have attempted to trace a learning route for English L2 in instructional settings. In a longitudinal study of oral English L2 narratives produced by Spanish/Catalan children and adults in an FL setting,¹⁰ Álvarez (2006) observed that the earliest L2 productions (stages 1 and 2) were characterised by the emergence of bare nominal content words (example (1))¹¹, similar to the pre-basic variety established by the ESF project (Perdue 1993). Spontaneous utterances consisted mainly of unconnected nouns, often accompanied by an L1 determiner:

9 A new corpus is being put together at University of Mainz (Corpus of Academic Learner English), also consisting of written samples of English L2 produced by advanced EFLs with different L1s.

10 Álvarez (2006) used three groups of subjects: the first group was aged 10, the second group was aged 12, and the subjects in the third group were older than 18. The three groups were tested after 200, 416 and 726 hours of instruction. It is not clear to what extent the early stages (stages 1 to 6) of the learning route presented here apply to adult FLLs. Given the uneven learning rate, the adult group in the study was found to have reached stage 7 after 200 hours of instruction. After stage 7, the two populations patterned similarly in terms of morphosyntactic development, with the noteworthy difference that the adult narratives contained more evaluative material, *i.e.*, the narrators often encoded the cause or the purpose of events in the story. The learning route outlined by Álvarez will, nevertheless, be presented in its entirety here for a better contextualisation of the advanced English L2 variety.

11 Examples (1) to (6) are taken from Álvarez (2006: 134-138).

(1) el [the] picnic, un [a] dog

The English FLLs in her study (from now on EFLLs) did not take long to produce functional categories related to the noun phrase, such as the definite article and the plural inflection *-s*, and prepositional phrases (stages 3 and 4). The first verbs to appear were the copula *be*, transitive verbs in clauses which often lacked one obligatory constituent but which were identifiable as SVO (subject/verb/object), and SVA (subject/verb/adverbial) structures (example (2)). Verb morphology emerged in the form of the progressive marker *-ing*:

(2) (a) the cows eating
(b) the children on mountain

This seems to indicate that, while the naturalistic learners in the ESF project generally plateaued at a stage marked by the organisation of the utterance around an uninflected verb and its arguments, *i.e.*, the basic variety (Klein and Perdue 1997), FLLs move rapidly into a post-basic variety characterised by grammatical organisation of the utterance and verb morphology. This is attributable to the type of input received in formal instruction settings and the metalinguistic awareness learners develop in such contexts (Pica 1983) and seems to indicate that naturalistic input is less productive in inflectional morphology than the instructional one.

Interestingly, it is only after a certain level of morphological and syntactic development is reached that discourse properties appear in English L2 in FL contexts. Álvarez (2006) observed that incipient discourse organisation was manifest in the use of spatial deictic expressions which located events with respect to the different pictures that made up the story and rudimentary coordination devices (stages 5 and 6), followed by the emergence of the L2 indefinite article marking the first mention of inanimate nouns (example (3)):

(3) They have a breakfast

Subsequently (stage 7), growing awareness of the verbal inflectional system of

the target language (the third person singular *-s*, the irregular past or the future marker *will*) set the ground for the use of temporal adverbials such as *then* or *after*, explicitly marking chronological order in the narrative. Moreover, subordination emerged in the form of adverbial and nominal clauses which were used exclusively to highlight a key event in the narrative (example (4)):

(4) When the children open the basket they see that the dog eat the food.

According to Álvarez (2006), it is only when the L2 order of clausal constituents is consistently appropriate that the morphological component undergoes substantial development in the area of tense-aspect inflections (appropriate forms for present and past progressive are incorporated, alongside regular past inflection *-ed*) and grammatical aspect contrast, *i.e.*, the progressive/non-progressive opposition starts to be used to mark the discourse distinction between foreground and background¹² (stage 8). The FLLs in her study marked departures from the chronological order by means of the perfect auxiliary *have* and encoded the relation of simultaneity by means of the subordinating conjunction *while* (example (5)):

(5) While the children are watching the plan, the little dog is watching something.

With respect to syntactic complexity, the final stages (stage 8 and 9) observed by Álvarez (2006) were characterised by the use of post-modification and subordinate clauses to encode evaluative material such as the purpose and the cause of the events in the story. Embedded clauses also emerged at this stage (example (6)) as well as aspectual verbs, especially inceptive periphrases with *start* and *begin*. Very importantly, by stage 9, FLLs were independent narrators, capable of carrying out the task without external help from the interviewer:

(6) and when the mother is telling what is the street they have to go, the dog came into the basket.

The advanced English L2 variety can be said to begin where the previously

¹² The foreground/background dichotomy in narrative discourse will be discussed at length in chapter 3.

presented study stops. At the stage of independent users of the target language, learners consolidate their communicative competence, in its linguistic, sociolinguistic and pragmatic domains (Bartning 1997, 2009). In terms of morphosyntactic development, this means that the advanced EFLLs are expected to broaden the range of morphosyntactic devices to include more marked ones, extend the functional-semantic scope of the known forms to match the full repertoire of discourse functions these forms have in the target language, and uncover the language-specific morphosyntactic patterns which underlie the way native speakers use their language for specific communicative purposes. The morphosyntactic development is, as in all the previous learning stages, asymmetrical and gives rise to different types or degrees of “advancedness” (Bartning 1997).

The advanced English L2 variety spans a series of phenomena which we will try to outline in the following section. As already mentioned, research on advanced FLLs of English is relatively scarce in the literature when compared to data from advanced FLLs of other target languages (particularly French). The discussion hereafter will bring together findings regarding the morphosyntactic features observed in complex English L2 production tasks, namely oral film retellings and written argumentative essays, by advanced FLLs of English with different L1s.

A word of warning is needed at this stage. In a functional approach to language learning as the one adopted here, linguistic phenomena are necessarily related to a specific task. The observations made hereafter about the advanced English L2 variety draw both on oral and written production tasks, making the most of the scarce data available in the literature. This, nevertheless, makes the resulting description a rather eclectic collection. Our purpose is simply to outline some of the major phenomena affecting the development of the morphosyntactic domain in the advanced English L2 variety, which we regard as characteristic of complex L2 production tasks as a whole, irrespective of their oral or written nature.

1.2 The Advanced English L2 Variety: Some Morphosyntactic Phenomena

Initial characterisations of the morphosyntactic features of the advanced English L2 variety came from studies carried out on written production (Bardovi-Harlig and

Bofman 1989). From a morphosyntactic point of view, the interlanguage of advanced EFLLs has been shown to be characterised by a high degree of syntactic complexity but by incomplete mastery of certain functional categories such as tense-aspect morphology, articles, and prepositions. Such categories, which do not have a referential meaning and can only be learnt through language (Slobin 1996), constitute an area of linguistic fragility in advanced English L2, giving rise to phenomena of over-, under- and misuse of certain forms. Carrying out an error analysis of the written essays collected from 30 advanced¹³ EFLLs with a variety of L1s (Arabic, Chinese, Korean, Malay and Spanish), Bardovi-Harlig and Bofman (1989) observed that, at this stage, learners generally make few syntactic errors, *i.e.*, errors of word order, clause embedding, fragments and constituents, etc., yet errors still occur in the use of certain closed set items such as articles, plurals and prepositions. Tense-aspect morphology is also an area of incomplete mastery. According to the authors, in the case of advanced learners, inaccuracies are not related to formal issues such as subject-verb agreement or tense formation but, rather, consist in tense switching, *i.e.*, using “a correctly formed tense unit in a context other than that required by the meaning of the tense” (1989: 28). Tense switching denotes incomplete mastery of the functional-semantic scope of verb inflections. The mastery of form over meaning is thought to be “an artefact of formal language instruction which emphasized form rather than communication” (28).

Bardovi-Harlig and Bofman (1989) account for the unbalanced development of syntax and grammatical categories in advanced English L2 by drawing on two hypotheses already existing in the literature: the communicative saliency of syntax and the exposure to a deficient input, lacking in evidence for the distribution of certain forms and structures. The authors believe that the EFLLs in their study were more successful at learning syntax than grammatical morphemes because the former is communicatively more salient than the latter. The learners seem to attend first to those linguistic aspects which facilitate the construction of global discourse structure, to the detriment of local, intra-clause grammar, which is less communicatively important. With respect to input, the inaccuracies observed with respect to grammatical categories

13 The EFLLs were incoming international students at the University of Indiana. The level of target language proficiency was established in terms of the learners' scores on the Indiana University Placement Examination. A score somewhere between 543 and 567 points was considered proficient enough to begin undergraduate university education. Note, also, that the error-analysis approach in this paper precedes the learner variety tradition.

may be due to the fact that language instruction focuses on formation rather than functional-semantic characteristics of tense-aspect inflections and provides insufficient evidence of (or instruction on) certain grammatical categories such as the plural inflection, articles, prepositions.

The authors suggest, without providing further discussion, that the strong syntax/weak morphology stage observed in the interlanguage of the advanced EFLLs can also be attributable to the L1 – L2 combinations available in the study, which may have facilitated or hindered the acquisition of certain morphosyntactic features of the target language. Evidence that advanced EFLLs draw on L1 similarities with the target language in complex production tasks comes from a later study by Granger and Tyson (1996). Working with a corpus of argumentative essays written by advanced French L1 university students of English, the authors observed that, while syntactic complexity was in overall terms similar in English L1 and English L2 texts, a closer look at the use of individual connectors revealed interesting patterns of over- and underuse in advanced English L2. The French learners in the study overused connectors with a corroborating function (*indeed, in fact, etc.*) or an additive function (*moreover*), and underused connectors with a contrasting function (*however, though, etc.*) or an argumentative function (*therefore, thus, then, etc.*). Overuse of connectors was generally caused by formal and semantic interferences from the learners' L1, for instance the fact that learners equated connectors such as *in fact* and *indeed*, which in English lead the reader to expect some new information, with the French *en fait*, which is generally used as a stylistic enhancer in French L1.¹⁴

Apart from L1 interferences, Granger and Tyson (1996) delimit two additional areas of learning difficulty with regard to the use of morphosyntactic devices in advanced English L2. Proficient EFLLs appear to have insufficient knowledge of the semantic scope of individual forms such as connectors in the target language and lack experience at manipulating linguistic devices within discourse structure. Over-/under-use phenomena indicate that increased awareness of the linguistic repertoire by means of formal instruction does not lead to full awareness of the discourse use of these forms in L2. Learners are either not familiar with the entire functional-semantic span of the

¹⁴ To further test that L1 transfer lay at the root of connector overuse, Granger and Tyson (1996) compared French learner figures for *in fact* and *indeed* with figures from a similar corpus collected from German L1 students of English. No overuse of *in fact* and *indeed* was observed with the latter.

forms they are using or produce incongruous form-function mappings. Advanced EFLs appear to be involved in a constant process of charting the functional-semantic territory of L2 forms.¹⁵

The periphery of the morphosyntactic domain, characterised by semantic indeterminacy and optionality of use, is only tentatively probed into by advanced EFLs. Looking at the use of present participle clauses in the argumentative essays of advanced French, German and Swedish learners of English, Granger (1997) found that these clauses were scarcely used in learner texts, whereas they were a dominant structuring device in English L1 production. When learners used participle clauses, it was generally in the context of a subordinating conjunction or a preposition (example (7)). Supplementive participle clauses, *i.e.*, adverbial participle clauses which are not introduced by a coordinator or subordinator, were only marginally produced by the advanced EFLs in the study (example (8)):

(7) After reading through many sources on new age ideas and the teaching of those ideas, I discovered that...

(8) Looking through the years of history, it is hard to imagine a time when religion did not exist.¹⁶

According to Granger (1997), L2 patterns of use are also influenced by the way the target language is taught in classroom settings. According to the author, textbooks do not reflect the role played by participle clauses in text cohesion and text organisation in English L1. Hence, the importance of corpus analysis to obtain insight into the actual linguistic choices that the native speakers of a language make in a specific task / discourse type. Areas of indeterminacy, such as the use of supplementive participle clauses, receive little, if any, attention in language syllabi, which are more often than not focused on obligatory contrasts and other morphosyntactic restrictions.¹⁷

15 This phenomenon affects advanced L2 learners in general, not just advanced EFLs. In this chapter, we limit our discussion to findings about the advanced English L2 variety but will extend it to other advanced L2 varieties when we discuss the theories available in the literature on the development of tense-aspect morphology (chapter 2).

16 Examples (7) and (8) belong to Granger (1997: 192-193).

17 According to Thornbury (2006), two criteria have traditionally underlain the design of a syllabus: the usefulness of certain items, established on the basis of their frequency in the target language and/or the learners' needs, and the teachability of an item, understood as whether it may be difficult to explain, demonstrate or teach to a particular group of learners. It is only very recently that findings from learner

The use of tense-aspect morphology is one of the firmest indicators of the difficulties advanced EFLs have in charting the functional-semantic span of grammatical categories. Based on a quantitative and qualitative analysis of the distribution of verb forms in oral film retellings elicited from advanced French L1 learners of English, Lambert (1997) found that one-to-one form-function mappings still exist in the use of tense-aspect morphology by advanced EFLs and it is only a minority of learners, the most proficient ones, who make a clearly discourse sensitive use of verb inflections, particularly of the progressive and the perfect form.

The less advanced learners used the progressive only with a descriptive function, *i.e.*, to introduce key events in the plot, ongoing at a specific moment of time (example (9)).¹⁸ For Lambert (1997), this use of the progressive is the closest to the main function of the progressive periphrasis *être en train de* in French. When English native speakers used the progressive descriptively, it was generally in syntactically complex structures to refer to simultaneous, durative situations unfolding in parallel (example (10 a, b)):

- (9) **then** the girl is robbing a bread and she ran away and she meets Charlie Chaplin.
 (10) a. they're sitting and chatting, she's sort of flirting with him, he's trying to be witty.
 b. he's reading the paper **while** she's preparing breakfast.

The most proficient group of learners were the only ones to broaden the range of functions of the progressive to those detected in native speaker production, namely an explanatory function, *i.e.*, the progressive is used with motion or position predicates such as *stand*, *lie*, *hold* to specify the location of an object or a character (example (11)) and an orientation function, *i.e.*, to set up a temporal span at the beginning of a new episode (example (12)). Moreover, this group stands out from the rest of the learners in that they used the progressive to express certain marked values such as modality, iterativity and future planning (example (13)):¹⁹

corpora research have found their way into syllabus design to adjust it to the difficulties of learners at different proficiency levels (Granger 2008).

18 Examples (9) to (14) are taken from Lambert (1997: 147 -172). The underlining is ours.

19 Lambert (1997) defines this group as near-natives which, according to Bartning (1997), constitutes a variety in itself. This group of learners can be said to represent the upper limit of the advanced English L2 variety.

- (11) the broom's holding the roof.
 (12) and **then** they're walking in the streets back in the city together.²⁰
 (13) everything is falling, the roof is falling onto them.

Interestingly, the most proficient learners predominantly used the progressive with a descriptive or explanatory value, whereas native speakers generally opted for the orientation progressive. According to Lambert (1997), the range of functions of the progressive in English L2 tied in with the perspective from which events were presented in the learners' narratives, namely as if seen through the eyes of a generic spectator. The native speakers, on the other hand, opted for a different organisational pattern in which progression along the storyline was triggered by progression in space. The orientation progressive was more intimately linked with this discourse organisational pattern than the other two types.

The present perfect was overused in the narratives of the less advanced learners to encode all anteriority contexts, including those in which the simple past would have been targetlike. Such form-function inaccuracies are, as already discussed, still present in the advanced English L2 variety. Only the most proficient learners systematically contrasted the simple past and the present perfect forms for discourse purposes, similar to the English native speakers. For instance, this group of learners used the present perfect to introduce a new character and then the simple past in subsequent mentions of this character (example (14)):

- (14) a woman has seen the girl

Findings in Lambert (1997) seem to indicate that, with respect to the use of tense-aspect morphology, the advanced English L2 variety is characterised by a clear jump from one form/one function pairings at the lower limits of the variety to one form/several functions mappings, in response to the discourse type in which these forms are used. Interestingly, even when the broadening of the functional-semantic scope of linguistic forms has taken place, the choices made by L2 learners within this scope differ from the preferred choices in the target language. According to Lambert, even when forms and functions are fully deployed, the information organisation patterns in

²⁰ The examples are only illustrative of the discourse functions of the progressive.

L2, what Lambert refers to as the way of saying things, *i.e.*, “les modes de dire” (1997: 169), differ from those preferred by the English native speakers in their narratives. Nativelike use of aspectual marking in narrative discourse requires that learners recognize its overall status in the information structure of the target language.

The findings regarding the morphosyntactic features of the advanced English L2 variety reinforce the claim that the morphosyntactic and discourse components interact and that a certain level of the former is essential to the emergence and consolidation of the latter in English L2 (Álvarez 2006). The consolidation of the discourse skills with the advanced EFLs is indicated by increased syntactic complexity and accuracy and by the extension of the functional-semantic scope of grammatical categories, in particular tense-aspect morphology. Advanced learners gradually move from one-to-one form-function mappings and the over-/underuse of certain forms to multiple functions for one form to accommodate the requirements of the task and to give the fullest expression to their communicative intentions.

While factors such as insufficient exposure to authentic L2 input or selection of linguistic items in syllabus design are to be taken into account, empirical studies on the advanced English L2 variety indicate that the learners’ L1 is also a conditioning factor in the observed over-/underuse of certain linguistic structures in advanced English L2. Moreover, interlanguage specific phenomena such as the development of a form-function interface in the area of tense-aspect morphology are in full swing in the advanced FLL variety, giving rise to learner rhetorical styles associated with particular discourse types. We shall come back to this point in chapter 2, section 2.3.

In this chapter, we have provided a broad-brush definition of the advanced foreign language learner and we have outlined some of the morphosyntactic phenomena at work in the advanced English L2 variety. In the following chapter, we will focus on the domain of tense-aspect morphology and on the factors that have been shown to shape its development from early to advanced L2 stages.

As we have tried to show in the present chapter, one needs to probe into the intricate interaction between instruction, L1 and L2 factors, and discourse type to obtain a better insight into the use of tense-aspect morphology in learner varieties. This interaction, as we hope to demonstrate in the remaining pages of this dissertation, goes beyond purely linguistic phenomena and spills over into the realm of psycholinguistic

phenomena, such as the imprint of the mother tongue in the way learners conceptualise complex events in the target language and how they tend to achieve cohesion in a narrative.

In what follows, we present an integrated account of the use of tense-aspect morphology in advanced English L2, more specifically in oral narratives elicited by means of the *Frog, where are you?* picture book from French and Catalan adult FLLs. Our study is rooted into the long-lasting tradition of cross-linguistic functional studies of language development initiated by Berman and Slobin (1994). Berman and Slobin's compelling findings regarding the development of the narrative competence in English L1 have guided our steps into the domain of advanced English L2, as will become evident in the following chapters.

Several hypotheses have been put forward regarding the development of tense-aspect morphology in interlanguage. Nevertheless, they hardly ever contemplate the advanced (English L2) variety, let alone the advanced EFLs. We will try and fill part of this gap and fathom the extent to which these hypotheses apply to the use of verb morphology at the advanced stages of L2 learning in instructional contexts. These hypotheses will be discussed extensively in chapter 2.

Chapter 2: Theories of Tense-Aspect Development: from Early to Advanced Learner Varieties

Research on the development of tense-aspect morphology in L2¹ is rooted in empirical studies carried out in the field of L1 acquisition. Whether in L1 or L2, certain distributional patterns underlie the emergence of verb morphology both in English and Romance (Bronckart and Sinclair 1973 for French L1; Antinucci and Miller 1976 for Italian L1 and English L1; Brown 1973; Bloom *et al.* 1980; Shirai 1991; Shirai and Andersen 1995 for English L1; Robinson 1990, 1995; Bardovi-Harlig 1992, 2000; Bardovi-Harlig and Reynolds 1995; Bardovi-Harlig and Bergström 1996 for English L2 Andersen 1986, 1991 for Spanish L2; Comajoan 2001, 2005 for Catalan L2, among others).

The patterns identified in child L1 can be summarized as follows (Andersen and Shirai 1996: 533):

1. Children first use past inflections (*e.g.*, English L1) or perfective past inflections (*e.g.*, Romance L1) on achievement² and accomplishment predicates. Eventually, these inflections are spread onto activity and state predicates.
2. In languages that encode the perfective/imperfective distinction, the imperfective past appears later than the perfective past and is first used with state and activity predicates, and only later extended to accomplishment and achievement predicates.
3. In languages which encode the progressive, progressive inflections are first used with activity predicates and only later extended to accomplishment and, finally, to achievement predicates.

¹ The label L2 is used here generically, for both second and foreign language. In L2, the theories discussed in the present chapter were put forward on the basis of data from untutored or naturalistic learners and tutored learners in second language settings. Instructed or tutored learners in foreign language settings (FLLs) have only marginally been analysed from this perspective. As a result, the development of tense-aspect morphology in L2 will be discussed in terms of the broader distinction between untutored/tutored L2 learners. The latter encompass, where available, data from FLLs.

² In this study we adopt Vendler's (1967) classification of predicates into states, activities, accomplishments and achievements. Prototypical states refer to situations that do not involve change over time, do not have salient endpoints or gaps, are non-volitional, and do not require any input of energy (*e.g.*, *to know something*). Activities are dynamic situations that involve change over time but do not have an intrinsic endpoint (*e.g.*, *to sing*). Accomplishments are dynamic situations that have duration and an end result (*e.g.*, *to draw a circle*). Achievements refer to dynamic situations that involve an instantaneous change (*e.g.*, *to recognize something*). This classification is referred to as lexical aspect or *Aktionsart*. We shall come back to it in chapter 3.

4. Children do not overgeneralise the progressive to state predicates.

As native speakers of the language, children will eventually become more flexible with respect to the use of verb morphology and produce a more diverse repertoire of predicate/verb form coalitions. Tense-aspect inflections will gradually be used more flexibly and in more marked ways, in line with the speaker's perspective on a particular situation.

In L2, the development of tense-aspect morphology has been shown to follow a similar pattern to that in early L1, with certain particularities which we list below (Li and Shirai 2000: 84):

1. The correlation between verb morphology and predicate type is stronger with L2 learners than with children in the initial stages of language learning.
2. The movement out of the initial correlations is not as linear as in the case of L1 acquisition; in fact, these correlations seem to strengthen as learners move out of the first stages of L2 learning.
3. In English L2, unlike children in English L1, learners overgeneralise the use of the progressive and use the progressive form with state predicates.

In a functional framework,³ several hypotheses have been put forward to account for the emergence and development of tense-aspect morphology in L2, hypotheses which draw on cognitive, semantic and discourse-organisational factors.⁴ These hypotheses will be discussed at length in section 2.2. Nonetheless, given that the theories regarding the development of tense-aspect morphology in L2 build on previous

3 Other hypotheses have been put forward in a UG framework for second language acquisition, such as the no parameter resetting hypothesis, the direct access hypothesis or the full transfer/full access hypothesis. This framework is not adopted in the current study, but see White (1989) and Slabakova (2001) for a review.

4 We are aware that we are leaving out pragmatic factors such as those identified in studies with naturalistic learners by the European Science Foundation project (Dietrich *et al.* 1995; Klein and Perdue 1997; Trévisé 1987, among others). This particular type of learners generally do not mark tense and aspect contrasts by means of verb morphology, which appears to be a communicatively less relevant grammatical feature. In the absence of verb morphology, learners rely on pragmatic strategies such as discourse organisational principles, *i.e.*, the Principle of Natural Order, or implicit temporal reference conveyed by means of the inherent semantics of the predicates, by association with other discourse elements or even by means of interviewer scaffolding. Given that these factors are particularly active at what Klein and Perdue (1997) call the Basic Variety in L2, they fall out of the scope of this dissertation.

findings from child L1 acquisition, a brief overview of some of the most relevant studies on emergent tense-aspect morphology in L1 will be provided in section 2.1. In section 2.3 we will try to establish to what extent the theories outlined in section 2.1 can account for the use of tense-aspect morphology in advanced English L2. At the end of this chapter the research questions underlying the present study will be formulated.

2.1 Theories of Tense-Aspect Development in L1

2.1.0 Aspect before Tense Hypothesis in Child L1

Early studies on the emergence of verb morphology in L1 (Bloom *et al.* 1980 for English L1; Bronckart and Sinclair 1973 and Antinucci and Miller 1976 for French and Italian respectively) argued for what was labelled as the aspect before tense hypothesis,⁵ namely that children are cognitively constrained in marking complex temporal relations and find it difficult to distinguish between tense and lexical aspect⁶ during the initial stages of L1 acquisition. Working with data from 74 French L1 children aged between 2;11 and 8;7, Bronckart and Sinclair (1973) observed that children used the *passé composé* to encode non-durative events⁷ with clear end results and the *présent* to encode durative events, irrespective of their past time reference. These results made the researchers conclude that, in French L1, very young children are initially sensitive to the inherent temporal properties of a predicate and use verb morphology to mark lexical aspect distinctions rather than deictic tense or grammatical aspect.

Antinucci and Miller (1976) came up with similar results⁸ based on longitudinal

5 This label is the title of a subsection in Bloom *et al.* (1980). According to Li and Shirai (2000), the aspect before tense hypothesis in L1 acquisition theory should not be mistaken with the more general linguistic principle of aspect before tense (Bybee, 1985), according to which in languages with a lot of inflectional affixes, grammatical aspect morphemes consistently appear closer to the stem than tense morphemes. Bloom *et al.*'s findings concern lexical aspect and should in fact be labelled as lexical aspect before tense in child language. Andersen (1989) also warned against this terminological pitfall.

6 Lexical aspect or *Aktionsart* refers to the inherent semantic properties of a verb phrase or predicate (see footnote 2). Lexical aspect is to be distinguished from grammatical aspect, encoded by means of inflectional morphology (the progressive in English and Catalan or the perfective/imperfective past in Romance languages). Grammatical aspect will be discussed in more detail in chapter 3.

7 The term *event* refers to a dynamic situation.

8 Nevertheless, we should note that Bronckart and Sinclair's study and Antinucci and Miller's are not directly comparable as the former were concerned with the temporal properties of situations (perfective events i.e. that gave a clear result, covered some distance in space and had an endpoint *vs* imperfective

data collected from one English L1 and seven Italian L1 children, aged between 1;6 and 2;5. In their corpus, *passato prossimo* markers in Italian and the regular/irregular past markers in English only encoded those verbs denoting a change of state with a subsequent resultant state. Activity and state predicates were generally left unmarked and almost never occurred with past inflections. Moreover, the Italian L1 children in the study made the past participle inflection agree with the object of the verb in number and gender, whereas such agreement only exists between the participle and the subject in adult Italian. According to the authors, the presence of this agreement indicated that the children interpreted the participle as specifying the object of the verb, which meant that they correlated the past inflections with the existence of a resultant state affecting the object rather than with the temporal location in the past of the event. For the authors, this was symptomatic of a limitation in the children's cognitive capacity to understand the concept of pastness and temporal deixis.

Using longitudinal data from English-speaking children aged between 1;10 and 2;4, Bloom *et al.* (1980) also found that the occurrence of inflections was selective with different types of predicates: the progressive marker overwhelmingly occurred with activity predicates, the *-ed*/irregular past was used with achievements, and the *-s* marker was used with accomplishments. The authors considered this to be evidence in support of Bronckart and Sinclair's (1973) and Antinucci and Miller's (1976) claim that children use tense markers to describe the internal properties of predicates prior to marking deictic tense. Nevertheless, Bloom *et al.* (1980: 407) minimized the impact of a possible cognitive underdevelopment by cautiously stating that "(a)lthough strongly influenced at the beginning by event-aspect, children are no doubt learning tense relations at the same time; they do not learn tense only after they learn aspect".

More recent studies on the early development of English L1 confirmed the distribution of verb morphology found in the above mentioned studies. Shirai and Andersen (1995) analysed speech samples from 3 children acquiring English in their home environment (Adam from age 2;3 to 4;10; Eve from age 1;6 to 2;3; Naomi from age 1;6 to 4;9). The researchers uncovered similar developmental patterns to the ones presented by Bloom *et al.* (1980). The children's initial use of *-ed*/irregular past was limited to predicates with the semantic features [+ telic], [+ punctual] (*e.g.*, *broke*, *fell*,

events i.e. that did not lead to any result and consisted of circular movements of animals in their natural habitat), whereas the latter worked with the inherent properties of predicates (telic vs. atelic).

threwed). According to the authors, at this early stage, telicity seems to be more important than punctuality, given that punctual verbs such as *jump* did not receive past marking. Gradually, the children extended the use of past morphology to other predicate types which lacked one or both of the above mentioned features.

As to the progressive marker *-ing*, the children seemed to associate it with what Shirai and Andersen (1995: 758) called an “action-in-progress meaning”. This resulted in a consistent distribution of the progressive with activities and iterative achievements (*e.g., jump, bang*) which both express the action-in-progress meaning.⁹ Unlike Bloom *et al.* (1980), Shirai and Andersen claimed that it was very difficult, if not impossible, to decide whether early past morphology encodes aspect or tense in English L1. Instead, they advocated the existence of certain acquisitional principles, based on cognitive and semantic factors, underlying early distribution of verb morphology. These principles will be discussed in section 2.1.2.

The aspect before tense hypothesis was not left unquestioned in the field of L1 acquisition. In one of the most quoted studies, Weist *et al.* (1984) showed that Polish L1 children aged between 1;7 and 2;2 were capable of deictic future references, thus casting some doubt on the claim that tense is an absolute defective category in children’s linguistic competence. Weist *et al.* also reported that the children in their study attached past inflections to both [+ telic] and [- telic] predicates and even distinguished between perfective and imperfective past. The authors considered these results to be counterexamples to a defective tense hypothesis in child L1.

However, after a reanalysis of the data, Andersen (1989) concluded that Weist *et al.*’s findings, while invalidating an absolute defective tense hypothesis (as argued by Antinucci and Miller 1976), still showed that Polish L1 children were generally guided by the inherent aspect of the predicates in their use of tense-aspect morphology: past perfective inflections mostly encoded accomplishment and achievement predicates, whereas past imperfective inflections were used with states and activities.¹⁰ According to Andersen (1989: 115), Weist *et al.*’s data provided evidence for a “relative defective

9 Note, nevertheless, that an iterative achievement has an activity reading because of the progressive form. This makes Shirai and Andersen’s account of the distribution of the progressive somewhat circular (Slabakova 2001).

10 Andersen (1989) also pointed out that the imperfective marker in Polish is also available in the present, which probably increased its degree of saliency in the input received by the children and could have prompted them into discovering its meaning and function sooner than in other languages which only encode the imperfective in the past.

tense hypothesis” in early L1, namely that children initially pair each inflection with a separate and distinct semantic predicate class. *-ed*/irregular past in English L1 and perfective past inflections in Romance and Slavic languages are restricted primarily to telic and punctual verbs, the progressive inflection in English L1 is restricted to activities, and imperfective past inflections in Romance and Slavic languages are slower to emerge and, when they eventually appear, are restricted to states and activity predicates. Table 2.1 below summarises the developmental path proposed by Andersen (1993: 312) for verb morphology in child L1 English, Romance and Slavic languages.

	States	Activities	Accomplishments/ Achievements
Early inflections	Uninflected	<i>-ing</i>	<i>-ed</i> ; irregular/perfective past
Late inflections	imperfective past	imperfective past	

Table 2.1. The development of tense-aspect morphology in L1¹¹

What explains, then, the skewed distribution of verb morphology in early L1 if not the cognitive impairment hypothesis? According to Andersen (1993), the answer might come from the interplay between the type of input the children are exposed to and several cognitive principles at work in the construction of form-meaning relations in emerging morphological systems. These hypotheses will be briefly discussed in sections 2.1.1 and 2.1.2.

¹¹ The stages cover a period of time between the ages of 18 months and two and a half years old. The table presents the early distribution of verb morphology in English and Romance L1. Surprisingly enough, the third person present marker *-s* is not included in the table. According to Andersen (1991: 319), this inflection is acquired later than obligatory past inflections and the progressive form because “(...) subject-verb agreement marking for person and number is less relevant to the meaning of the verb than is marking the time of occurrence of the event with past morphology (...)”.

2.1.1 The Distributional Bias in Adult L1 Input

The bias observed in children's early use of verb morphology could be a reflection of a similarly skewed distribution of tense-aspect inflections in adult L1 input. On the basis of results from Shirai (1991) regarding the use of verb morphology in English L1, Andersen and Shirai (1994) argued for the existence of a tendency among adult speakers

(...) to use each verb morpheme with a specific class of verbs, also following the trend detected in children's productions. When L1 learners are then exposed to this language of native speakers, they initially interpret this skewed distribution of forms as an absolute characteristic of the forms themselves (1994: 137-138).

Summarising the findings across several studies on different L1s, Andersen (1993) concluded that, in adult L1, telic and punctual predicates receive (perfective) past inflections to a greater extent than activity and state predicates, whereas activity predicates are predominantly encoded in the progressive form.

An interesting case in point for the impact adult L1 input has on the use of verb morphology in child L1 is the absence of over-generalisation of the progressive marker *-ing* onto state predicates in early English L1 acquisition. Brown (1973), who was among the first to observe it, suggested that this might be due to a lack of over-generalisation of the progressive in the input children receive from their caretakers.¹² In a later longitudinal¹³ study of mother-child interaction in English L1, Shirai (1994) showed that at least one of his subjects (Naomi) encoded state predicates in the progressive. Naomi's mother also used progressive states much more frequently than the mothers of the other children. This seemed to indicate that, when *-ing* over-generalisation in child L1 occurs, it is probably due to similar characteristics in the input the child receives from the mother. According to Shirai, the lack of *-ing* overgeneralisation in the other children's production came from a simplification of the input by the adult speakers they were exposed to, who consciously avoided using

12 Brown (1973: 326-327) looked at the speech of Eve's mother in the samples preceding Eve's productive use of *-ing* and found no involuntary state verbs in the progressive form.

13 Shirai studied the transcribed speech of three children: Adam from age 2;3 to 4;10, Eve from age 1;6 to 2;3 and Naomi from age 1;6 to 4;9.

complex structures such as progressive states.

A later study by Shirai and Andersen (1995), using the same child-mother speech sample from Shirai (1994), further underlined the existence of a distributional bias in the maternal speech with respect to the use of tense-aspect morphology. All three mothers in the study used past inflections most frequently with achievements (58-64% of the total of achievement predicates), and the progressive inflection most frequently with activities (53-61% of the total of activity predicates).

Robinson (1995b) also addressed the issue of skewed tense-aspect morphology distribution in adult L1 speech from a more general perspective. Using data obtained from interviews with three young native speakers of English, first-year students at the University of Puerto Rico, Robinson observed that all three speakers showed a bias in the use of past marking in favour of achievements. In the case of the progressive, native speakers used the *-ing* inflection to encode activity predicates more than any other semantic verb class. According to the author, the skewing in adult English L1 comes entirely from “(...) a progressive/non-progressive distinction: progressive marking on activities contrasts with *-s* - or an absence of marking - on other aspectual classes in non-anterior contexts, and with PAST in anterior contexts” (1995b: 215). The adult English L1 speakers in the study clearly identified *-ed* and *-s* as tense markers and *-ing* as a genuine grammatical aspect marker.

The Distributional Bias hypothesis can, therefore, be formulated as follows: fully proficient native speakers exhibit, in relative terms, the same distributional deviation observed, in more extreme terms, in child production. That is, adult L1 speakers tend to use past or perfective past inflections more with telic and punctual predicates than with activities and states, progressive inflections primarily with activity predicates, and imperfective past inflections more often with states and activities than with telic and punctual predicates. The choice of tense-aspect inflections in child L1 is, at least in part, motivated by the type of information children infer from the input they receive from more proficient speakers.

2.1.2 Four Cognitive Principles to Account for Emergent Tense-Aspect Morphology Patterns in Early L1 Development

Alongside the Distributional Bias hypothesis, Andersen (1993: 328-329) identified four cognitive principles at work in the construction of form-meaning relations in emergent tense-aspect systems as the ones found in early L1 productions:

1. *The relevance principle* – children will initially attach an inflection to a verb stem according to the inherent semantic properties of the verb.¹⁴
2. *The congruence principle* – a grammatical morpheme is used according to its degree of congruence with the inherent meaning of the verb. In other words, children preserve a high degree of homogeneity between the semantics of the inflections and the semantics of the predicates these are attached to. Consequently, progressive markers tend to be paired with activity predicates given the shared [+ durative] semantic feature; past and perfective past inflections are congruent with telic and punctual predicates with which they share the [+ endpoint] semantic feature. The morpheme adds little, if any, totally new information to the interpretation of the predicate. This principle is also operational in adult L1 production, given that it minimises the speaker's effort to convey temporal information about the situation encoded by the predicate.
3. *The one-to-one principle* – children initially assume that each grammatical morpheme has one and only one meaning, function and distribution.
4. *The subset principle* – children will assign a more conservative form-meaning relation to a morpheme than fully proficient adults in such a way that the children's form-meaning relation is a logical subset of the proficient adults' form-meaning relation.

Consequently, development in the domain of tense-aspect morphology in L1 involves a transition from more conservative uses of verb forms to marked uses of the

¹⁴ This is based on Bybee's (1985) general linguistic principle of aspect before tense. See footnote 5.

same forms in contexts in which the morpheme is less expected, for instance a progressive marker on an achievement predicate or a perfective past morpheme on a state predicate. According to Andersen (1993: 332), the real virtuosity in language use occurs “(...) when the speaker or learner gains expressive control over the use of each morpheme so that he can intentionally (although presumably subconsciously) impose his own perspective on each proposition through the use of morphology”.

The aforementioned principles are not limited to early L1 and can be extended to L2 learning. In fact, on the basis of data from both L1 and L2, Andersen and Shirai (1994, 1996) argued for a prototype account of the development of tense-aspect morphology in emergent grammars. This model will be presented in section 2.2.3 after the overview of the relevant research on the development of tense-aspect morphology in L2.

2.2 Theories of Tense-Aspect Development in L2 Learning

2.2.1 The Aspect Hypothesis

Research on the development of tense-aspect morphology in L2 has been carried out with different types of learners (children and adults) with a variety of L1 languages (English, Spanish, French, Italian, German, Dutch and Japanese, among others), learning the target language in different types of environments (naturalistic and classroom).¹⁵ These studies have shown that L2 learners are also sensitive to the inherent semantics of the predicate in their use of verb morphology and that a similar bias in the distribution of verb inflections exists in early L2 varieties.

Nevertheless, the development of verb morphology in an additional language is conditioned by a series of factors which are not present in the acquisition of verb morphology in one's mother tongue. The most relevant one for the discussion here is the fact that learners develop L2 grammar on the basis of grammatical distinctions encoded in their L1. According to Slobin (1996), the grammar of the mother tongue provides native speakers with a set of options, a “lens”, for encoding experience. Native speakers of a language will be particularly sensitive to those elements of experience for which

¹⁵ See footnote 1 in this section.

their mother tongue provides linguistic expression.

Analysing a series of oral narratives, Slobin (1996) pointed out that while speakers of languages which grammaticalise aspect, such as English and Spanish, provide temporal information about events or situations by means of aspectual morphology (progressive/non-progressive in English, perfective/imperfective in Spanish), speakers of German L1, a language which does not encode aspect inflectionally, do not attend to this type of information in their stories, illustrated in example (1) below.¹⁶ For Slobin, this is an indication that grammaticalised devices available in a given language train speakers of that language to attend to and encode certain semantic content, giving rise to a language-specific “rhetorical style” (1996: 77), along the lines of the Sapir-Whorf hypothesis:

- (1) a. English: The boy fell out ... and the dog was being chased by bees.
 b. Spanish: Se cayó el niño y le perseguían al perro las avispas.
 “He fell-PVF and the wasps chased-IPVF the dog.”
 c. German: Der Junge fällt vom Baum unter ... und die Bienen gehen hinter dem Hund her.
 “The dog falls down from the tree ... and the bees go after the dog.”

(Slobin 1996: 79-80)

Learning an additional language involves being able to grasp not only the range of grammaticalised devices available in the target language but also the functional-semantic scope of these distinctions. For Slobin (1996), this task is particularly challenging in the case of categories such as grammatical aspect, which do not have a notional referent but are entirely learnt through language. It is assumed that, in the case of tense-aspect inflections, learners will have to infer from the L2 input the most prototypical meaning of each inflection. Factors such as the frequency of occurrence of a form in the L2 input, *i.e.*, its markedness, or its relative degree of saliency have been shown to have a strong correlation with grammatical morpheme learning in L2 (Eckman 1996; Bardovi-Harlig 1987). We shall come back to this point in section 2.2.3 of the current chapter.

Evidence of a biased distribution of emerging verb morphology in terms of

¹⁶ Marginally, German speakers provide aspectual information by means of the perfect form, focusing on the bounded quality of an event or situation. This indicates the systematic but not absolute nature of the patterns discussed among speakers of the same language. What is particularly interesting is that, in spite of this, “speakers so rarely make use of options that differ from the norm” (Slobin 1996: 82).

predicate class, the so-called relative defective tense hypothesis or, with its more neutral label, the Aspect Hypothesis (Andersen and Shirai 1994), has come from studies in which both the L1 and the L2 encoded grammatical aspect (English L1-Spanish L2, Andersen 1986, 1991; Spanish L1-English L2, Robinson 1995a; French L1-English L2, Bardovi-Harlig and Bergström 1996; Catalan L1¹⁷-English L2, Comajoan 2001, to mention but a few). A weaker link between the inherent semantics of the predicate and the distribution of verb inflections has been found in studies where the learners' L1 did not encode viewpoint aspect, such as German L1-English L2 (Rohde 1996) or Dutch L1-English L2 (Housen 2000, 2002), among others.

Housen (2002) concludes that the influence of the inherent semantics of the predicate on the development of tense-aspect morphology in the target language

“(...) interacts with and may be sometimes overridden by other factors, including: (a) L1-based predispositions, (b) properties of the respective TA (tense-aspect, our note) markers in the input language (*e.g.*, type and token frequency, co-occurrence probabilities, distributional-combinatorial patterns, saliency, transparency, etc.), (c) morphophonemic properties of the respective TA categories, and (d) different processing mechanisms that operate at a particular point in the development of a given TA category (2002: 190).

The similarities and differences between the tense-aspect system in English and the one in the mother tongues of our subjects (French and Catalan) will be presented in more detail in chapter 3.

The discussion hereafter will revolve around research testing the Aspect Hypothesis in English L2. The selected studies have been grouped into two categories: studies dealing with untutored or naturalistic learners (section 2.2.1.1) and studies dealing with tutored or classroom learners (section 2.2.1.2). Data from untutored learners has been included in order to highlight certain specificities of the development of L2 tense-aspect morphology in tutored contexts. For contrastive purposes also, we have included both child and adult L2 data, though more attention has been paid to those studies carried out on adult learners, given the characteristics of the learner population analysed in the present study.

17 In the present study we refer to Catalan as L1 in the sense of Catalan as a mother tongue. Catalan speakers are bilingual speakers of Spanish.

2.2.1.1 Untutored English L2 learners

The earliest evidence for the Aspect Hypothesis in naturalistic L2 data came not from English L2 but from Spanish L2. In a longitudinal study of two English L1 children, aged 8 and 12 respectively, learning Spanish naturalistically in Puerto Rico, Andersen (1986, 1991) identified several stages in the emergence of past morphology, *i.e.* the perfective and the imperfective past inflections, in Spanish L2. Given that Andersen's developmental sequence for past morphology is often referred to in English L2 research on the Aspect Hypothesis, we take the time to briefly present it here.

According to Andersen (1986, 1989, 1991), the two learners appeared to initially interpret perfective and imperfective past inflections in Spanish L2 as makers of inherent aspect and used them redundantly on specific verb classes, mainly guided by basic semantic features such as [\pm punctual], [\pm telic]. As shown in Table 2.2 below, the first past marking to emerge was the perfective past with punctual events at stage 2, whereas the rest of the verb classes remained unmarked (in the base form). At stage 3, prototypical states began to be encoded in the imperfective past form. By stage 4, all verbs referring to past time appeared in a past form, even though the use of tense-aspect morphology was clearly biased in terms of one-to-one, semantically homogeneous, pairings: inherently punctual events were encoded exclusively in the perfective past, while inherently durative events received exclusively imperfective marking.

Similar to other Romance languages, past morphology in Spanish encodes both tense and grammatical aspect and can be used with any predicate type.¹⁸ This flexibility in the use of the perfective/imperfective inflections was not observed until stage 5, probably because it requires learners to free themselves from the inherent meaning of the predicates and use inflections to encode a subjective perspective on a given situation, in spite of the apparently incongruent nature of the resulting predicate/verb form pairings (perfective inflections with durative verbs and imperfective inflections with punctual verbs). Andersen (1991) observed that the spread of tense-aspect inflections across predicate classes was not random but followed a gradual progression

¹⁸ More flexibly than English tense-aspect morphology, which has certain distributional restrictions that will be discussed in chapter 3.

from more predictable¹⁹ to less predictable combinations. The imperfective past eventually spread from states and activities onto telic predicates (stage 5) and finally to punctual predicates (stage 7). The perfective past spread from achievements and accomplishments onto activity predicates (stage 6) and states (stage 8). Andersen (1991: 316) considered that, by stage 8, the children had finally arrived at near-native competence in the use of Spanish L2 past morphology.

Stages	States	Activities	Accomplishments	Achievements
1	base form	base form	base form	base form
2	base form	base form	base form	perfective
3	imperfective	base form	base form	perfective
4	imperfective	imperfective	perfective	perfective
5	imperfective	imperfective	imperfective/ perfective	perfective
6	Imperfective	imperfective/ perfective	imperfective/ perfective	perfective
7	imperfective	imperfective/ perfective	imperfective/ perfective	imperfective/ perfective
8	imperfective/ perfective	imperfective/ perfective	imperfective/ perfective	imperfective/ perfective

Table 2.2. Developmental sequence for perfective/imperfective past inflections in Spanish L2 (adapted from Andersen (1991))

Evidence for the Aspect Hypothesis in naturalistic English L2 comes from Robinson (1990), who found that a 30-year-old native of El Salvador (Rogelio) living in the US and with very little instruction in English L2 used past inflections only with dynamic predicates and never encoded states in the past, even when the latter occurred in past time contexts. Moreover, Rogelio used past morphology with punctual

19 Andersen (1991: 318) considered this to be an illustration of the relevance principle at work in the development of L2 verb morphology: “(...) inflections are more naturally attached to a lexical item if the meaning of the inflection has direct relevance to the meaning of the lexical item”.

predicates more frequently than with durative predicates, whereas durative predicates were generally encoded in the progressive form, irrespective of their past time reference.

What Robinson considered to be a major incongruity with previous research on child English L1 was that, while English L1 children never overgeneralised the progressive form to states, in Rogelio's interlanguage 22% of the state predicates were used in the progressive (39 out of 176) and only 13% of the dynamic predicates (48 out of 377) carried the *-ing* inflection. Rogelio appeared to correlate the [+ durative] property of the progressive with the inherent durative quality of state predicates, but ignored the [+ dynamic] property of the progressive which makes it incompatible with states in English L1. Rogelio correlated states with the progressive form to such an extent that, in certain contexts, states and dynamic predicates were distinguished by means of the progressive/past contrast.

The development of tense-aspect morphology in untutored English L2 appears, though, to be subject to strong individual variation and does not entirely fit the Aspect Hypothesis. In a longitudinal study of two German L1 children, aged 9 and 6 and learning English during a six-month stay in California, Rohde (1996) observed that the Aspect Hypothesis was supported only by the early use of past inflections, both regular and irregular, which consistently paired with achievement predicates in early English L2. On the other hand, the distribution of the progressive was less clear-cut: *-ing* emerged both with activity and achievement predicates and was also used with states (also Robinson 1990). According to Rohde (1996), this was due to the fact that both children used the progressive not so much as a marker of lexical aspect but rather as a tense marker. The function of the progressive was to express future and also past time.²⁰

Findings from naturalistic English L2 seem to indicate that, unlike what was observed in early L1, "(...) temporal relations do play an important role for the L2 learner and are encoded as early as the first inflections" (Rohde 1996: 1130). In other words, tense is not a defective category in naturalistic English L2. Naturalistic English

²⁰ In a later study, Rohde (2002) suggests that the use of the past progressive constitutes a strategy to mark simple past where *was* carries the function of past and the *-ing* marker is equivalent to an infinitive form. This auxiliary + participle structure formally matches the *perfekt* in German L1, which could mean that the use of past progressive in English L2 by these German children is a matter of L1 transfer. This can explain why the children use the past progressive with punctual and telic predicates such as *catch*, *ride into* or *jump*.

L2 learners are not only sensitive to the semantic properties of the predicates but also encode temporal relations as early as the first inflections.

Moreover, as discussed in Rohde (2002), the children's use of verbal inflections was not fully systematic. The existence of uninflected forms, both in the present, where the progressive was expected, and in the past, where achievement predicates were not encoded for past time reference, seems to indicate that, at least in those children's interlanguage, "(...) the relationship between verb and inflection is not as strong as otherwise suggested" (207).

To conclude this section, the studies discussed so far provide contradictory evidence for the applicability of the Aspect Hypothesis in untutored English L2. The past morphology in English as a target language seems to be the area of highest sensitivity to the aspectual class of the predicate, irrespective of the subjects' L1. Regular and irregular past inflections emerge with achievement predicates and spread to accomplishments, activities and finally states, similar to what was observed in child L1 acquisition (see section 2.1).

Nonetheless, the emergence of the progressive appears to be subject to more individual variation in untutored English L2 than in child L1. While clearly dominant, the association of the progressive with activity predicates is weaker than in L1 data and naturalistic L2 learners often produce non-targetlike pairings in which the progressive marker is used with state predicates. For Li and Shirai (2000), this could be due to the fact that, at lower proficiency levels, inflections are rote-learned on account of their high frequency in the input, but learners do not really grasp their inherent semantics. This means that "(...) early on these are haphazardly produced forms before the actual form-meaning relationship is acquired" (2000: 87). In the following section we will discuss to what extent the development of English L2 verb morphology in tutored settings responds to the patterns predicted by the Aspect Hypothesis.

2.2.1.2 Tutored English L2 learners

Unlike the studies on untutored English L2, which only covered the early stages of the emergent interlanguage, the studies carried out on tutored English L2 learners generally have a wider scope and provide data about the interaction between the

inherent semantics of the predicate and the use of verb morphology at different levels of L2 proficiency. Working with oral interview data from 26 Spanish L1 learners of English²¹ grouped into four proficiency groups at the University of Puerto Rico, Robinson (1995a) reported that, among the less proficient learners, the inherent semantics of the predicates exerted more control over the choice of the inflection than the semantics of the inflection itself or the temporal reference of the situation.

Lower level learners consistently associated the progressive with activity predicates, to such an extent that *-ing* often distinguished activities from past or unmarked non-activities.²² In this study, very few occurrences of non-targetlike progressive states were recorded (only Group II produced 6.7% of progressive states of all the state predicates). Past morphology often distinguished punctual events from progressive or unmarked predicates that were not punctual. According to Robinson (1995a), at lower levels of proficiency, past morphology was strongly associated with punctual events independent of their temporal reference, *i.e.*, past inflections on punctual events often occurred in non-anterior contexts. With respect to states, they exhibited both an elevated occurrence of base or uninflected forms and, when inflected, a strong affiliation with the *-s* marker.

Robinson (1995a) also observed that, at higher proficiency levels, the use of verb morphology became more targetlike. Similar to findings from English L1 data (Robinson 1995b, section 2.2.1.1), “(...) the English verb inflections *-s* and PAST shift from markers of lexical aspect among lower-level learners to markers of tense at the highest level, while *-ing* strengthens as a marker of lexical aspect” (363). More precisely, the affiliation of the progressive with activities appeared to strengthen at higher proficiency levels (14.5% of all activity predicates for Group I; 23% for Group II; 26.2% for Group III and 25.8% for Group IV). With increasing proficiency, the use of past morphology became more flexible with respect to the inherent semantics of the predicate and spread from punctual events onto the adjacent aspectual categories of durative event and punctual activity. Moreover, the higher-level groups showed a much

21 These learners are foreign language learners (FLLs).

22 Note that Robinson (1995a) uses a six-fold classification comprising a two-dimensional semantic space (durative *vs.* punctual and atelic *vs.* telic). The resulting aspectual classes are: states; punctual states (*i.e.*, inert perception predicates such as *notice*); activity; punctual activity; durative events; punctual events. Robinson’s classification complicates the comparison with other studies using Vendler’s (1967) classification.

stronger association of past morphology with anterior reference, “(...) a connection that is at least comparable to the affinity of PAST for punctual predicates in these two groups” (1995: 363). A similar trend was detected with respect to the third person singular marker *-s* and present time reference.

In a cross-sectional study with six groups of learners at different proficiency levels (from beginning or level 1 to advanced or level 6) enrolled in the Intensive English Program at Indiana University, Bardovi-Harlig and Reynolds (1995) observed that tutored learners were sensitive to the lexical aspectual class of the predicate not only during the beginning stages but also during the more proficient ones. After eliciting verb morphology by means of a cloze-type passage, the authors identified three stages in the development of simple past morphology:

1. During the first stage (level 1 to level 3), there was a strong correlation between the simple past and event predicates (accomplishments and achievements). Learners showed 80% of appropriate use of simple past with this type of predicates as early as level 2. Activities and states were less frequently encoded in the simple past (between 53% and 67% for states and between 51% and 68% for activities).
2. During the second stage (levels 4 and 5), states were encoded in the simple past more frequently than activity predicates (72% and 76% of states at levels 4 and 5 respectively vs. 54% and 68% for activities). This goes against the distributional pattern posited by the Aspect Hypothesis (Andersen 1991), namely that past inflections spread first onto activity predicates and then onto states.
3. At the last stage (level 6), states and activity predicates were encoded in the simple past at similar rates.

Bardovi-Harlig and Reynolds (1995) claimed that, in the case of activity and state predicates, learners often used other inflections – the progressive with activity predicates and the non-past with state predicates. Interestingly enough, the use of the progressive with activity predicates by the lowest level learners was higher than Robinson’s (1995) more proficient groups (24.6%). However, the use of the progressive decreased at levels 2 and 3 (11% and 7.8% respectively) to rise again at level 4²³

23 According to the authors, at this level the past progressive was the dominant form of progressive to be

(26.3%). At the more advanced levels, the use of the progressive decreased once again in favour of the simple past.

The overgeneralisation of the progressive to states was negligible (also Robinson 1995a) and the use of the non-past form with activity predicates was also very limited. For the authors, this constituted further evidence that the distribution of verb morphology in tutored English L2 is not random but conditioned by the inherent semantic properties of the predicates.

The distribution of verb morphology in interlanguage was also conditioned by the presence of frequency adverbs. According to the authors, “(...) some learners associate the concept of present so strongly with adverbs of frequency that this association overrides contextual cues that establish the past tense” (1995: 118). At the lower levels, the presence of frequency adverbs triggered an increase in the use of non-past forms, but their use was greater with states than with activity predicates, given that in the case of the latter there was added competition from the progressive. At the advanced level of proficiency, frequency adverbs had little effect on the use of tense-aspect forms.

Using data from a written film retelling task²⁴ based on an excerpt from the silent film *Modern Times*, Bardovi-Harlig and Bergström (1996) analysed the distribution of verb morphology in the instructed interlanguage of learners of English as a second language and learners of French as a foreign language enrolled at Indiana University. Students were divided into four groups according to their rates of accuracy of past morphology use. Learners of the two target languages appeared to respond to the semantic properties of the predicates in their use of verb morphology.

With respect to English, several trends were identified. Firstly, past inflections appeared to spread from telic predicates (achievements and accomplishments) to atelic predicates (activities and states) very soon.²⁵ Secondly, the progressive was clearly

produced due to the fact that the past progressive was also addressed in instruction at that time.

²⁴ According to the authors, one of the strengths of this type of task is the fact that it involves relatively free production of data and results in a substantial quantity of verb tokens (as opposed to the more limited sample produced in the cloze-type task). However, the data sample is unbalanced with respect to the distribution of verb tokens across the aspectual classes. To avoid a potential skewing in the results, the authors calculated the distribution of verb morphology inside each aspectual class, rather than across classes. We will return to these data analysis methods in chapter 6 (Research Methodology).

²⁵ In fact, for Slabakova (2001), this precocious distribution of past morphology across all aspectual classes is a counter-argument to the Aspect Hypothesis. Note that, according to the data presented by Bardovi-Harlig and Bergström, in the lowest group all types of predicates receive past inflections, to a

associated with activity predicates, and this affiliation strengthened with rising proficiency (from 17.2% of all activity predicates in group 1 to 42.9% in group 4). The low percentage of progressive activities in the less proficient groups was due, in part, to the existence of a high percentage of uninflected or base forms (58.6% of all activity predicates in group 1 and 32.5% in group 2). Finally, unlike what was observed in untutored English L2 by Robinson (1990), non-targetlike overgeneralisation of the progressive to states was extremely scarce.

A later study by Bardovi-Harlig (1998), encompassing both written and oral narratives, provided further evidence supporting the trends identified above, namely that in tutored English L2 past inflections consistently encode telic predicates to a higher extent than activity predicates, whereas the latter show greater, and growing, occurrence of the progressive than any other predicate class up until the most advanced stages. This study also confirmed the existence of a different pattern for accomplishments and achievements in the oral narratives – use of simple past with achievements was 30% higher than with accomplishments. Bardovi-Harlig (1998) also provided further evidence in favour of a parallel hypothesis for the distribution of verb morphology in English L2, the so-called Discourse Hypothesis, which will be discussed in section 2.2.3.

Two conclusions can be drawn so far with respect to the development of tense-aspect morphology in English L2, in tutored and untutored settings. Firstly, tutored and untutored L2 learners behave similarly with respect to the use of past morphology - past morphology is strongly associated with telic predicates in early English L2, irrespective of the learning environment. However, the correlation between telicity and past inflections gradually weakens and past inflections consistently encode atelic predicates with more proficient learners. Secondly, tutored English L2 learners differ from untutored ones in that they generally do not produce non-targetlike progressive states. Moreover, the bias in the distribution of the progressive with activity predicates appears to strengthen across proficiency levels. For Li and Shirai (2000: 81), this indicates that

higher or lower extent: 15% for states, 17.2% for activities, 47.1% for accomplishments and 46.4% for achievements of the total of tokens in each class. Note also that no sequencing in the emergence of past inflections is observed between achievements and accomplishments, unlike what was initially postulated by Andersen (1986, 1991).

the less advanced learners are not necessarily more sensitive to the inherent semantic properties of the predicates than the more advanced learners.

The existence of certain distributional patterns in proficient native speaker language, *i.e.*, the so-called distributional bias, and several cognitive principles have been invoked to account for the skewing observed in emergent verb morphology in early L1 and L2 varieties. However, neither explain how children and L2 learners are able to relax the initial bias in the use of verb morphology and gradually extend the domain of application of an inflection beyond the initial form-meaning pairings. We believe that Andersen and Shirai's (1994, 1996) and Li and Shirai's (2000) prototype model allows for a unitary account of both initial and later stages in the development of verb morphology, both in L1 and L2. This model will be presented in section 2.2.1.3.

2.2.1.3 A Prototype Account for Emergent Tense-Aspect Morphology

The prototype account for emergent tense-aspect morphology (Andersen and Shirai 1994, 1996; Shirai and Andersen 1995; Li and Shirai 2000) posits the existence of a constant form-function mapping process during the early stages of L1 acquisition and L2 learning - children and L2 learners create semantic representations of tense-aspect inflections based on regularities or patterns observed in the input. In time, both children and learners fine-tune the meaning of the inflections and narrow down the contexts in which each inflection can be used. This is in line with a connectionist approach to language learning,²⁶ according to which "(...) linguistic representations (of the lexicon, morphology, and grammar) are "emergent properties" due to the interaction of the learning system with the linguistic environment" (Li and Shirai 2000:150).

According to Andersen and Shirai (1994: 148), the prototypical meaning of English tense-aspect inflections can be summarised as follows: "action in progress at that moment" for the progressive, "completed action" for *-ed*/irregular past marking and "continued existence" for *-s* marking. In terms of semantic features, past morphology correlates with verbs that are [+ punctual] and [+ telic], whereas the progressive form coalesces with verbs that are [- telic] and [- punctual]. Children and low level L2

²⁶ This model contrasts with the representational innateness of some grammatical and semantic categories postulated by theories such as UG.

learners arrive at these meanings through a distributional analysis of the input and create one-to-one mappings between inflections and certain predicate classes. Initially, children and L2 learners limit themselves to the combinations that are most accessible and redundant in the input.

Gradually, through positive and negative evidence, children and L2 learners will relax the initial form-meaning pairings and start using inflections with less prototypical predicate types. Evidence from L1 and L2 studies shows that children and L2 learners extend inflections first to items that are closer to the prototype (*-ing* from activities to accomplishments; past morphology from achievements to accomplishments) and only later to least prototypical members (*-ing* to achievements and past morphology to activities and states).

Empirical findings from L2 learning seem to indicate that the spread of verb inflections from the prototype to non-prototypical predicates is not as straightforward as in L1 acquisition, especially among instructed learners. First of all, for these learners, the initial prototypical pairings are weaker and, in spite of a clear bias in the distribution of inflections, inflections can be affixed to unexpected verb types in incipient interlanguage. Phenomena such as overuse (*e.g.*, the non-targetlike progressive states) and underuse of tense-aspect markers (*e.g.*, past inflections on activity predicates encounter strong competition from the progressive, more so than in native speaker production) are common in L2 data. Secondly, certain prototypical form-meaning mappings seem to strengthen with rising proficiency, at least up to an intermediate level (Robinson 1995a; Bardovi-Harlig and Reynolds 1995; Bardovi-Harlig and Bergström 1996; Bardovi-Harlig 1998). This contrasts with the linear relaxation of the initial restriction to the prototype observed in L1 data.

At least three factors can be identified to account for the discrepancies between the development of verb morphology in early varieties of L1 and L2:

1. *L2 learners' higher capacity for rote-learning.* According to Li and Shirai (2000), L2 learners might have a higher memory capacity but a weaker analytic ability than L1 children, thus memorising high-frequency forms without a real insight into the semantics or the distribution of the inflection.

2. *The L1 background.* As already discussed, L2 learners have a different starting point in the learning process from L1 learners. Grammaticalisation patterns in their mother tongue can speed up or slow down the noticing process of grammatical devices in L2. When no L1 framework is available to interpret the grammaticalised distinctions in the target language, learners appear to resort to invariant semantic prototypes to reconstruct the form-meaning relations encoded by the tense-aspect morphology in the L2 (Housen 2002).
3. *The role of instruction.* In instructed settings, learners often have access to “enhanced input” (Sharwood Smith 1993), namely input that has been modified to draw learners’ attention to specific features in the target language. It might be the case that this enhanced input favours the prototypical form-meaning coalitions and provides very little evidence for less prototypical combinations.²⁷

Meta-linguistic explanations provided through instruction also shape the way in which L2 learners use target language verb morphology. More often than not, such explanations rely on oversimplified rules of thumb which, in the difficult task of presenting grammar progressively, “overlook” more marked uses of tense-aspect forms. Learners might not have enough and/or relevant exposure to input to acquire these uses on their own and, even when exposure is abundant and/or relevant, instruction may not allow learners to see beyond the strict dichotomies taught in class.

With rising proficiency, both children and learners “free the meaning of the inflection from (...) the prototypical situations that allowed them to infer that meaning and impose on a less prototypical situation that same perspective” (Andersen and Shirai 1994: 148). Native or targetlike control of tense-aspect marking consists in correlating the semantic attributes of inflections with one’s own perspective on a particular situation, irrespective of the inherent temporal characteristics of the latter. This is when

²⁷ Nevertheless, instruction does not alter the developmental sequence for verbal inflections observed in naturalistic L2 learning. The studies discussed in section 2.2.1.2 showed that tutored learners follow the sequence observed in naturalistic L2. According to Bardovi-Harlig (2000: 405), instruction needs to be combined with other factors, such as motivation or exposure to authentic L2 input in order to lead to “(...) an advanced level of development and, eventually, corresponding targetlike form-meaning association”.

the distribution of verb morphology is no longer entirely motivated by the inherent semantic properties of the predicate but responds, at least in part, to more subjective considerations of encoding a particular temporal contour on a situation.

This productive use of inflections is, according to Comajoan and Pérez Saldanya (2005), the end stage of a grammaticalisation process.²⁸

Regarding lexical aspect, complete grammaticalization implies the use of all types of morphology in all types of aspectual predicates. Regarding discourse, it implies the use of verb morphology in less prototypical contexts (2005: 50).

With proficient native speakers and L2 learners at more advanced stages, the use of verb morphology becomes discourse-motivated (Bardovi-Harlig 1994, 1998, 2000). The impact of discourse-organisational factors on the development of tense-aspect morphology will be discussed in section 2.2.2.

2.2.2 The Discourse Hypothesis

In addition to the effect of the inherent aspect of the predicate, it has been argued that the choice of verb morphology in emergent L1 and L2 is also conditioned by factors beyond the sentence level such as the text type²⁹ and, particularly, grounding in narrative discourse (Berman and Slobin 1994; Trévisé 1987; von Stutterheim 1991; Bardovi-Harlig 1992, 1994, 1998, 2000; Giacalone Ramat 2002 to mention but a few). Most of the studies discussed here analyse the distribution of verb morphology with respect to Hopper's (1979) two-tiered narrative structure: foreground (the narrative plot) vs. background (temporally unsequenced material in the narrative). The limitations of

28 It is important to bear in mind that the final stage of the grammaticalisation process in L1 is different from L2 acquisition. While children acquire native control of tense-aspect marking in L1, L2 learners create approximations to various subsystems of the target language (Giacalone Ramat 1992) which fail to be nativelike even at the very advanced stages of target language acquisition, as we will discuss in the last section of this chapter.

29 To take the case of narrative discourse only, Noyau (1990) argues that different types of narratives, whether personal or elicited, can influence the production of tense-aspect morphology. According to Noyau, while a film or picture book retelling task brings to the fore the expression of sequences of events at the expense of background material, it yields a more limited range of temporal expressions than a personal or life narrative, in which the speaker can refer to past experiences, future plans or current situations. Retelling tasks have been shown to contain more foreground verb tokens than background tokens (Bardovi-Harlig 1998), whereas personal narratives, both native speaker and learner, are rich in background (Schiffrin 1981; Trévisé 1987, among others).

this model together with other, more objective criteria to account for the temporal organisation of narrative discourse will be thoroughly discussed in chapter 4.³⁰

The use of verb morphology is discourse-motivated from an early age in L1 acquisition. Several cross-sectional studies carried out with children aged between three and nine years old speaking a variety of L1s have shown that, from a relatively young age (generally around 5 years old), children make a discourse-motivated use of morphology in languages which encode aspect, such as English and Spanish (Sebastián and Slobin 1994 for Spanish; Berman and Slobin 1994 and Aksu-Koç and von Stutterheim 1994 for English). In oral English L1 *Frog* stories, the progressive marker is the first verbal inflection to emerge around the age of three. 66% of all the present tense forms produced by 3-year-olds take the progressive, as opposed to 48% among 4-year-olds, 30% among 5-year-olds and 22% among 9-year-olds (Berman and Slobin, 1994: 138). It seems that for the youngest children, the progressive form is the unmarked way of referring to events construed as simultaneous with the time of speaking. Consequently, at this stage, the progressive form is not yet a grounding device – it simply indicates simultaneity of perception and reflects a spatio-perceptually based organisation of discourse. Older children (5- and 9-year-olds) use aspectual contrast to distinguish foreground events from background material, especially by means of the past progressive. According to Berman and Slobin, this age group uses the progressive with a backgrounding function to indicate the temporal overlap between events narrated in the past. The progressive is no longer an unmarked form.

In adult English L1 *Frog* stories, the progressive form is systematically used with a grounding function to distinguish between “(...) events which form a durative background to the plot-advancing sequentially unfolding course of events described in simple narrative present or past” (Berman and Slobin 1994: 142). Unlike the younger children, who are in a picture-description mode, the English L1 adults never anchor their narratives predominantly by means of the progressive but use it across episodes, which indicates a plot-motivated use of aspectual marking. While certain group trends can be established with the English L1 adults, the use of tense-aspect forms in this

30 Very few of the studies reviewed here discuss the segmentation criteria used in their analysis of narrative material (von Stutterheim and Klein 1989 is one of these). However, deciding which situations in a narrative are temporally sequenced and constitute the foreground and which fall out of the temporal sequence and constitute the background is not always an easy task as we shall try to argue in chapter 4.

group also responds to individual narrative styles.

Other grammaticalised devices, such as tense-shifting from present to past or the present perfect, are also used to indicate departures from the temporally ordered plotline in the adult English L1 *Frog* stories and, at times, to distinguish between two series of simultaneous events. The relation between temporal relations and tense-aspect morphology in adult English L1 *Frog* stories will be illustrated in chapter 5.

In interlanguage, learners also seem to use “(...) emerging verb morphology to distinguish foreground from background in narratives” (Bardovi-Harlig 1994: 43). This represents the Discourse Hypothesis (Bardovi-Harlig 1992, 1994, 2000) - the distribution of early verb morphology in L2 is shaped not only by inherent semantic properties of the predicate but also by the discourse function of the predicate.

Whereas the basic semantic features of predicates attract verb morphology with the same features, in actual production these inflected predicates are pressed into the service of communication and may take on features appropriate to the narrative structure, thus going beyond the most basic predicate-level pairing of verbal and morphological features (Bardovi-Harlig 2000: 317).

In the present study, the Discourse Hypothesis applies exclusively to narrative discourse.

The majority of studies testing the Discourse Hypothesis in interlanguage have been carried out in tutored settings, in part due to the fact that untutored or naturalistic learners have been shown to express complex temporal relations in discourse with almost no verbal morphology (Noyau 1984, 1990; Trévisé 1987 for French; von Stutterheim 1991 for German among others). The discussion of the Discourse Hypothesis in section 2.2.2.1 will, hence, draw on several studies carried out with English L2 learners in tutored settings.

2.2.2.1 Tutored English L2 Learners

Robust evidence for the Discourse Hypothesis in English L2 comes from tutored learners (Bardovi-Harlig 1992, 1997, 1998, 2000). Analysing the oral and written narratives produced by 16 low and high-intermediate tutored learners of English as a

second language, Bardovi-Harlig (1992) observed that (a) some learners marked the foreground-background distinction more than others, (b) when discourse grounding occurred, learners tended to use past inflections to encode situations in the foreground and non-past forms to encode background material, and (c) the background of the narratives contained a greater range of verbal morphology than the foreground.

In a later study carried out with 37 tutored learners of English as a second language who produced both oral and written narratives elicited by means of a film retelling task, Bardovi-Harlig (1998) showed that the simple past emerged first and more strongly in the foreground, whereas the progressive was restricted to the background. With higher proficiency levels, the simple past became the dominant verb form in the background, too, but never to the same extent as in the foreground, given the competition from other forms such as the past progressive and the perfect. From a predicate class perspective, the findings can be summarised as follows:

1. Achievement predicates were consistently inflected with the simple past, irrespective of their function in the narrative (70% and 74% in the background and foreground respectively in the written narratives; 69% and 64% in the background and foreground respectively in the oral narratives).
2. Accomplishment predicates showed greater use of simple past when in the foreground (70% in the written narratives and 44% in the oral narratives). In the background, accomplishments were also encoded in the progressive (28% in the written narratives and 26% in the oral narratives), though to a lesser extent than activity predicates.
3. Activity predicates were mostly found in background contexts. In this case, they were predominantly encoded in the progressive (67% of all background activities in the written narratives and 41% in the oral narratives), though other forms such as the simple past or the base form were also used. When used in the foreground, activity predicates were generally encoded in the simple past (52%) in the written narratives and in the base form (53%) in the oral ones. Some interesting differences appear between written and oral narratives with respect to this group of predicates. Firstly, progressive activities were more common in the background in the written narratives than in the oral narratives and, secondly,

progressive activities seemed to be somewhat more frequent in the foreground in the oral narratives (20% vs. 13%).³¹

Bardovi-Harlig (1997, 2000) notes that the distribution of inflections across the predicate types in L2 production is not necessarily sensitive to both inherent semantics and grounding. In fact, “[a]chievements seem to be inflected regardless of grounding, whereas accomplishments and activities show sensitivity to both grounding and lexical aspect” (1997: 497). There seems to exist an interaction between the Aspect and the Discourse Hypotheses which will be discussed in section 2.2.3 below.

The analysis of the Discourse Hypothesis in English L2 reveals that discourse-sensitive use of verb morphology is related to the level of proficiency in the target language (Bardovi-Harlig 2000).³² At very low levels, the use of inflections is not systematic and appears to respond predominantly to the inherent semantics of the predicate. This does not mean that less proficient learners do not use grounding strategies in their narratives, but they often rely on linguistic means other than verb morphology. In the post-basic varieties, a discourse-motivated use of inflections can be observed, where the conflict between the semantic and pragmatic principles governing the use of verb morphology pushes the L2 learner towards more flexible predicate/tense-aspect form and tense-aspect form/discourse function coalitions.

With respect to grounding, there is a gradual transition from an almost specialised use of verb morphology (the simple past or the base form in the foreground and the progressive in the background) to a more uniform distribution of morphology across foreground and background (the simple past both in the foreground and the background). Nevertheless, certain verb forms, such as the progressive in English, strengthen their association with the background with rising proficiency in the target language. Moreover, irrespective of the task type, the variety of verb forms to be found in the background is wider than in the foreground.

When contrasting the Aspect and the Discourse Hypotheses, one notices areas of

31 The Discourse Hypothesis was not tested for states given that very few stative predicates appeared in the foreground.

32 This is also in line with findings by Álvarez (2006) in foreign language settings. See chapter 1 for a discussion.

overlap principally due to the typical distribution of certain types of predicates in foreground/background contexts. Authors such as Housen (1997) and Bardovi-Harlig (1998, 2000) observed that certain coalitions can be accounted for both in terms of the Aspect and the Discourse Hypothesis given the “[n]atural affinities (...) between telicity and foregrounding on the one hand, and atelicity and backgrounding on the other (...)” (Housen 1997: 303). The interaction between Aspect and Discourse Hypotheses will be discussed in section 2.2.3 and some criteria for distinguishing between the two hypotheses will be presented.

2.2.3 Aspect or Discourse: Competing Hypotheses?

Figure 2.1 below illustrates the areas of overlap and divergence between the Aspect and Discourse Hypotheses in the classification of predicates by aspectual class and grounding status. In quadrants 1 and 3, it is impossible to discriminate between the Aspect and Discourse Hypotheses. For instance, if telic predicates encoded in the simple past appear in the foreground, the use of the past inflection could be motivated both by the inherent semantics of the predicate and its discourse function. The same applies for atelic predicates encoded in the progressive in the background.

Nevertheless, the affinities between predicate type and grounding are not absolute, as we shall see in chapter 4. Any event can be in the foreground or in the background, regardless of its semantics. In this case, the interaction of semantic features postulated by the prototype model (section 2.2.1.3) becomes more complex because both the foreground and the background have their own temporal characteristics. The choice of the tense-aspect form will be “torn” between the inherent semantics of the predicate and the function of the predicate in the narrative.

The atypical combinations which may result are illustrated by the quadrants 2 and 4 in Figure 2.1 below. According to Housen (1997: 303), the Aspect and Discourse Hypotheses can be distinguished in those “(...) atypical coalescences where inherent semantics and grounding status do not conspire to predict the same verb form but where their predictions are in conflict (...)”. If simple past forms prevail in quadrant 2, then this constitutes evidence for the Aspect Hypothesis – the influence of the inherent semantics of the predicate is stronger than the function it fulfils in the narrative.

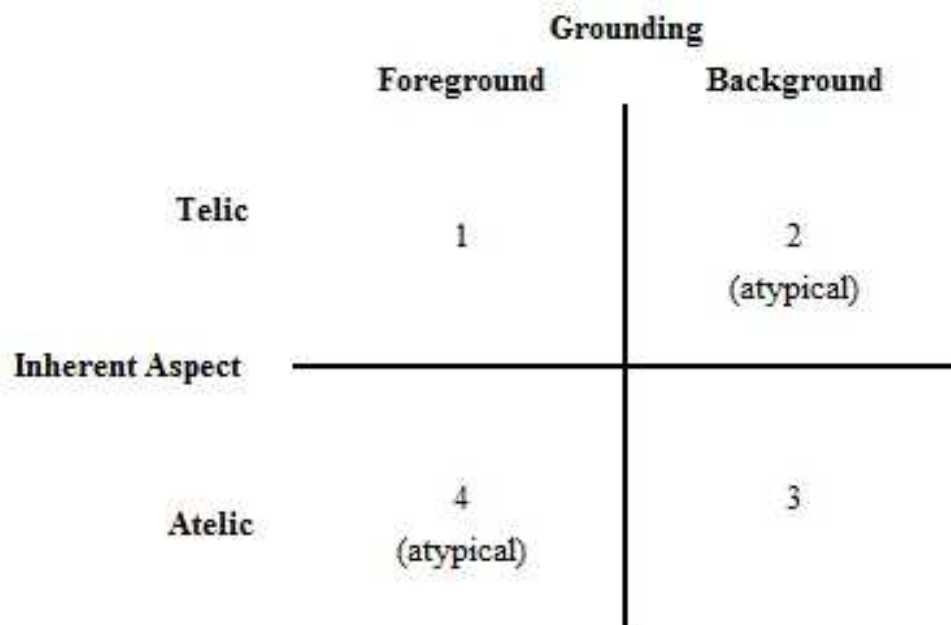


Figure 2.1.Overlap in the classification of verb forms by semantic class and grounding status (Housen 1997: 303)

However, if *-ing* forms are observed in the same quadrant, this represents evidence for the Discourse Hypothesis – the grounding function of the predicate in the narrative outweighs the aspectual class in the choice of inflection. With respect to quadrant 4, predominance of *-ing* forms would be evidence for the Aspect Hypothesis, whereas predominance of simple past or the base form would point to the influence of discourse-organisational factors in the choice of inflections.

According to Bardovi-Harlig (2000), the two hypotheses can be told apart in several ways. With respect to the aspectual class of the predicate, if in the same aspectual class the use of a particular inflection is balanced across foreground and background, this means that its distribution responds to the inherent semantics of the predicate rather than the narrative function. If in the same aspectual class a particular inflection is used at different rates in foreground than in background contexts, this indicates that its use responds to discourse-organisational factors. The existence of the atypical combinations described above provides further support to one or the other of the hypotheses.

Another approach is to look at the distribution of the inflections. If the simple past form is used more frequently in the foreground than in the background, regardless of the aspectual class of the predicates, this constitutes evidence for the Discourse

Hypothesis. The same applies if the progressive is used predominantly in the background, regardless of the aspectual class of the predicates. Similar rates of tense-aspect morphology across the two narrative domains would support the Aspect Hypothesis.

A discourse-motivated use of verb morphology is, according to Bardovi-Harlig (1998: 499), “(...) one way in which learners come to expand their interlanguage prototypes and move toward the point-of-view use of tense-aspect morphology that characterizes a native-speaker’s potential for creative use (...)”. Bardovi-Harlig suggests that, when English L2 learners foreground activity predicates, they may start encoding them with simple past morphology under the universal pressure to distinguish between foreground and background in a narrative. This non-prototypical pairing may lead to other uses of simple past activities and, also, expand the domain of use of the past inflection. Likewise, progressive accomplishments in the background may stimulate further use of this pairing in other contexts and expand the domain of applicability of the progressive to other, less prototypical predicate classes.

There is relatively little insight into how the Aspect and the Discourse Hypotheses in narrative discourse apply to the advanced English L2 learners. The Aspect Hypothesis predicts that the advanced L2 learners are no longer bound by the semantic prototypes active in early interlanguage and make a grammaticalised use of verb morphology, which results in a more uniform spread of inflections across predicate types. With respect to the Discourse Hypothesis, the distribution of tense-aspect morphology in advanced English L2 narratives is expected to be discourse-motivated, yet not as systematically associated with foreground or background contexts as with lower level learners. This means that certain verb forms, such as the simple past, may be used across foreground and background and, thus, undergo a widening of their functional scope.

The applicability of the Aspect and Discourse Hypotheses to the advanced English L2 variety will be discussed in more detail in section 2.3. The studies presented hereafter were carried out in tutored settings of English as a second and as a foreign language.

2.3 Tense-Aspect Morphology in the English L2 Advanced Variety: Aspect Hypothesis, Discourse Hypothesis and L1 Rhetorical Style

Though not exclusively dedicated to advanced L2 learners, some of the studies discussed in sections 2.2.1 and 2.2.2 (Bardovi-Harlig and Reynolds 1995; Bardovi-Harlig and Bergström 1996; Bardovi-Harlig 1998, 2000) pointed out that the prototypical form-predicate coalitions in the distribution of verb morphology seemed to strengthen with rising proficiency, at least up to an intermediate level, particularly in the case of the progressive with activity predicates. However, past this stage, learners freed themselves from the *congruence principle* (Andersen 1993) and made a productive use of tense-aspect inflections. Let us recall here the results of the most proficient group (Group 6) in Bardovi-Harlig and Reynolds (1995). The simple past marker was used in more than 80% of the tokens in the four aspectual classes (states, activities, accomplishments and achievements). The advanced learners in this study made a fully grammaticalised use of inflections and affixed verb morphology across a wider range of predicate types than the less proficient learners.

With respect to the Discourse Hypothesis, the simple past becomes the dominant form across foreground and background in the narratives of the most proficient group, though the rates of simple past in the foreground (95% of all predicate tokens in the foreground) are higher than those of simple past in the background (61% of all predicate tokens in the background) due to competition from other verb forms (Bardovi-Harlig 1998, 2000). Advanced English L2 learners are no longer liable to the *one-to-one principle* identified by Andersen (1993) in emergent interlanguage and associate certain verb inflections with more than one discourse function.

One of the very few studies to specifically look at the relevance of the Aspect Hypothesis in the advanced English L2 variety (Ayoun and Salaberry 2008) found a surprisingly strong aspectual class effect on the distribution of past tense markers in advanced English L2. The authors worked with 21 French L1 EFLs who completed two elicitation tasks, a personal narrative and a cloze-test.³³ States were consistently

³³ It is, nevertheless, not very clear how advanced the learners in Ayoun and Salaberry (2008) were. The participants' level of proficiency in the target language was not established by means of a level test and the only information we have is a self-assessment test in which only 2 participants rated their competence in English L2 as good.

marked with past tense morphology more often than activity predicates in the cloze test (86.61% vs. 46.72%), a distributional bias which was also present in the native speakers' production (91.25% vs. 68.16%). In the narratives, state predicates were encoded in the past tense form more often than telic predicates.³⁴ For the authors, this finding constituted evidence against the developmental stages predicted by the Aspect Hypothesis – “(...) we would have expected states to be the last verbs to be consistently marked for past tense” (580).

We believe that this finding is not so surprising. One needs to bear in mind that the predictions of the Aspect Hypothesis were made with respect to early interlanguage, where states are expected to occur mainly in the base (unmarked) form. The advanced learners in the study have probably “grown out” of the Aspect Hypothesis and have reached the stage in which the distribution of the simple past marker is less sensitive to predicate semantics, resulting in a wider distribution across predicate classes. The simple past seems to be used as a default past tense marker for all predicate types at more proficient stages of English L2 (Bardovi-Harlig 1998, 2000).

As observed by Ayoun and Salaberry (2008), English native speakers tend to mark states consistently with simple past, whereas telic events are marked both with simple past and progressive. This means that the L2 learners perform in a targetlike manner with respect to the use of states in the past and that a higher percentage of simple past marking on states than on telic predicates is the expected outcome of the development of the tense-aspect system of English L2.

What is for us more intriguing is the rather low percentage of simple past marking on activity predicates in the production of this group of French L1 English L2 advanced learners. Even though no information is given on how the remaining percentage is distributed, we believe that this is a clear indication that the simple past marker competes with other inflections, namely the past progressive, in this class of predicates. A possible explanation comes from differences between the functional-semantic scope of certain verb forms in the L1 and L2. According to Ayoun and Salaberry (2008), the simple past in English can express several aspectual values encompassing the perfective and the imperfective. However, in French, the learners' mother tongue, past morphology is specialised in encoding either perfective or

³⁴ The authors do not provide any percentages for the narrative data.

imperfective meanings. French L1 learners may find it difficult to encode atelic predicates with an apparently perfective form in the target language and are more conservative with respect to the prototypical pairing of activity predicates with a clearly imperfective inflection such as the progressive even at more proficient stages (also Trévisse 1995; see chapter 3).³⁵

It seems, therefore, that a proper insight into the use of tense-aspect morphology in advanced English L2 needs to take into account three factors: the role of universal semantic prototypes, the function verb forms fulfil in L2 (narrative) discourse and the influence of L1 verb form-function pairings. The grammaticalised information in L1 verb inflections informs the use of verb forms in advanced English L2 and the overall organisation of L2 discourse.

Recent research indicates that form-function relations in advanced L2 tense-aspect morphology also respond to an underlying rhetorical style shaped in subtle ways by the grammaticalisation patterns existing in the learners' L1 (Slobin 1996; Carroll and Lambert 2003, 2006; von Stutterheim and Lambert, 2005). This style consists of systematic linguistic choices made by L2 learners in a given task, drawing on their learnt repertoire of L2 linguistic devices and also on the way in which information is encoded and organised in their mother tongue. The cross-linguistic comparison between source, target and learner languages reveals the extent to which the information selection and organisation patterns acquired with the L1 are implemented into the L2. We will illustrate this point with findings regarding the use of aspectual marking and subordination patterns in the expression of time-event relations in oral film retellings³⁶ by advanced German L1 and French L1 EFLLs and how this contrasts with the use of verb morphology in English, French and German L1 (Carroll and Lambert 2003, 2006).

The progressive marker plays a central role in the expression of temporality and the construction of a temporal perspective³⁷ in English L1 narratives. According to

35 The authors gauged the influence of the L1 on the learners' L2 performance by looking at the frequency of the present perfect in the corpus. Learners were expected to overuse the present perfect due to its morphological similarity with the *passé composé*. However, no such overuse was observed.

36 The film used for eliciting the narratives is an eleven-minute silent film, *Quest*, which features a single protagonist, a clay figure, on a quest for water. In that search, which takes the figure from one hostile world to another, the protagonist is successively confronted with inanimate elements such as rocks, sand, wind, and papers.

37 The temporal perspective is part of a series of obligatory choices that speakers have to make when rendering a complex informational structure (von Stutterheim and Klein 2002). In narrative discourse, it has to do with the array of temporal relations inter-connecting the different elements of the narrative. The

Carroll and Lambert (2006), the availability of a grammaticalised expression for ongoingness ties in with an observer-anchored perspective in oral film retellings, *i.e.*, relations between events are organised from the vantage point of the speaker, whose presence is instantiated by means of expressions such as *(then) you see, you realize, you hear* (example (2) below). The narrative is a succession of deictic points at which “(...) events are often bundled in a complex way, and learners must uncover how the simple and the progressive forms are integrated into the narrative sequence to move the storyline forward” (2006: 58). English native speakers use the contrast between the non-progressive and the progressive forms to distinguish between plot-advancing and other, unsequenced material. The events in (2 d, e, h, j and k) are chronologically ordered, whereas (2 i) is hooked on the temporal reference set up by (2 h):

- (2)
- a. and **you see** a form in the sand
 - b. and there's a bottle lying near the form
 - c. **and then you see** an eye
 - d. an eye opens
 - e. **and then** a figure stands up
 - f. and **you realize**
 - g. it's some sort of animal or person
 - h. he reaches out (...) for a bottle
 - i. that's lying near to him
 - j. and lifts up the bottle
 - k. and tries to get something out of it (...)
 - l. **and then you hear** the sound of water dripping / one drop
 - m. and the figure tries to find the drop
 - n. **and then** as the figure starts to dig
 - o. the sand starts to flow downwards.

(Carroll and Lambert 2006: 58-59)

The absence of grammatical means to encode ongoingness in German and French L1³⁸ leads to a different temporal perspective in these narratives. Both languages

choice of a particular perspective conditions the use of tense-aspect morphology and other linguistic devices such as topic selection, use of temporal adverbials, subordinations, etc. (Carroll and Lambert 2003). We shall come back to this point in chapter 9.

³⁸ German and French grammaticalise other types of aspectual information, namely the perfect and the perfective/imperfective, respectively. A more detailed presentation of tense-aspect morphology in French will be provided in chapter 3.

prefer an anaphoric type of linkage in which events hook up onto the right boundary of the preceding event or stand in cause-consequence relation with it. In German L1, the temporal shift from one event to another is encoded by means of *dann* (then) in preverbal position ((3 g) and (3 j) in example (3)). When *dann* occurs directly following the finite verb ((3 a) and (3 c)), it codes a causal relation:

- (3) a. wacht **dann** so langsam auf
 “and wakes **then** slowly up”
 b. schaut sich um
 “and looks around”
 c. und sieht **dann** die Flasche vor sich liegen
 “and sees **then** the bottle lying in front of him”
 d. nimmt die Flasche
 “takes the bottle”
 e. und guckt
 “and looks”
 f. ob da Wasser drin ist
 “if there is water in it”
 g. **dann** steht er so langsam auf
 “**then** he gets slowly up”
 h. und kniet so
 “and kneels down”
 i. und guckt sich um
 “and looks around”
 j. und **dann** donnert es plötzlich.
 “and **then** there is suddenly thunder”

(Carroll and Lambert 2006: 60)

In contrast to German L1 speakers, French L1 speakers often leave temporal relations implicit and insist on the causal connections between events, encoded explicitly by means of connectors (*donc*), subordinate clauses, and relative clauses ((4 d, e)). French speakers also frequently mention the protagonist’s goals, intentions, and states that motivate or surround his actions:

- (4) a. le personnage tombe dans un désert de feuilles de papier
 “the person falls in a desert of sheets of paper”

- b. il y a beaucoup de vent
“it's very windy”
- c. il entend la goutte d'eau
“he hears a drop of water”
- d. **qui** tombe
“**which** falls”
- e. et **donc** il se lève
“and so he gets up”
- f. il marche
“he walks”
- g. et le vent lui envoie une feuille de papier dans la figure
“and the wind blows a sheet of paper into the figure”

(Carroll and Lambert 2003: 280)

Turning now to the English L2 learner narratives, Carroll and Lambert (2006) observed that both the advanced German L1 and French L1 EFLLs in the study had not yet uncovered how to integrate the progressive form in their English L2 narratives in order to achieve the deictic cohesiveness observed in English native speaker narratives. Both groups of learners overgeneralised the role of the aspectual marker by using it in plot-advancing contexts without the necessary deictic anchor. *Is looking around* in (5 c) from the German L1-English L2 corpus is anchored onto the previous two events which form a sequence. This seems to indicate that the advanced EFLLs in the study master the formal means for encoding aspectual marking in English L2, but not “the full implications of the functional distinctions which they encode in narrative discourse.” (Carroll and Lambert 2003: 281):

- (5) a. at first he is little bit amazed
- b. but after a few seconds he gets up
- c. and is looking around.

(Carroll and Lambert 2006: 62)

French L1 EFLLs were also found to encode not only temporal but also cause-consequence relations, similar to what was observed in French L1 (example (6)). Note that it is not an issue of inaccurate use of clause linkage but rather of a non-nativelike organisation of information in the narrative (temporal rather than causal linkage was

predominant in the English L1 narratives):

- (6)
- a. and as he is walking
 - b. there are rocks emerging from the floor around him
 - c. and as he keeps on walking
 - d. one of these big piles of rock rises up under his feet
 - e. **so** he ends up at the summit of the rocks
 - f. and he is just trying to look around
 - g. to see what's happening.

(Carroll and Lambert 2006: 64)

It seems, therefore, that advanced EFLLs still have to “uncover the role accorded to grammaticised meanings and what their presence, or absence, entails in information organisation” in the target language (von Stutterheim 2003: 203). The ultimate challenge for these proficient learners is to gauge the exact impact of semantic and discourse factors in the use of L2 tense-aspect morphology and discover the array of implications the choice of verb morphology can have on the overall construction of meaning in the target language. The power of invariant semantic prototypes may still tilt the balance in favour of one-to-one form-meaning mappings, just as the L1 discourse organisational patterns may still filter the perspective from which learners will encode the events.

The survey of the literature on the development of tense-aspect morphology in English L2 reveals that we know relatively little about how the inherent semantic properties of the predicates (the Aspect Hypothesis) and the function the predicates have in discourse (the Discourse Hypothesis) shape the use of tense-aspect morphology by advanced EFLLs. While several studies claim that, with advanced learners, tense-aspect forms are more homogeneously spread across predicate types and more sensitive to discourse organisational criteria, namely the foreground/background dichotomy, in complex production tasks, the only study specifically testing the Aspect Hypothesis with such learners (Ayoun and Salaberry 2008) found evidence indicating that strong correlations between certain predicate types and certain verb inflections continue to exist at more advanced stages of English L2. It might be that, in foreign language contexts, learners remain for a longer time under the influence of the *congruence*

principle (Andersen 1993) in the absence of exposure to less prototypical coalitions through input. To our knowledge, no study has yet attempted to gauge the specific weight of both semantic and discourse factors in the use of tense-aspect morphology with advanced EFLs. Such insight is needed for a more fine-grained characterisation of the domain of verb morphology in the advanced English L2 variety and a better insight into the functional-semantic mappings which take place in this domain.

The present study is, hence, a study of the interlanguage at its advanced stages and of the distributional patterns observed in the use of tense-aspect morphology in a specific task, that of picture book oral narratives. Knowledge of the exact areas of discrepancy with the target language and of the factors that produce them is essential for understanding how interlanguage systems are shaped at different stages of proficiency, what the developmental ceilings at each moment are and, eventually, how these ceilings can be pierced and the route continued.

Before attempting to answer the research questions formulated in the Introduction, a brief characterisation of the tense-aspect systems of English, French and Catalan will be provided in chapter 3. This will also allow us to justify the choice of the L1-L2 combination in the present study.

Chapter 3: Forms and Meanings in English, Catalan and French Tense-Aspect Morphology

The purpose of this chapter is not to provide an exhaustive discussion of the tense-aspect forms available in the three languages in our study, but rather to delimit some of the areas of possible difficulty for Catalan and French learners of English as a foreign language. As discussed in chapters 1 and 2, the enduring challenge of proficient L2 learners in the area of verb morphology is to uncover the role these forms play in native speaker discourse and to what extent the systematic choice of a form affects the overall construction of meaning in discourse. Tense-aspect forms, and particularly aspectual contrast, encode a temporal perspective on a given, extra-linguistic situation (see discussion in chapter 2, section 2.3). Apart from the interaction with the semantic prototypes (chapter 2, section 2.2.1), the choice of a verb form also responds to the type of discourse into which it is inserted, *i.e.*, the conventions of use proper to a discourse genre, and to the speaker's communicative intentions, *i.e.*, the speaker's choice to emphasise certain properties of a situation over others.¹

As discussed in chapter 2, the process of language learning, whether of one's mother tongue or of an additional language, involves a gradual move from one-to-one form/function coalitions and prototypical pairings to a wider functional-semantic scope and marked coalitions for a particular verb form. This enlargement may result in apparently contradictory functions performed by the same verb form. A case in point, among many others, is the English simple present which, in its unmarked use, refers to routines or general truths, whereas, in marked contexts such as sports commentaries or narrative discourse, the simple present can also have a single-event reading and function as a device of "dramatic heightening" (Leech 2004: 16).

Moreover, and this time more specifically for the EFLL, discourse use of verb forms raises the intricate issue of optionality of forms and stylistic choice in the target language. This is undoubtedly slippery ground, seldom dealt with in the language class where verb forms are generally presented as mutually exclusive, in the difficult process of teaching grammar progressively. To give but one example, the use of the English simple past and the past progressive forms in narrative discourse is often taught as a

¹ Nevertheless, the choice of a given verb form is not always a subjective choice of the speaker. Verb form choices are also conditioned by the truth value of a sentence and by syntactic and pragmatic factors.

complete or bounded² vs. durative or unbounded contrast, whereas the simple past can, when used with durative atelic predicates and in the presence of certain contextual elements such as temporal adverbials or conjunctions, have an unbounded reading and, hence, “invade” the functional-semantic domain of the progressive form (example (1), verb forms underlined and contextual elements in bold) (see section 3.2 in this chapter for discussion):

- (1) She watched TV **while** he listened to music.

The stylistic or qualitative choice involved in using the simple past instead of the past progressive in English narrative discourse is seldom reflected in the strict explanatory dichotomies used for teaching grammar in the language class. When oversimplified rule-of-thumbs converge with certain grammaticalised patterns in the learners’ mother tongue, they may lead to incomplete meta-linguistic representations and persistent one-to-one correlations, such as those between the progressive marker *be+ Ving* and the *imparfait* and the simple past and the *passé simple* for French learners of English (Trévisé 1992).

In this chapter we try to delimit the functional-semantic scope of some tense-aspect forms in English, with a focus on several areas of potential difficulty for learners with Catalan and French as mother tongues. Our interest in this particular combination of source and target languages comes from the conviction that, while formal and functional similarities between the L1 and L2 tense-aspect systems facilitate the emergence and consolidation of verb morphology in the interlanguage, these similarities can also be a source of potential over- or misgeneralisation.³ The fact that English, Catalan and French encode tense and aspect morphologically sets the ground for what Andersen (1983: 178) called the “transfer to somewhere” principle: “A grammatical form or structure will occur consistently and to a significant extent in interlanguage as a result of transfer *if and only if* there already exists within the L2 the potential for (mis-) generalisation from the input to produce the same form or structure”. Three areas of

2 The concept of boundedness in relation to tense-aspect morphology and narrative discourse will be discussed more thoroughly in chapter 4.

3 Hence the importance of increasing learners’ awareness of the similarities and contrasts existing between form/function coalitions in L1 and L2. We shall come back to this point when we discuss the possible pedagogical implications of this study in chapter 10.

contrast between source and target languages in the area of tense-aspect morphology will be discussed in this chapter:

(1) The different degree of grammaticalisation of a verb form in the target language as opposed to the learners' mother tongue. This is the case of the progressive form in English, Catalan and French (Comrie 1976), as will be discussed in section 3.1.

(2) The functional-semantic scope of certain tense-aspect forms in the target language which is wider than that of the corresponding forms in the learners' mother tongue. In English, the simple past does not have a strict aspectual interpretation, whereas the past morphology in French and Catalan is specialised with respect to aspectual values (Trévisse 1992, 1995; Pérez Saldanya 2002, among others). This will be discussed in section 3.2.

(3) The functional-semantic scope of certain tense-aspect forms in the target language which is narrower than that of the corresponding forms in the mother tongue of the learners. The "current relevance" value of the Present Perfect in English is not compatible with sequencing narrative material, whereas the *perfet* in Catalan and the *passé composé* in French can encode anaphoric temporal relations (Curell 1990; de Swart and Molendijk 2002). This will be discussed in section 3.3.

Before starting the analysis of these areas of contrast, we would like to clarify some of the terms and concepts which will be frequently used in this chapter. The definitions provided hereafter are by no means exhaustive and remain on the surface of an extremely complex domain. Many more pages than we can afford here would be necessary to thoroughly deal with these issues.

Broadly speaking, in language, the concept of time is expressed by means of the grammatical categories of tense and aspect.⁴ Tense is a deictic category which establishes a temporal *locus* for a given situation, relative to the moment of utterance,⁵

4 There are also lexical ways of encoding time, such as time adverbials (*now*), prepositional phrases (*at 10 o'clock*), or conjunctions (*when*).

5 According to Klein (1994), tense does not directly locate situations in time but rather establishes a relation between the time of the utterance and some other time for which the speaker wants to make an assertion, *i.e.*, the topic time. The topic time roughly corresponds to Reichenbach's (1947) reference time

whereas aspect refers to “different ways of viewing the internal temporal constituency of a situation” (Comrie 1976: 3). The function of tense is, thus, to order situations along a time line, whereas aspect reflects the speaker’s perspective on a given situation. The definition of aspect provided above refers to what is commonly known as *grammatical or viewpoint aspect* and should be distinguished from *lexical or situational aspect*. A definition of these two types of aspect is attempted here below.

(i) *Lexical or situational aspect* (also known as *Aktionsart*) refers to the inherent properties of the verb phrase or predicate (Vendler 1967; Mourelatos 1981, among others). According to the Vendler-Mourelatos hierarchy, all predicates can be grouped into four categories with respect to the semantic features of dynamicity, telicity and punctuality: states, activities, accomplishments, and achievements. Table 3.1 below shows the categorisation of predicate types in terms of these features.

	States (<i>to know</i>)	Activities (<i>to sing</i>)	Accomplishments (<i>to build a house</i>)	Achievements (<i>to arrive</i>)
Punctual	-	-	-	+
Telic	-	-	+	+
Dynamic	-	+	+	+

Table 3.1. Semantic features of aspectual categories (adapted from Ayoun and Salaberry (2008))

Lexical aspect is compositional, in the sense that other elements in the sentence (the complements of the verb, the subject, duration adverbials, prepositional phrases, etc.) and in the preceding context need to be taken into account in the classification of a predicate according to the aspectual categories above (Verkuyl 1972, 1993; Krifka 1992; Borik 2006).

(ii) *Grammatical or viewpoint aspect* is encoded morphologically, by means of inflections and/or verb periphrases, such as the progressive form *be + Ving* in English or the perfective/imperfective past forms in French and Catalan (Smith 1991). The main

(RT). The temporal *locus* of a situation can be anchored deictically, in relation with the utterance/speech time, or anaphorically, in relation with a contextually established reference point (e.g., by means of temporal adverbials or clause combining in narrative discourse, reported speech, etc.).

types of grammatical aspect are the perfective and the imperfective. With the perfective aspect, the speaker presents the situation “(...) from outside, without necessarily distinguishing any of the internal structure of the situation” (Comrie 1976: 4) (example (2 a)). The imperfective aspect “(...) looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation (...)” (1976: 4) (example (2 b)). The progressive is a manifestation of the imperfective viewpoint and refers to a situation ongoing at a given point in time,⁶ with no reference to its boundaries. According to Comrie (1976), the progressive is a sub-category of the imperfective viewpoint together with the habitual, which is not grammaticalised in any of the three languages.

- (1) a. At that point, Jim arrived. Sam phoned the police.
 b. At that point, Jim arrived. Sam was phoning the police.
 (Smith 1991: 104)

The perfect is also mentioned in the literature as a form of grammatical aspect. Nevertheless, the perfect differs from the perfective and the imperfective in that it does not provide any information about the internal constituency of a situation. The perfect does not refer to the situation as such but to its continuing relevance at a later time (either speech time or another contextually established moment) (Pérez-Saldanya 2002). We present it together with the other viewpoints for a more systematic picture of the range of aspectual devices available in the three languages. Table 3.2 below illustrates the expression of grammatical aspect in English, Catalan and French.

One last difference needs to be made between form and meaning in the domain of grammatical aspect. The existence of grammaticalised devices in a language does not entail that the meaning they encode can exclusively be expressed by means of these dedicated devices. In English, for instance, the progressive form is the specialised expression of ongoingness, but the meaning of ongoingness can also be encoded by other, non-specialised devices such as the non-progressive form with certain types of predicates and in certain contexts (see the discussion in section 3.1).

⁶ The progressive can also refer to a situation ongoing over an interval of time or at a class of given points. See discussion in section 3.1.

Grammatical/ Viewpoint Aspect	English	Catalan	French
Perfective	<i>Non-progressive (simple) forms</i> John <u>jumped</u> into the lake.	<i>Passat simple/perifràstic</i> En Joan <u>saltà/va saltar</u> al llac.	<i>Passé simple/composé</i> Jean <u>sauta/a sauté</u> dans le lac.
Imperfective (including the Progressive)	<i>be + Ving</i> At midnight, John <u>was jumping</u> into the lake.	<i>Imperfet</i> A mitja nit, en Joan <u>saltava</u> al llac. <i>Estar+gerund</i> A mitja nit, en Joan <u>estava saltant</u> al llac. <i>Anar+gerund</i> En Joan <u>anava saltant</u> al llac cada vegada que passava un tren.	<i>Imparfait</i> ⁷ À minuit, Jean <u>sautait</u> dans le lac.
Perfect ⁸	Present Perfect John <u>has jumped</u> into the lake.	<i>Perfet</i> ⁹ En Joan <u>ha saltat</u> al llac.	<i>Passé Composé</i> ¹⁰ [Regarde!] Jean <u>a sauté</u> dans le lac.

Table 3.2. Grammatical aspect in English, Catalan and French (adapted from Comrie (1976) and Smith (1991))

In the remaining part of this chapter we shall concentrate on the three areas of contrast between source and target languages in the area of tense-aspect morphology

7 The progressive lexical periphrasis *être en train de* does not constitute a grammatical category in the French tense-aspect system and, as such, it is not included in the table.

8 We only mention the perfect forms which encode speech/utterance time relevance given their aspectual function. The past perfect forms, in English, French and Catalan are ambiguous between aspect and tense devices and have not been included in the table.

9 The Catalan *perfet* can also function as a tense form, namely as a hodiernal past (Pérez-Saldanya 2002; Curell and Coll 2007). As such, it establishes a temporal relation of anteriority with respect to the speech/utterance time and refers to situations that took place in the day which includes the speech/utterance time: *Aquest matí m'he llevat/*em vaig llevar a les vuit*. "This morning I have got up / *got up at 8 o'clock".

10 In French, the perfect is not a form in itself but an aspectual value of the otherwise perfective form of *passé composé*. Consequently, the *passé composé* in French encodes two aspectual values: the perfective and the perfect.

identified above. We will illustrate them by means of three tense-aspect forms in English, namely the progressive form *be + Ving* (section 3.1), the simple past (section 3.2) and the present perfect (section 3.3). These forms are, respectively, the expression of the imperfective, perfective and perfect aspect in English. We will compare and contrast their distributional characteristics and functional-semantic scope with the distributional characteristics and functional-semantic scope of the tense-aspect forms corresponding to these viewpoints in French and Catalan.

3.1 The Progressive Form *be + Ving*

In English, the progressive meaning is typically encoded by a specialised device, namely the *be + Ving* form, whereas in Catalan and French, the use of the specialised progressive form is optional, the progressive meaning being generally conveyed by the imperfective past or the unmarked present form (Comrie 1976; Dahl 1985; Espunya 1996; Squartini 1998; Bertinetto 2000):

- (3) a. English: When I arrived, he was sleeping.
 b. Catalan: Quan vaig arribar, estava dormint/dormia.
 “When I arrive-PFV, he was sleeping/sleep-IPFV.”
 c. French: Quand je suis arrivée, il était en train de dormir/dormait.
 “When I arrive-PFV-PC, he be-IPFV in the process of sleeping/sleep-IPFV.”

The languages under study here present different morphological devices to refer to progressivity or ongoingness. Following Bertinetto's (2000) classification, English and Catalan present state progressive periphrases (St-PROG) – periphrases containing auxiliary verbs meaning *be, stand*:

- (4) a. English: John is reading the newspaper.
 b. Catalan: En Joan està llegint el diari.
 “Joan is reading the newspaper”

Catalan presents a second type of progressive periphrases, the so-called motion progressive periphrases (Mot-PROG) – periphrases based on auxiliary verbs meaning *go, come*:

- (5) Mentre llegia el diari, anava menjant una poma.
 “While he read-IPFV the newspaper, he go-IPFV eating an apple”

Modern French possesses the lexical periphrasis (*être en train de + infinitive*), whose usage in French is far less frequent than that of the progressive form in English (Dahl 1985):

- (6) Jean est en train de lire le journal.
 “John is in the process of reading the newspaper.”

The hierarchy of grammaticalisation of the progressive aspect in English, Catalan and French is presented in Table 3.3:

English	<i>be + Ving</i>	obligatory verb periphrasis	[+ grammaticalised]
Catalan	<i>estar + gerund;</i> <i>anar + gerund</i>	optional verb periphrases	↓
French	<i>être en train de + inf</i>	optional lexical periphrasis	

Table 3.3. Grammaticalisation of the progressive aspect in English, Catalan and French (adapted from Comrie (1976))

Two features of the progressive periphrasis in English will be discussed here, namely its interaction with certain predicate types and its functional-semantic scope. We will briefly show that the progressive form in English has a wider range of functions than the similar periphrases in Catalan and French.

According to Smith (1991), the progressive periphrasis in English, as the main expression of the imperfective viewpoint in this language, presents a situation as ongoing at a given moment in time and has connotations of dynamism and agentivity. It is available neutrally only for non-stative predicates (activities, accomplishments and achievements). The use of the progressive with state predicates is marked (7 b) and not always possible (7 a, c):

- (7) a. *John is knowing the answer.
 b. John is being a fool.
 c. *John is being tall.

State verbs “of having and being” can combine with the progressive in those contexts in which a dynamic reading obtains (Leech 2004). *John is being a fool* is acceptable because we are able to understand John’s foolishness “as a mode of behaviour over which the person has control, rather than as an inherent trait of character” (30). On the other hand, a sentence like *John is being tall* is not acceptable because one cannot act out the quality of being tall. This is due to the kind of property introduced by the adjective *tall* which is deprived of any notion of dynamism or change. We are dealing in this case with a homogeneous, individual-level state which blocks the progressive form.

Similar to English, none of the progressive periphrases in Catalan and French are available with state predicates (Bertinetto 2000).¹¹ This restriction does not apply to the imperfective past form, which is available for all types of predicates, states included (8 c, d):

- (8) a. *Estava/*Anava sabent la resposta.
 “Be-IPFV/go-IPFV knowing the answer.”
 b. *Jean est en train d’être grand.
 “John is in the process of being tall.”
 c. Sabia la resposta.
 “Know-IPFV the answer.”
 d. Jean était grand.
 “John be-IPFV tall.”

Given its unbounded reading, the progressive form in English is prototypical with inherently durative predicates (activities and accomplishments) (9 a, b). However, achievement predicates can also be encoded in the progressive form in English - in this case the progressive form focuses on a moment in the transition into a new state, that of

11 Laca (1995: 500) identified certain marginal contexts in which the St-PROG periphrasis in Catalan can combine with state verbs: *Durant els deu anys que feia que vivia amb en Jordi havia estat tement un gest com aquest.*

being on top (9 c). According to Smith (1991), the progressive in (9 d) is awkward given the lack of transition in the act of *finding a watch*:

- (9) a. Mary is walking in the park.
 b. John is eating an apple.
 c. Helen is reaching the top.
 d. ?Mary is finding her watch.

Leech (2004: 24) classifies achievements into transitional event verbs (*arrive, die, fall, land, reach, stop, leave, etc.*) and momentary or semelfactive verbs (*hiccough, jump, kick, knock, etc.*). Semelfactive verbs in the progressive form (*Jane is coughing*) are interpreted as iterative, *i.e.*, Jane coughs several times during an interval of time.

We consider that the progressive form in English does not alter the inherent semantic properties of a predicate, namely its [+/- telic] quality (Squartini 1998).¹² This is what Dowty (1979: 133-134) called the “imperfective paradox”: in the progressive, the endpoint of a telic situation as the one in (10 a) is still envisaged, even if not reached. The English progressive fails the homogeneity test (Borik 2006) when used with telic predicates and is incompatible with expressions of temporal delimitation (10 b). The progressive periphrasis simply presents a situation in progress at a certain RT, with no information about its beginning, nor about the attainment of its *telos*:

- (10) a. When I came in, John was eating an apple. \dashrightarrow John ate an apple.
 b. John was eating an apple *in an hour/*for an hour.

With respect to the functional-semantic span covered by the progressive form in English, Bertinetto (2000) identifies two prototypical uses: the focalised progressive (11 a, b), where the progressive form encodes a situation ongoing at a particular point in time, with no information about its boundaries, and the durative progressive, where the progressive encodes a situation seen in progress over an interval of time, rather than at a

¹² In other frameworks, the progressive has been analysed as a semantic operator, in the sense that it suspends the endpoint of a telic predicate, re-categorising it into an atelic one (Bertinetto 2000). In the present study, lexical and grammatical aspect are kept apart. We believe the progressive does not interact with the *Aktionsart* of the predicate but, rather, conditions the overall interpretation of the predicate as unbounded in a given context (Depraetere 1995). The concepts of boundedness and unboundedness will be explained in more detail in section 4.2.2.

particular instant (11 c, d). In durative contexts, the progressive form insists on the temporary quality of the situation it encodes, in the sense that the situation depicted holds over a limited period of time (11 d):

- | | | |
|------|---|-----------|
| (11) | a. John <u>is having</u> a shower (now)/*for ten minutes. | focalised |
| | b. When Mary arrived, John <u>was having</u> a shower. | focalised |
| | c. John <u>was singing</u> while Mary <u>was playing</u> the piano. | durative |
| | d. <u>I'm studying</u> Chinese this year. | durative |

The durative interpretation of the progressive periphrasis often arises in the context of temporal adverbials or conjunctions which prevent focalisation, such as frame adverbials or conjunctions (*meanwhile, in the meantime, while, etc.*) or temporal expressions indicating a clearly delimited period of time (*this (year), from (2 pm) to (4 pm), etc.*).¹³

According to Leech (2004), the English progressive form can also have an iterative reading, in the context of temporal expressions such as *whenever, every time, etc.* (12 a), or refer to a persistent activity, particularly in the context of frequency adverbials such as *always, constantly, continually*, with connotations of irritation arising from the ongoingness of the complaint and its protraction in time (12 b):

- | | | |
|------|---|------------|
| (12) | a. Whenever I pass the house, the dog's <u>barking</u> . | iterative |
| | b. You <u>are always complaining</u> . | persistent |

Grammarians often present the progressive form in English as an obligatory choice when the speaker wants to refer to a situation as ongoing at a given moment or class of moments in time. Trévisé (1992) warns against a possible simplification of a much more complex picture. The use of the progressive is obligatory when explicit reference is made to ongoingness with telic predicates (accomplishments and achievements) (13 a). In the absence of the progressive form, the situations presented in (13 b) would not be interpreted as simultaneous but as sequential. Nevertheless, in certain contexts, the progressive form is optional with atelic durative predicates

¹³ Note that the progressive form in combination with a perfect form in English is compatible only with a durative reading: *I have been baking since I got up*. In such contexts, the situation depicted has been going on for an interval of time which includes the speech/utterance time (Bertinetto 2000: 572).

(activities) (14 a). In this case, the simultaneity reading is preserved in the absence of the progressive marker (14 b):

- (13) a. I entered. She was waking up.
 b. I entered. She woke up.
- (14) a. He told me about it. I was listening carefully.
 b. He told me about it. I listened carefully.

(Trévisse 1992: 57-58)

According to Trévisse, in (14 b) the activity of *listening* is presented holistically, somehow distanced from the speaker, whereas in (14 a) the perspective is “from within” the process, at a given reference point. The optionality of the progressive form with activity predicates is particularly visible in past contexts, where there is an intrinsic temporal displacement with respect to the moment of speech which allows more easily for a holistic perspective encoded by means of the simple past form (further discussion in section 3.2).

The use of *be + Ving* in English is obligatory with all types of predicates when explicit reference is made to ongoingness at speech time (15 a). However, even in such cases, when the necessary distance for a holistic perspective can be obtained, whether because the speaker has no direct control over a given situation or is not personally involved in it at the moment of speech (*e.g.*, sports commentaries, narrative commentaries, ceremonial commentaries), the progressive form is once again optional (15 b). In such cases, the non-progressive present is often used to enhance the dramatic nature of the situation and/or to convey “a sense of momentous occasion” (Williams 2002):¹⁴

- (15) a. She is waking up/listening to the radio **now**.
 b. The Pope waves to the crowd from the balcony, turns round and re-enters the room.

(Williams 2002: 1238)

¹⁴ The use of the non-progressive present form in contexts of deictic reference is a marked choice in English due to the grammaticalised contrast with the progressive form. This is an area of dissimilarity between the English simple present form and the Catalan *present* and the French *présent*. In Catalan and French, the non-progressive form is not a marked choice in such contexts.

The St-PROG periphrasis in Catalan covers a functional-semantic span similar to that of the English progressive,¹⁵ namely the focalised and durative uses (16 a, b). In French, *être en train de* is only used in focalised contexts (16 c):¹⁶

- (16) a. En Joan està dormint en aquest moment/*durant tota la tarda. focalised
 “John is sleeping in this moment/*during all afternoon.”
 b. Ahir vaig estar mirant la tele tota la tarda.¹⁷ durative
 “Yesterday I watch-PVF-PROG TV all afternoon.”
 c. Jean est /était en train de travailler en ce moment/*pendant une heure. focalised
 “John is /be- IPFV in the process of working in this moment/*for one hour.”

With respect to the iterative and persistent values, they are more likely to be encoded by means of the present or the imperfective past form, both in Catalan (17 a, c) and French ((17 b, c); the Catalan examples are taken from Pérez-Saldanya 2002: 2584-2585):

- (17) a. En aquella època agafava l'autobús a dos quarts de vuit. iterative
 “At that time catch-1st pers sg.-IPFV the bus at half past seven.”
 b. A cette époque-là il prenait le bus à sept heures et demie. iterative
 “At that time catch-3rd pers sg.-IPFV the bus at half past seven.”
 c. Quan era petit, tenia els cabells rossos. persistent
 “When be-3rd pers. sg.-IPFV, he had blond hair.”
 d. Quand il était petit, il avait les cheveux blonds. persistent
 “When be-3rd pers. sg.-IPFV, he had blond hair.”

To conclude, English differs from Catalan and French in that the progressive form is the only grammaticalised device to explicitly encode ongoingness at any

15 Mot-PROG periphrasis in Catalan exclusively encodes durativity: *La Maria anava recollint els plats de la taula.*

16 Moreover, the French progressive periphrasis *être en train de* can, in certain contexts, be considered a modality marker, with a strong coercive connotation: *Es-tu en train de m'accuser d'un meurtre?* (Lachaux 2005: 134).

¹⁷ This is, in fact, a perfective progressive construction (also found in Spanish). According to Squartini (1998: 40), the perfective aspectual value dominates over the progressive value in such constructions. *Vaig estar mirant* refers to a durative situation which takes place over a delimited span of time (*tota la tarda*). In English, such contexts require the non-progressive form (*I watched TV all afternoon yesterday*) or the present perfect progressive (*I have been watching TV all afternoon*), though in the latter case perfectivity is only weakly entailed given that the right boundary of the interval is the speech time.

temporal location, whereas Catalan and French normally resort to other forms such as the unmarked present or the imperfective past (Bertinetto 2000: 565). In its different readings, focalised, durative and iterative, the *be + Ving* form in English can be optional and in competition with the simple/non-progressive form. In these contexts, the use of the progressive introduces additional connotations of transience and agentivity. Table 3.4 below summarises the array of meanings associated with the progressive periphrases in English, Catalan and French:

English	Catalan		French
<i>Be + Ving</i>	<i>Estar + gerund</i>	<i>Anar + gerund</i>	<i>Être en train de + infinitive</i>
Focalised	Focalised	(-)	Focalised
Durative	Durative	Durative	(-)
Iterative	(-)	(-)	(-)
Persistent	(-)	(-)	(-)

Table 3.4. Forms and meanings of the progressive periphrases in English, Catalan and French

3.2 The Simple Past *Ved*

The discussion in this section deals with the English simple past as an aspectual marker and not as a tense marker. The simple/non-progressive forms in English encode the perfective aspect (Smith 1991, see Table 3.1 above). According to Trévisse (1992, 1995), unlike the past perfective forms in French and Catalan, the English simple past is a perfective form in that it is non-progressive and not because it presupposes the termination or completion of the situation it encodes. The semantic contribution of the simple past as an aspectual marker, irrespective of the type of predicate it encodes, is a holistic perspective on a given situation. This allows for a qualitative contrast with the past progressive form, which provides a perspective “from within”. Any information on the endpoint of the situation comes from the inherent semantics of the predicate or from other contextual elements, at sentence or discourse level.

Comrie (1976) also warned against a possible terminological confusion in the definition of aspectual perfectivity. A perfective form refers to the situation as complete but not necessarily completed because “(...) the perfective puts no more emphasis, necessarily, on the end of a situation than on any other part of the situation, rather all

parts are presented as a single whole” (18).

Consequently, a simple past form can have both a bounded reading (18 a) and an unbounded reading (18 b), depending on the type of predicate and other contextual factors (verb arguments, temporal adverbials, etc.):

- (18) a. She smoked a cigarette.
 b. She smoked a cigarette **and held** it in her bright lips.

(Trévisé 1995: 19)

Working with a corpus of excerpts from several English-written novels, Trévisé (1995) identified a series of factors which condition the interpretation of the simple past in context, namely the nature of the subject argument, the nature of the direct object argument and the presence of certain temporal adverbials and conjunctions. The bounded/unbounded quality of the simple past is a discursive construct and not simply an inherent property of the form (Trévisé 1995: 23). The larger context of the discourse in which the simple past is used (*e.g.*, narrative discourse, descriptive discourse, etc.) can also disambiguate between the bounded and unbounded reading of this form. According to Trévisé (1995), several semantic and syntactic factors come into play in the interpretation of the simple past in English.

(i) *The properties of the subject.* The presence of an inanimate subject, particularly in descriptive contexts, can trigger an unbounded reading of the simple past form, even when the predicate contains an endpoint:

- (19) Pine trees grew right up to the house and the windows of the cottage were small.

(I. McEwan in Trévisé 1995: 12)

An unbounded reading of the simple past also obtains with animate subjects with a low degree of agentivity, namely in the context of position verbs such as *sit*, *stand*, *lie*, *hang*, etc. or other verbs such as *wear*, *wait*, etc.:

- (20) a. Where he stood he could see her nose in profile (..).

(I. McEwan in Trévisé 1995: 14)

b. She wore a red woolen scarf knitted by his mother (...).

(I. McEwan in Trévisé 1995: 15)

(ii) *The properties of the predicate and its inner argument(s)*. As already discussed, the aspectual value of the simple past in English depends on the (a)telic nature of the predicate it encodes, *i.e.*, the existence or absence of an intrinsic endpoint will condition the interpretation of the simple past form as bounded or unbounded respectively, particularly when this interpretation is carried out at sentence-level. (A)telicity is a compositional property of the predicate and, as such, is conditioned by the properties of its inner arguments, in particular its direct object (Verkuyl 1972, 1993). A quantified NP can, for example, turn an intrinsically atelic verb like *swim* into a telic predicate (*swim three miles*) and, hence, indirectly condition the interpretation of the simple past form. A sentence such as *She swam three miles* will be easily interpreted as bounded, whereas a sentence like *She swam* will be ambiguous between a bounded and unbounded reading. The wider context of the sentence would have to be analysed to correctly establish the aspectual value of the simple past in this case.

(iii) *The presence of certain temporal adverbials and conjunctions*. Trévisé (1995) identifies numerous contexts in which the simple past form is used together with unbounding temporal adverbs and conjunctions such as *while*, *as* or *still*. In such contexts, the interpretation of the simple past is unbounded, irrespective of the (a)telic quality of the predicate:

(21) As he took the salmon from the trolley, he glanced at Kate and winked.

(I. McEwan in Trévisé 1995: 18)

Unlike the English simple past, the Catalan and French perfective past forms, the *passat simple/perifràstic* and *passé simple/composé* respectively, can only have a bounded reading in aorist contexts (Guillemin-Flescher 1988; Vettters 1996; Pérez-Saldanya 2002):¹⁸ the perfective past form in Catalan and French does not interact with the inherent semantics of the predicate and expresses some form of completion, irrespective of the telic or atelic nature of the predicate it encodes. This checks the

18 The *passé composé* can also have a “current relevance” value. This will be discussed in section 3.3.

possibility of interpreting the predicates in (22 b, c) as unbounded, as opposed to the unbounded reading obtained in (22 a):

- (22) a. [I looked around]. She swam while he sunbathed on the shore.
 b. [J'ai regardé tout autour]. ?Elle a nagé pendant qu' il a bronzé.
 "I looked around. She swim-PFV-PC while he sunbathe-PFV-PC."
 c. [Vaig mirar al voltant.] ?Ella va nedar mentres ell va prendre el sol.
 "I looked around. She swim-PFV while he sunbathe-PFV."

To refer to a situation which continues beyond a chosen reference point, in Catalan and French one needs to use the imperfective past form:¹⁹

- (23) a. [J'ai regardé tout autour.] Elle nageait pendant qu' il bronçait.
 "I looked around. She swim-IPFV while he sunbathe-IPFV."
 b. [Vaig mirar al voltant.] Ella nedava mentre ell prenia el sol.
 "I looked around. She swim-IPFV while he sunbathe-IPFV."

Figure 3.1 below shows the functional-semantic scope of the simple past in English and of the past forms in Catalan and French:

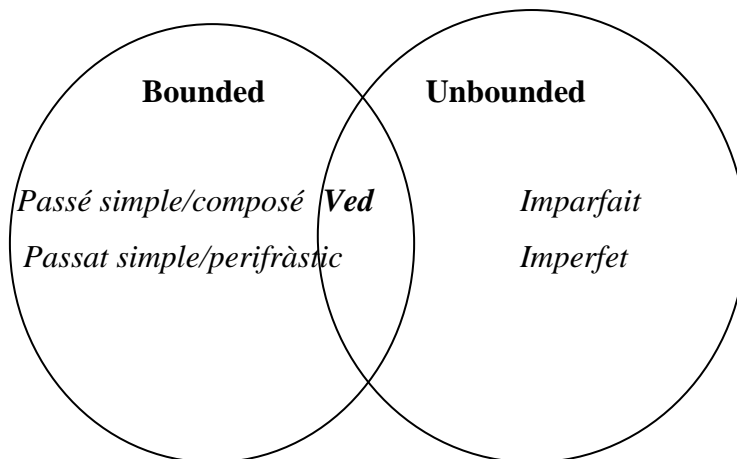


Figure 3.1. Forms and meanings in past tense-aspect morphology in English, Catalan and French

¹⁹ This is what, in Trévisé's view complicates the task of the translator from French into English: "En français on ne peut référer à un événement qui est censé durer dans le réel au-delà du moment considéré que par un imparfait, mais en anglais on peut, avec un prétérit simple, dans certains cas et avec certains types de verbes ou de constructions verbales, référer à un événement extralinguistique non terminé au moment repère considéré, en dehors de l'opposition non accompli/accompli" (1995: 43-44). ("In French we cannot refer to an event which is supposed to continue extra-linguistically beyond a chosen reference time other than by means of the *imparfait*, but in English we can, in certain cases and with certain types of verbs or verb phrases, refer by means of a simple past to an extra-linguistic event which is incomplete at a given reference time, irrespective of the perfective/imperfective contrast", our translation).

3.3 The Present Perfect *have + Ven*

As mentioned in the introduction to this chapter, the perfect differs from the perfective and imperfective viewpoint aspects in that it does not provide any information about the internal constituency of a situation. If we were to establish a semantic invariant of the perfect, two features would have to be included: the situation encoded in the perfect form is at least partly *anterior* to speech time (ST), yet still *relevant* at this ST (ET_RT, ST).²⁰ The perfect is grammaticalised in English and Catalan by means of the verb periphrases *have + Ven* in English and *haver + past participle* in Catalan. In French, the semantic value of the perfect is covered by the *passé composé* form:

- (24) a. English: I have lost my glasses. I can't find them.
 b. Catalan: He perdut les ulleres. No les trobo.
 c. French: J'ai perdu mes lunettes. Je ne les trouve pas.

In the literature on the English perfect, three main uses are commonly distinguished: continuative (*I have lived in Barcelona for more than 5 years*), resultative (*I have left my driving license at home*) and existential (*I have been here before*) (Michaelis 1994, Mittwoch 2008, and many others).²¹ Our analysis will be limited to the resultative present perfect, given the frequency of this form in our narrative corpus (particularly in the English L1 narratives and the English L2 narratives produced by the French learners). The resultative present perfect in English will be briefly contrasted with the *perfet* in Catalan and the *passé composé* in French so as to identify certain semantic features and discourse-functional constraints which characterize the former but not the latter in a very specific context.²²

The inference of a resultant state holding at ST is part of the meaning of the

20 Reichenbach's abbreviations: ST = speech time; ET = event time; RT = reference time.

21 Comrie (1976: 60) mentions a fourth type of present perfect, *i.e.*, the perfect of recent past (*He has just arrived*), which is used when "(...) the present relevance of the past situation referred to is simply one of temporal closeness". Note also that Comrie refers to the existential present perfect as "experiential" (58).

22 We would like to underline that the difference between the expression of the perfect aspect in English, French and Catalan goes beyond what we can afford to discuss here. For instance, the continuative value of the present perfect in English (*I have lived here for 20 years*) is only a marginal value of the *perfet* in Catalan (Curell 1990: 242). Catalan and also French generally refer to persistent situations by means of the unmarked present form.

resultative present perfect, particularly in combination with telic predicates. Atelic predicates in the present perfect do not entail a resultative reading and are interpreted as existential (Depraetere 1998; Mittwoch 2008):

- (25) a. I have caught a cold. (telic)
 b. I have lived in London. (atelic)

The resultative present perfect in English asserts the resultant state and only indirectly the triggering event (Curell and Coll 2007; Mittwoch 2008). Evidence for this comes from the ungrammaticality of the present perfect in the context of temporal adverbials which specify the ET (26 a) or questions which address the event component of the resultative present perfect (26 b). This does not apply to the *perfet* in Catalan (27 a, b) nor to the *passé composé* in French (28 a, b):

- (26) a. *He has left at five o'clock.
 b. I have bought a car. *When have you bought it?
- (27) a. Ha marxat a les sis.
 b. He comprat un cotxe. Quan l'has comprat?
- (28) a. Il est parti à six heures.
 b. J'ai acheté une voiture. Quand l'as-tu achetée?

The accessibility of the resultant state at ST conditions the functional scope of the present perfect in discourse (Michaelis 1994). The resultative present perfect in English cannot encode a sequence of events in a narrative, typically interconnected by means of anaphoric temporal relations (Partee 1984, see discussion in 4.1.2). This is what distinguishes the (resultative) present perfect from the simple past, which is anaphoric in that it locates “(...) a situation at a “definite” past interval: a time which has either been previously evoked in the discourse or is contextually recoverable” (1994: 115):

- (29) a. *When John has seen me, he has got frightened.
 b. When John saw me, he got frightened.

According to Curell (2003: 109), it could be argued though that two resultative present perfect predicates can be interpreted as temporally sequenced if the situations/events they encode form a natural sequence. In this case, the interpretation of chronological order is obtained on the basis of logical relations and world knowledge regarding the relation between *buying a broom* and *cleaning the house*:

(30) I have bought a new broom and cleaned the house.

(Curell 2003: 109)

Both the Catalan *perfet* and the French *passé composé* can appear in narrative sequences of events (Pérez-Saldanya 2002; de Swart & Molendijk 2002). However, in such contexts, the temporal schema underlying these forms changes to ET, RT_ST. No resultative interpretation is possible in this case. In narrative contexts, the Catalan *perfet* has a hodiernal past value, encoding a series of events anterior to ST but located within the temporal interval established by the day of the speech act. The *perfet* encodes temporal progression in the narrative:

(31) Quan he arribat, m'he tret les sabates i m'he assegut al sofa.

“When I arrive-PFV, I take-PFV off my shoes and I sit-PFV on the sofa.”

As for the French *passé composé*, it has an aorist value which licenses anaphoric temporal relations with the preceding discourse in a narrative. Note that, unlike Catalan, the temporal interval within which the events are located is disconnected from ST:

(32) Quand je suis arrivée, j'ai enlevé mes chaussures et je me suis assise sur le sofa.

“When I arrive-PFV-PC, I take-PFV-PC off my shoes and I sit-PFV-PC on the sofa.”

Table 3.5 below summarises the differences outlined here between the functional-semantic scope of the resultative present perfect in English and the Catalan *perfet* and the French *passé composé*.

English	Catalan	French
Resultative Present Perfect	<i>Perfet</i>	<i>Passé composé</i>
ET_RT,ST; [-anaphoric]	ET_RT,ST; [- anaphoric]	ET_RT,ST; [- anaphoric]
(-)	ET,RT_ST; [+ anaphoric]	ET,RT_ST; [+ anaphoric]

Table 3.5. Forms and meanings of the perfect aspect in English, Catalan and French

In this chapter we have discussed some of the distributional and functional restrictions associated with the use of the progressive form *be + Ving*, the simple past form *Ved* and the present perfect form *have + Ven* in English. We have tried to delimit some areas of potential learning difficulty for native-speakers of Catalan and French, generally due to apparent similarities between the tense-aspect systems of the source and target languages which hide subtle variations in the functional-semantic scope of the tense-aspect morphology. We have, very schematically, shown that the progressive periphrasis and the simple past form in English cover a wider range of meanings than their counterparts in Catalan and French, whereas the resultative present perfect has a narrower functional-semantic scope than the Catalan *perfet* and the French *passé composé*, which restricts its use in narrative discourse.

For the time being, the discussion has only marginally focused on the role played by tense-aspect morphology in narrative discourse. In chapter 4, we will discuss the contribution of verb forms to the expression of temporality and the construction of a temporal perspective in narrative discourse. Subsequently, we will highlight some of the criteria which we believe the researcher needs to take into account when analysing temporality in narratives. This will bring us to the analytical grid used in the present study and the illustration of its applicability to the *Frog* story (chapter 5).

Chapter 4: Accounting for Temporality in Narrative Discourse

One of the defining traits of narrative discourse, whether we are talking from a literary or linguistic standpoint, is its temporal organisation:¹ a series of events,² experienced or fictional, is moulded into discourse and organized into a pattern according to criteria of saliency established by the narrator. Events as such do not constitute a narrative unless they are encoded observing some sort of temporal order and follow a recognizable pattern, generally called plot.

One expects the events in a narrative to follow a standard sequence, *i.e.*, orientation-complication-resolution (Labov and Waletzky 1967), which is believed to match the order in which the events occurred in some extra-linguistic world. Narratives fulfil, thus, a referential function, in that they provide an account of a set of events which is organised in response to the implied or underlying question “What happened (then/next)?” (Labov 1997; von Stutterheim and Klein 1989). However, narratives that are purely referential would not make much sense if it were not clear to the hearer/reader why the narrative is told. Consequently, narratives also contain evaluative material and/or comments which convey the narrator’s attitude towards the events reported and the reason why the story is worth telling. This material fulfils an evaluative function and does not belong to the plot *per se* (Labov and Waletzky 1967). The discussion hereafter will focus on how the referential quality of a narrative, *i.e.*, the “illusion” of temporal progression, is achieved and on the role of tense-aspect forms in the expression of temporality in narrative discourse.

Some authors (Hopper 1979; Kamp and Rohrer 1983) advocated a relation of strict temporal iconicity between the linguistic expression and the string of events in some extra-linguistic world, in the sense that the main events in a narrative “succeed one another in the narrative in the same order as their succession in the real world” (Hopper 1979: 214). Kamp and Rohrer (1983) considered the relation between the temporal order of the events in discourse and in the represented world to be part of the

1 Note that temporal order is only one of the characteristics of narrative discourse, what Bamberg and Marchman (1991) call the “horizontal axis along which events (...) unfold as the narrative is told” (277). There is also a vertical axis along which “(...) the same linguistic units are ordered hierarchically as established by the global theme, that is, what the narrative is about” (277).

2 We are using this term neutrally at this stage.

truth conditions of discourse in general and of the narrative discourse in particular.

A laxer interpretation of the temporal iconicity feature of narrative discourse is found in Reinhart (1984: 781), who advocated a “partial congruity between the temporal order of the reported events and the order of presentation”. The fact that what happens in the extra-linguistic world and its linguistic representation need not totally coincide is manifest even in the simplest oral narratives, in which one can find temporal flashbacks or jumps ahead. According to Reinhart, “narrativity is not a property of the represented world, but of the text” (782). Nevertheless, the represented world and its linguistic representation do intersect in what Reinhart, following Labov (1972), called the “narrative skeleton” (781), which constitutes “the portion of the text matching the order in the world” (782).³ The narrative skeleton is understood as a temporal axis along which the narrative is organized. The events which form part of the narrative skeleton constitute the “*foreground* material of the text” (782), whereas the non-narrative material becomes the background of the text.

The foreground/background dichotomy remains one of the most widely used approaches in the analysis of narrative discourse ever since Weinrich (1964). According to Hopper (1979), the foreground is characterised by temporal sequentiality, whereas the background material is not subjected to this chronological constraint and “may be located at any point along the time axis or indeed may not be located on the time axis at all” (215). While the foreground/background organisation is a cross-linguistic feature of narratives, for Hopper there is a correlation between the type of narrative material to be found on these tiers (telic events⁴ in the foreground *vs.* atelic situations in the background) and the linguistic means which are used to encode them in a given language (for instance, perfective forms in the foreground *vs.* imperfective forms in the background). In other words, languages grammaticalise the foreground/background distinction by means of tense-aspect morphology, what Hopper and Thompson (1980: 282) called “the grammaticization of grounding”.

In Romance languages such as French, grounding distinctions are encoded by means of morphological oppositions such as the *passé simple/imparfait*. For Hopper

³ For Reinhart (1984), the problem remains to establish what degree of overlap between the linguistic representation and the extra-linguistic world is necessary for a sequence of sentences to be identified as a narrative text.

⁴ In this chapter, we distinguish between events and situations. Events refer to [+ telic] predicates (accomplishments and achievements), whereas situations refer to [- telic] predicates (states and activities).

(1979), aspectual contrast in French is a direct result of discourse use and of the necessity to distinguish between foreground and background in narratives. Nevertheless, not all languages possess such devices. English, for example, has fewer formal markers for grounding than French. Given its ambiguity between a bounded and unbounded reading (see chapter 3, section 3.2), the English simple past form can be used both in the foreground and the background and does not constitute a reliable criterion for distinguishing between the two types of narrative contexts (Hopper and Thompson 1980: 283).

Two major drawbacks can be established with respect to the foreground/background approach to narrative discourse. Firstly, the tie between the foreground/background dichotomy and tense-aspect forms makes it difficult to apply beyond certain prototypical texts. Even in languages like French, the *passé simple* and the *imparfait* have been shown to encode both foreground and background material (Vetters 1996; Molendijk 1983, 1990; see discussion in section 4.1). There does not seem to be an unequivocal relation between verb forms and narrative material, as we will try to show in the present chapter.

Moreover, despite its intuitive nature,⁵ Hopper's (1979) distinction between foreground and background remains coarse-grained when trying to plot the complex temporal organisation of narrative discourse. Take, for example, the following excerpt from our English L1 corpus of oral narratives:

- (1) a. the dog falls out of the window – with the jar on his head
 b. and the little boy **just** watches
 c. him fall
 d. **still** wondering where - the frog is...
 e. um – the little boy goes after the dog –
 f. and he looks very angry at the dog
 g. **because** he – put the jar on his head
 h. and fell out of the window
 i. but the dog seems to be friendly.
 (Eng L1, E8)

⁵ Reinhart (1984) considered that the distinction foreground/background is the linguistic counterpart of the perceptual distinction between figure and ground in *gestalt* theory.

We can rapidly see that, applying the foreground/background dichotomy, one would have to categorise as background very different types of narrative material – simultaneous material in (1 b, c, d), a retrospective series of events in (1 g, h) and an evaluative comment in (1 i). The network of temporal relations spanning the passage above is not, in our opinion, reflected in the foreground/background approach. Moreover, no aspectual distinctions encode the relation of simultaneity between (1 a) and (1 b), which is established on the basis of other elements such as the contrast between the intrinsic durative quality of *watch* and the punctual nature of *fall* and the presence of the temporal adverbial *just*.

With respect to the use of verb morphology in narrative discourse, Hopper (1979) only hinted at a very intricate relation between forms and functions. More recent studies (Dowty 1986; Hatav 1989; Depraetere 1995; Lascaride and Asher 1993; Moeschler 1998, among others) suggest that criteria such as the inherent semantics of the predicate, the presence of temporal adverbials or conjunctions, as well as certain pragmatic inferences may override the role of tense-aspect forms in establishing temporal relations in narrative discourse. According to Lascaride and Asher (1993: 438), “(...) temporal relations must be calculated on the basis of semantic content, knowledge of causation and knowledge of language use, as well as sentential syntax and compositional semantics”. The impact of each of these elements on the temporal structure of the narrative is not equal and, as we shall see, a certain hierarchy can be established among them.

In the remaining part of this chapter, we are going to present some of the main theories relative to the role of tense-aspect morphology (section 4.1) and of other factors, namely the inherent semantics or the *Aktionsart* of the predicate (section 4.2), the role of (un)bounding devices (section 4.3) and that of pragmatic inferences (section 4.4), in the expression and interpretation of temporality in narrative discourse. Our intention is to go beyond the foreground/background framework and put together a more fine-tuned analytical protocol for interpreting temporal relations in narratives, which will be presented in section 4.5. This will lead us to the interpretive framework adopted in our study and illustrate its applicability in the *Frog, where are you?* picture book story (chapter 5).

4.1 The Role of Tense-Aspect Forms

Looking at the distinction between the *passé simple* and the *imparfait* in French, Kamp and Rohrer (1983: 250) concluded that the main role of tense-aspect forms⁶ in discourse is to indicate in what way the sentence containing such a verb form should be incorporated in the overall discourse representation structure, *i.e.*, a mental mapping of the temporal relations between the elements of a narrative carried out by the hearer/reader: “(...) the main function of these tenses, and in fact of all tenses generally, is to signal to the recipient of the sentence in which the tense occurs how he should incorporate the information the sentence brings him into the representation which he has already formed of the preceding sections of the text or discourse of which the sentence is part”.

The function of the *passé simple* is to introduce a new event, which is understood as following the previous event encoded in the *passé simple* (2 a), whereas the *imparfait* in (2 b) is understood as overlapping with the previous event encoded in the *passé simple*. The clauses in (2 a) are interpreted as consecutive and the ones in (2 b) as simultaneous because of the choice of verb forms and not because of the temporal conjunction *quand* (*when*), which can be dropped without altering the temporal interpretation:

- (2) a. (Quand) Pierre entra, Marie téléphona.
 “(When) Pierre enter-PFV-PS, Marie phone-PFV-PS.”
 b. (Quand) Pierre entra, Marie téléphonnait.
 “(When) Pierre enter-PFV-PS, Marie phone-IPFV.”⁷
 (Kamp and Rohrer 1983: 253)

A sequence of *passés simples* is, therefore, interpreted as temporally ordered because of the semantics of the tense-aspect form used. Temporal progression in narrative discourse is explained by means of a reference point or reference time (RT) which “gets transferred to the next event that gets to be introduced into the representation by a *passé simple* sentence” (Kamp and Rohrer 1983: 253-254). This

⁶ Kamp and Rohrer (1983) refer to the *passé simple* and *imparfait* as tense forms. We believe, nevertheless, that it is more accurate to refer to them as tense-aspect morphology, given that both the *passé simple* and the *imparfait* are past tenses, the difference between them being aspectual (Garey 1957).

⁷ A sequential reading would obtain, though, if the *imparfait* had an iterative reading.

progression is cancelled by an *imparfait*, which denotes a situation that includes the RT. In Kamp and Rohrer's (1983) analysis of temporality in narratives, the RT is constantly re-calculated in relation to the previously introduced event via the tense-aspect forms, with the exception of the introductory sentence of the narrative in which the RT is established with respect to the moment of speech (ST). This anaphoric treatment of the reference point, though Kamp and Rohrer do not use this term, which will be coined later by Partee (1984), partly ensures the temporal cohesion of narrative discourse.⁸

However, Kamp and Rohrer acknowledged that the interpretation of tense-aspect forms in discourse is not always unequivocal. There are contexts in which an *imparfait* is understood in sequence with the previously introduced sentence in the *passé simple*, normally in the presence of a temporal adverbial:

- (3) Le docteur entra chez lui et vit sa femme debout. Il lui sourit.
Un moment après elle pleurait.

“The doctor enter-PFV-PS and see-PFV-PS his wife standing. He smile-PFV-PS at her.
A moment later she cry-IPFV.”

Two *passés simples* are not necessarily sequenced but can be understood as referring to overlapping situations, as illustrated in example (4) below. Moreover, there are contexts in which the *passé simple* encodes events which represent segments of an overarching event also encoded in the *passé simple* (example (5)). In this case, *monta*, *passa*, *attaqua*, and *arriva* are understood as temporally included in the over-arching event of *escalader*:

- (4) Marie chanta et Pierre l'accompagna au piano.

“Marie sing-PFV-PS and Pierre accompany-PFV-PS her at the piano.”

- (5) L'année dernière Jean escalada le Cervin. Le premier jour il monta jusqu'à la cabane H. Il y passa la nuit. Ensuite il attaqua la face nord. Douze heures plus tard il arriva au sommet.

“Last year Jean climb-PFV-PS the Cervin. The first day he climb-PFV-PS up to the hut H. He spend-PFV-PS the night there. Then he tackle-PFV-PS the north side of the

⁸ Note, nevertheless, that the RT can also be calculated deictically with respect to a fictional ST, as is the case in present-based novels or picture book stories.

interpretation of temporality in narrative discourse is based on English past narratives with predicates in the simple past form. As already mentioned, the simple past can encode both sequential and overlap relations in English. Partee's claim is that, in this case, the interpretation of discourse as temporally sequenced or overlapping is conditioned by the aspectual class of its constituting predicates.¹⁰ The introduction of an event in discourse shifts the reference time forward, while states or processes do not:¹¹

“(...) each new past-tense event is specified to occur within the then-current reference time, and it subsequently causes the reference time to be shifted to a new reference time which follows the just-introduced event. States and processes are required to include the current reference time but need not overlap the event that led to the introduction of that reference time” (Partee 1984: 254).

Consequently, a sequence of sentences like the one in (7) will be represented by the discourse representation structure in (8):

- (7) Jameson entered the room, shut the door carefully, and switched off the light.
e1 *e2* *e3*
 It was pitch dark around him, because the Venetian blinds were closed.
s1 *s2*

- (8)

<i>r0 e1 r1 e2 r2 e3 r3 s1 s2 rs</i>
.....
<i>e1 ⊆ r0</i>
<i>e1 < r1 < rs</i>
<i>e2 ⊆ r1</i>
<i>e2 < r2 < rs</i>
<i>e3 ⊆ r2</i>
<i>e3 < r3 < rs</i>
<i>r3 ⊆ s1</i>
<i>r3 ⊆ s2</i>
<i>e1: Jameson enter the room ...</i>

r0 = a given past reference

\subseteq temporal inclusion

< temporal sequence

10 Even though Partee claims that the aspectual classes apply to tenseless sentences, her analysis only takes into account the verb phrase. This is precisely what Dowty (1986) will later on challenge in the discourse representation approach to narrative discourse.

11 Partee (1984) replaces Hinrichs' (1981) initial categories of states, activities, accomplishments and achievements by Bach's (1981) classification into states, processes and (instantaneous *vs.* extended) events. In this classification, processes correspond to activities and events include both accomplishments and achievements.

In Partee's (1984) model, the “illusion” of temporal progression is achieved by the constant projection or shift of the RT. The RT is updated by means of events: each event projects a new RT which, in turn, will serve as an anchor for the following event. States and processes must hold at the current RT, without the possibility of updating it. The interpretation of tense in narratives is, consequently, anaphoric, in relation to the previously introduced event. Exceptions to this rule are sentences which contain a temporal adverbial, which will be understood as identifying the RT, or the first sentence in the narrative, which retrieves its RT from the relation with ST. However, Partee warns that not all past tense discourses follow such a neat linear progression and that, for example, two events with different subjects may be understood as simultaneous or overlapping.

Partee (1984) also contributes an interesting analysis of the role of temporal subordinates in the dynamics of the RT in narratives. According to her, the main clause “(...) is interpreted with respect to a reference time descriptively characterized by the subordinate clause” (1984: 257) and, consequently, pre-posed¹² temporal subordinate clauses can shift the current RT to create an anchor for the following main clause. Temporal subordinates introduced by *when*, *after* and *before* have an event reading (when they contain a state or a process predicate, this receives an inchoative reading) and trigger the introduction of a new reference time located *just after* the event described in the subordinate clause (example (9)).¹³ Nonetheless, *before*-clauses are different from the rest in that “they do not end up in the linear order at all. (...) This seems to be a natural reflection of two factors, iconicity of order in simple linear narratives and the dynamics of successive introduction of reference times in the interpretation process” (Partee 1984: 263):

12 While Hinrichs (1981) always processes the subordinate clause first, even when it follows the main clause, Partee does not believe that the position of the subordinate with respect to the main clause is irrelevant: “(...) one would have to consider issues of real-time processing, within-sentence temporal iconicity, topic-focus structure, backwards anaphora, S- versus VP-attachment of temporal adverbial clauses, and restrictive versus non-restrictive adverbial clauses” (283). This is why her analysis deals only with cases in which the subordinate is pre-posed with respect to the main clause.

13 Unlike Hinrichs (1981), Partee (1983) argued that events in temporal subordinates do not occur within the then-current RT, but simply anchor the main clause. We believe that such clauses introduce an RT of their own which allows for a simultaneity reading in *When I looked out of the window, I saw her cross the street.*

- (9) a. Mary turned the corner. **When** John saw her, she crossed the street. She hurried into a store.
- $r0 < r1 < e \text{ see} < r2 < r3 < r4$
e turn *e cross* *e hurry*
- b. Mary turned the corner. **Before** John saw her, she crossed the street. She hurried into a store.
- $r0 < r1 < r2 < r3 < r4$
e turn *e cross* *e hurry*
- c. Mary turned the corner. **After** she crossed the street, John saw her. She hurried into a store.
- $r0 < r1 < e \text{ cross} < r2 < r3 < r4$
e turn *e see* *e hurry*

Several conclusions can be drawn from our discussion of Partee's (1984) work on the interpretation of temporal relations in narratives. Firstly, the inherent semantics or the *Aktionsart* of the predicate plays an essential role in interpreting two sentences as consecutive or as overlapping in English narratives in the past – (non-generic and non-iterative) events shift the current RT, while states and processes maintain it. Unlike what was advocated by Kamp and Rohrer (1983), tense-aspect forms alone cannot account for the temporal organisation of narrative discourse in English and it seems that different criteria are needed to understand RT progression in French and English. Note, however, that tense-function pairings in French are not always one-to-one, as shown in examples (3) to (5) above.

Secondly, both main clauses and pre-posed subordinate temporal clauses¹⁴ shift the current RT in a narrative. *When*- and *after*- clauses appear on the time line as anchors for the following main clause. Thompson (1987: 447) also concludes that fronted temporal clauses are temporally sequenced with the events in the main clause, though "(...) we can make a case for these clauses having other discourse connections to make besides the temporal linking one". Moreover, temporal subordinate clauses introduced by *when*, *after* and *before* have a bounding effect on states and processes, which are interpreted inchoatively.

The analysis of temporal organisation of narrative discourse presented in Partee (1984) for English is not without limitations. Certainly, the major one was signalled by

¹⁴ Other types of subordinates can have a RT-shift effect, particularly those which encode cause-consequence relations. This will be discussed in more detail in section 4.3.

Dowty (1986) and has to do with the circularity of the discourse representation structures. The classification of sentences into aspectual types plays a crucial role in discourse representation construction rules but is itself determined by the compositional semantic interpretation of the parts of the sentence, given that much more than the aspectual class of the main verb plays a role. Moreover, “(...) the intended aspectual class of a sentence is determined in part by the hearer’s real world knowledge” (Dowty 1986: 40). When she mentions the temporal progression premise of linear narratives, Partee herself hints at the existence of certain mechanisms beyond the predicate, which are involved in the interpretation of the temporal organisation in narrative discourse. The nature of these mechanisms remains, though, unclear in her theory.

4.3. Sentence and Context-Based Approaches to Temporality in Narrative Discourse

4.3.1 The Endpoint Property

According to Dowty (1986), understanding temporal relations in discourse depends, on the one hand, on the aspectual properties of each sentence and, on the other hand, on a uniform temporal discourse interpretation principle and a series of pragmatic mechanisms or conversational implicatures. The aspectual class of a sentence is determined by “the lexical aspectual class of its main verb and the compositional semantic rules that have applied in combining the NPs, adverbials, tenses and other constituents involved in the whole sentence” (1986: 43). It is the aspectual class of the sentence as a whole, not just that of its predicate, that is relevant to temporal order in narrative discourse.

Narrowing down the concept of sentence aspect, Hatav (1989) argued that what really matters when analysing the temporal relations in a sequence of sentences is the endpoint property of the individual sentences. The endpoint (EP) is both a semantic property of the predicate and a syntactic property of the sentence and/or of the wider context.

“Endpoints are inherent properties of accomplishments and achievements, logically entailed by

the definition of the events to which they refer, and so events can always appear on the time line. States and activities, on the other hand, do not entail end points, but at the same time do not entail a lack of end points. Therefore, they are flexible concerning this property and hence can be referred to as having or lacking EPs” (Hatav 1989: 511).

The presence of a retrievable endpoint triggers the update of the current RT. For Hatav, in a sequence of sentences, an RT shift is triggered when a sentence denotes either an event or a state with explicit endpoints. When the endpoint is not encoded as part of the semantics of the predicate, it can be expressed by means of temporal expressions, namely temporal adverbials or conjunctions. Both scenarios are illustrated in examples (10) and (11) below:

(10) I entered the room. She stood up. telic predicates; inherent endpoints; sequence

(11) He waited for half an hour, then he left. atelic/telic predicates; external delimitation by *for half an hour*; sequence

Unlike Partee (1984), for whom events were included in the RT projected by the previous event, in Hatav's (1989) approach, events (and delimited or bounded states) introduce their own RT. In the case of states, there is a clear hierarchy between the sequencing impact of the inherent semantics of the predicate (which lacks endpoints) and that of the externally established endpoints – the latter override the inherent semantics of the predicate and can place state predicates on the narrative time line.

Hatav identifies three types of temporal adverbials, depending on the whether they refer to the EPs of a situation, or to some interval of the situation deprived of EPs: (i) precedence adverbials, which refer to one of the endpoints¹⁵ (*e.g., suddenly, then, etc.*); (ii) delimiters, which refer to the two endpoints of a situation (*e.g., for 3 hours, etc.*); containment adverbials, which indicate that the RT of a situation is contained in it (*e.g., while, during, etc.*).

The fact that the endpoint can be specified at sentence or context level allows sentences encoded in the progressive form to integrate the narrative plot in the presence

15 The label of endpoint is, in this case, misleading, given that precedence adverbials such as *suddenly* and *then* refer to the initial point of an event or situation. The label of boundary is, in our opinion, more appropriate, as discussed in section 4.2.2.

of a temporal adverbial, as is in example (12) below. However, progressive sentences are difficult to fully integrate in a sequence. Example (13) below is awkward because the temporal delimiter *then* needs to select either the final or the initial point of the situation encoded in the progressive, which is presented as lacking endpoints:

- (12) In the darkness, John felt his way up the stairway of the dilapidated old house. Half way up, there was a loud cracking noise under his feet, and **suddenly** he was falling through space.

(Dowty 1986: 55)

- (13) Ruth was eating supper, and **then** took /was taking a shower.

(Hatav 1989: 502)

To conclude this section, the endpoint property of a sentence plays a crucial role in the interpretation of the temporal order in narrative discourse. For Hatav (1989), the RT progression in narratives is conditioned by the (un)delimited nature of the sentences which form the narrative. This is both a semantic and a syntactic property. Consequently, the narrative line can be made up both of events and explicitly delimited states (or processes). Apart from the inherent semantics of a sentence, languages present overt devices to encode the endpoints of a situation, for example by means of temporal adverbials and conjunctions. As we have shown, these delimiters override the effect of both the inherent semantics of the predicate and tense-aspect forms on the interpretation of the temporal order in narrative discourse.

4.3.2 The Notion of (Un)Boundedness

In the work of Declerck (1979, 2006), the notion of (un)boundedness is crucial in establishing the role of a sentence in the temporal organisation of narrative discourse. As we shall see, (un)boundedness is a wider concept than Hatav's endpoint property. For Declerck, bounded sentences represent situations as "terminating" (1979: 765), irrespective of whether they actually reach their terminal point in the extra-linguistic world. Any constituent of a sentence can add the idea of a (temporal) boundary, rendering the sentence bounded:

- (14) a. A litre / three litres of water will run out of this tap.
 (bounded – the quantified subject NP specifies the boundary)
- b. Water / litres of water will run out of this tap.
 (unbounded – the mass / indefinite plural subject NP does not specify any boundary)
- c. Bill read a poem / three poems.
 (bounded - the boundary is specified by the quantified count NP functioning as a direct object)
- d. Bill read poetry.
 (unbounded - the unquantified mass NP functioning as a direct object does not specify any boundary)
- e. [Melissa drove, and] John sulked from France to the Hungarian border.
 (bounded – the adjuncts specify both boundaries of the situation)

(Declerck 2006: 79-80)

Note that all the examples above are in the non-progressive form, because the progressive automatically renders a situation unbounded. This follows from the semantics of the progressive, which presents a situation in progress at a certain reference point, with no information about its beginning nor about its end (also Hatav 1989).

In order to establish the (un)bounded nature of a sentence, Declerck (1979, 2006) put forward a series of tests that we present here below:

1. Non-inclusive durational adverbials (answering the question *For how long?*) can be added to unbounded sentences only, whereas inclusive durational adverbials (answering the question *Within what time?*) can only be added to bounded sentences:¹⁶

- (15) a. John ran for hours.
 = unbounded + non-inclusive durational adverbial
- b. *John ran in an hour.
 = unbounded + inclusive durational adverbial

16 Declerck (1979) acknowledges that there are some linguistic representations which are ambiguous between a [+ bounded] and a [- bounded] reading, which he labels as θ -bounded. These sentences are compatible both with non-inclusive and inclusive durational adverbials and they become unbounded or bounded accordingly:

The insect crawled through the tube for hours / in two hours.
John filled the tank with water all afternoon / in thirteen minutes.

- (16) a. John ran a mile in an hour.
 = bounded + inclusive durational adverbial
- b. *John ran a mile for hours.
 = bounded + non-inclusive durational adverbial (ungrammatical with a non-iterative event)

2. If a sentence containing an imperfective form entails the truth of the corresponding sentence with a perfective form, the latter is unbounded. Otherwise, the latter is bounded. If *John was drawing a circle* is true, one cannot state that *John drew a circle* is also true, therefore the latter is bounded. If *John was walking in the park* is true, one can also state that *John walked in the park* is true, therefore the latter is unbounded.

3. The previous test entails that unbounded sentences refer to homogeneous situations, while bounded sentences refer to heterogeneous situations. This is often a test used to establish the (a)telic nature of a predicate. (A)telicity is a property of verb phrases, whereas (un)boundedness is a property of sentences – the former focuses on the existence of an inherent or arbitrary endpoint to a situation, while the latter has to do with the way a speaker chooses to represent a situation as reaching or not an (inherent or arbitrary) endpoint. A telic predicate such as *run five miles* can be used both in a bounded sentence (*John ran five miles that day*) and in an unbounded one (*John was running five miles the day I met him in the park*).

According to Declerck (1979), different factors contribute to the (un)bounded nature of a sentence in English. The bounded/unbounded distinction is applicable only to durative dynamic predicates (activities and accomplishments). Punctual predicates (achievements) lack all the characteristics that distinguish bounded from unbounded expressions, because such predicates encode events that have no duration, they are neither homogeneous nor heterogeneous, and are incompatible with any kind of durational adverbials:

- (17) a. !John fell onto the roof for hours.
 b. *John fell onto the roof in an hour.
 c. !John fell onto the roof from 3:00 to 4:00.

(Declerck 1979: 773)

This does not mean that achievements cannot receive an unbounded reading when encoded in the progressive form. The progressive in *I had the impression the bomb was exploding for hours* presents as protracted what is actually a punctual event in the extra-linguistic world and augments the emotional impact of the explosion on the speaker. The contrast between the inherent semantic properties of the predicate and the aspectual marker is intimately linked with the speaker's subjective lens which filters, at all times, the extra-linguistic input.

For Declerck, states are inherently unbounded, since states are by definition homogeneous. Moreover, states are compatible with [– bounding] durational adverbials but not with [+ bounding] ones:

- (18) a. John lay on the sofa for hours.
 b. *John lay on the sofa in an hour.

(Declerck 1979: 773)

Several elements can have a [± bounding] effect on the (un)bounded nature of a sentence in English. The (a)telic nature of the predicate is one of the strongest factors determining the (un)bounded quality of a sentence. However, the presence of an imperfectivity marker such as the progressive renders a sentence containing a telic predicate unbounded (*John was running five miles the day I met him in the park*).¹⁷ Elements other than the nature of the predicate or the progressive can impact on the (un)bounded quality of a non-progressive sentence:

1. The nature of the object NP indirectly affects the (un)bounded nature of a sentence, given its crucial role in determining the (a)telicity of the predicate (see examples (14 c) vs. (14 d) above).
2. The subject NP has a [± bounding] effect on the sentence, irrespective of the (a)telic nature of its predicate (see examples (14 a) vs. (14 b) above).

¹⁷ The progressive triggers an unbounded reading but not a re-categorisation of the predicate as atelic (Borik 2006).

3. The presence of measure phrases (*e.g.*, durational adverbials):

- (19) John worked for two hours.

Depraetere (1995) added some more elements to Declerck's (1979) inventory of (un)bounding linguistic devices in English. She claimed that the influence of directional prepositional phrases (PPs) on (un)boundedness is similar to that of NPs: "a change from atelic to telic brought about by the addition of a directional PP will coincide with a change from unbounded to bounded provided the sentence is non-progressive" (1995: 11). This is illustrated in (20) below. However, (20 d) shows that the nature of the NP can override the bounding effect of the directional PP:

- (20) a. John pushed the cart. [-directional PP] (unbounded atelic)
 b. John pushed the cart **into the barn**. [+directional PP] (bounded telic)
 c. John was pushing the cart **into the barn**. [+directional PP] (unbounded telic)
 d. John pushed **carts into the barn**. [+directional PP] (unbounded atelic)

(Depraetere 1995: 11)

Depraetere also highlighted the effect of the perfect form on the (un)bounded quality of a sentence. The English past perfect has a bounded reading, irrespective of the atelic nature of the predicate. "(...) [T]he notion of (un)boundedness explains why there is a constraint on the interchangeability of the past tense and the past perfect to refer to an anterior situation" (14). Substituting one for the other can affect the temporal relation between the sentences, in the absence of other contextual information:

- (21) a. Now that she was alone she lost all the inhibitions which had confined the poetry in her soul. (sequence: E1 confine < E2 lose)
 b. Now that she was alone she lost all the inhibitions which confined the poetry in her soul.¹⁸ (simultaneity: lose \subseteq confine)

(Depraetere 1995: 14)

For Depraetere, "it is in fact (un)boundedness which determines whether or not

18 Note, nevertheless, that the verb *lose* implies a state of non-confinement which means that in this particular example the sequence reading can be obtained when both predicates are encoded in the simple past form.

the action is pushed forward” (15). The notion of temporal boundary conditions our understanding of the RT as maintained or moved forward. It is the reference to the succession of temporal points which triggers the “illusion” of time movement in narratives, and these points are generally the initial and/or the final boundaries of situations. Similar to Hataav (1989), for Depraetere, (a)telicity is too narrow a concept to account for the interpretation of temporal relations in a narrative. The notion of boundary, temporal or spatial, inherent or contextual, accounts for a wider range of contexts, including those in which states and activities are understood as moving the RT forward.

Several key points for our analysis of temporal relations in narrative discourse have emerged from the discussion so far. Firstly, the inherent semantics or *Aktionsart* of the predicate does not suffice to disentangle the array of temporal relations in narratives, given that other elements in the context can cancel the effect of this feature (for example, the nature of the subject NP or the presence of temporal adverbials or conjunctions). Secondly, the notion of (un)boundedness is a broader concept, which allows us to perform our analysis at sentence and text level (*vs.* verb phrase level, in the case of (a)telicity) and, therefore, account for a series of cases traditionally considered problematic for the interpretation of temporal relations in discourse, *i.e.*, atelic predicates which move the RT forward. Finally, as shown by Declerck (1997, 2006) and Depraetere (1995), the (un)bounded nature of a sentence is the result of the interplay of a series of linguistic elements: the presence or absence of an (im)perfectivity marker, the (a)telic nature and the tense of the predicate, the nature of the subject and object NPs, certain directional PPs and durational adverbials. The existence of a (temporal) boundary conditions our understanding of the RT as maintained or moved forward.

4.4 Pragma-Semantic Theories of Temporality in Narrative Discourse

As Dowty (1986) pointed out, pragmatic and contextual factors also come into play and are, to a great extent, responsible for the interpretive process of temporality in

narrative discourse.¹⁹ In this section we would like to deal more specifically with the pragmatic principles at work in narrative discourse and analyse in more detail the contribution of some pragma-semantic theoretical frameworks to the interpretation of temporal relations in narrative discourse (Lascarides and Asher 1993; Vettters 1996; de Saussure 1998 and Moeschler 1998, among others).

According to Lascarides and Asher (1993), compositional semantics derived from sentence syntax, the backbone of discourse representation theory (Kamp and Rohrer 1983; Partee 1984), is not enough to interpret temporal relations between events. According to them, “temporal interpretation is not determined by relations between reference times, where those relations are encoded in a logical form built from syntax alone” (438). To retrieve the reverse order of the sentences in (22) below, one needs further knowledge of causation and language use:

(22) Max fell. John pushed him. (Lascarides and Asher 1993: 437)

Consequently, the interpretation of temporality and temporal order in narrative discourse seems to depend not only on the semantics of the predicate or other overt linguistic elements but also from certain logical relations among the situations that make up the narrative and other pragmatic mechanisms. For Moeschler (1998), these logical relations play a double role in discourse processing: “elles sont à l’origine des relations de discours et permettent de donner une définition référentielle de la cohérence du discours” (“They are at the origin of discourse relations and allow for a referential definition of discourse coherence”, our translation) (1998: 297). Temporal coherence or order in discourse is, thus, obtained not only by means of linguistic marking but also as a result of pragmatic processes. If two events or situations in a narrative are not linked by a logical relation, the narrative will be considered as temporally incoherent.

Lascarides and Asher (1993) identified several types of discourse relations based on the different logical relations between events or situations in a narrative:

19 Dowty (1986) argued for the existence of a temporal discourse interpretation principle according to which, given a sequence of sentences to be interpreted as a narrative, the reference time of each sentence will be, by default, understood to immediately follow the reference time of the previous sentence, unless there is a temporal adverbial which can specify it otherwise. This overlaps, to some extent, with Partee’s (1984) temporal progression premise in linear narratives.

1. Explanation (α , β): the event described in β explains why the event described in α happened. Logical relations: cause and reversed consequence:

(23) Max fell. John pushed him.

2. Elaboration (α , β): the event described in β is part of the event described in α . Logical relation: inclusion (part-whole):

(24) The council built the bridge. The architect drew the plans.

3. Narration (α , β): the event described in β is a consequence of (but not strictly speaking caused by) the event described in α . Narration exploits the dynamic processing of discourse, in which the information in β must be understood in relation to the information previously introduced in α . In the case of Narration, “textual order matches temporal order, unless there’s information to the contrary” (1993: 443). Logical relations: consequence and/or cause:

(25) Max stood up. John greeted him.

4. Background (α , β): the state described in β is the “backdrop” or circumstances under which the event in α occurred (no causal connection but the event and the state temporally overlap). Logical relations: inclusion (part-whole) or temporal overlap:

(26) Max opened the door. The room was pitch dark.

5. Result (α , β): the event described in α caused the event or state described in β . Logical relations: cause and consequence.

(27) Max switched off the light. The room was pitch dark.

In his pragma-semantic approach to the past tense forms in French, Vetter (1996) argued that the pragmatic principle governing the interpretation of temporal

order in narrative discourse is equivalent to what Sperber and Wilson (1986) defined as the presumption of optimal relevance:²⁰ when interpreting a sequence of sentences, the hearer will minimise their processing effort by constructing the most immediate interpretation and in doing so, they can be guided both by linguistic and extra-linguistic cues. In examples such as (23) above, the hearer's extra-linguistic knowledge of what happens when someone pushes someone else makes it easier to process the sentences in the reversed order than to imagine an alternative scenario in which John pushed Max once the latter had fallen. This is what explains that, in certain contexts, the interpretation of a string of sentences will be nonlinear in spite of the presence of perfectivity markers such as the *passé simple* in example (4) repeated here as (28 a), or the sentences will be interpreted linearly in spite of the presence of imperfectivity markers such as the *imparfait* in (28 b):

- (28) a. Marie chanta et Pierre l'accompagna au piano. (Vetters 1996: 150)
 “Marie sing-PFV-PS and Pierre accompany-PFV-PS her.”
- b. Il se remit en marche. Il avançait avec précaution maintenant. (Molendijk 1993: 182)
 “He start-PFV-PS walking again. He progress-IPFV cautiously now.”

De Saussure (1998) enlarged on the pragmatic principles underlying the interpretation of temporal relations in narrative discourse, concluding that the hearer is conditioned by a series of conceptual rules – “(...) des mises en relation, prototypiques ou non, entre les concepts dénotés, que le destinataire peut être amené à activer par recours à son environnement cognitif” (“(...) connections, prototypical or not, between the denoted concepts, which the receiver can activate by drawing on his cognitive environment”, our translation) (246). According to de Saussure, these rules are activated by the different lexical items used in the narrative and prompt the hearer to establish an anticipatory hypothesis about the relations existing among the situations presented in the narrative. Nevertheless, only after having considered all the information in the context will the hearer be able to validate the initial conceptual rule and produce a

20 According to Sperber and Wilson (1986), the presumption of optimal relevance implies that “a) the set of assumptions {I} which the communicator intends to make manifest to the addressee is relevant enough to make it worth the addressee's while to process the ostensive stimulus; (b) the ostensive stimulus is the most relevant one the communicator could have used to communicate {I}” (158). Consequently, “(...) one of the factors which makes one interpretation more relevant than others is that it requires less processing effort” (166).

definitive hypothesis and a pertinent interpretation. A prototypical conceptual rule is that of cause-effect, underlying example (23) above, but other possible scenarios exist such as part-whole relations in example (5) repeated here below as (29) or temporal overlap in example (28 a):

- (29) L'année dernière Jean escalada le Cervin. Le premier jour il monta jusqu'à la cabane H. Il y passa la nuit. Ensuite il attaqua la face nord. Douze heures plus tard il arriva au sommet.

For Moeschler (1998), the default interpretation of (29) as temporally ordered is cancelled by a contextual hypothesis based on the hearer's knowledge of the concept of *escalader* (a complex event which consists of a series of temporally ordered subevents (e1 = *monter jusqu'à une cabane ... en = arriver jusqu'au sommet*). This is also the case in (28 a), in which the concept of *accompagner quelqu'un au piano* cancels the forward "drive" inherent in the conjunction *et* and the *passé simple*. Moeschler put forward a hierarchy among the different linearity cues in a narrative. He distinguished between weak linearity cues, such as the order of the sentences, tense-aspect morphology and cause-effect entailments, and strong linearity cues, such as temporal conjunctions and contextual hypotheses on the basis of lexical items, as illustrated in (28 a) and (29) above.

It appears, therefore, that (un)boundedness on its own cannot account for those contexts in which, in spite of the bounded nature of the predicates and/or of the sentences, the resulting interpretation is not of forward progression of the RT. In examples such as (23) and (28 a) above, temporal order is established on the basis of the logical relations among the situations encoded as well as by drawing on our knowledge of language use and other contextual information. The forward "drive" of linguistically expressed boundaries (the telic nature of the predicates in (23) and the *passé simple form* and the adverbials *ensuite* and *plus tard* in (28 a) on the temporal interpretation of the sentences is cancelled by the cause-effect entailment in (23) and by the contextual hypotheses activated by the hearer's knowledge of the world in (28 a).

In section 4.5, we would like to present a possible analytical protocol which takes into account the hierarchy existing among the different semantic, syntactic and pragmatic criteria discussed so far in the interpretation of temporal relations in narrative

discourse. This protocol was applied to our *Frog* stories corpus and constitutes the basis of the analytical framework for narrative discourse adopted in our study and which will be thoroughly illustrated in chapter 5.

4.5 A Protocol for Interpreting Temporal Relations in *Frog, Where Are You?* Stories

To conclude the discussion of the multiple criteria to be taken into account when analysing temporal relations in narrative discourse, we would like to present in the form of a protocol or list the steps that we went through in the analysis of temporality in our own corpus. The protocol takes into account the hierarchy of the impact that the semantic, syntactic and pragmatic elements discussed in the previous sections have on the interpretation of temporal relations in narratives, but this does not mean that the steps are mutually exclusive. In fact, it is important to go through the entire protocol, as, marginally, a low ranking criterion may impose itself over a higher ranking one. This will be illustrated in chapter 5.

Each step in the protocol is illustrated with examples from our English L1, French L1 and Catalan L1 corpora.

1. look for RT-shift/maintenance temporal expressions	i. RT-shift temporal expressions: <i>(and) then, (and) now, puis, ensuite, alors, llavors, amb aquestes</i> , etc. → RT-shift alors ils commencent à fouiller partout “ then they start searching everywhere” (Fr L1, F3)
	ii. RT-maintenance temporal expressions: <i>meanwhile, while, pendant ce temps là, mentrestant</i> , etc. → RT-maintenance a. the boy looks in his boots. b. while the dog looks in the jar for the frog. (Eng L1, E2)
2. look for explicit cause-effect logical relations	i. logical connectors: <i>so, because, donc, parce que, perquè</i> Result → RT-shift a. Ensuite le petit garçon voit. “then the little boy sees” b. Que <dans un arbre> dans un tronc d’arbre il y a un trou.

	<p>“that in a tree in the trunk of a tree there is a hole”</p> <p>c. Donc il grimpe sur l’arbre “so he climbs onto the tree”</p> <p>d. Et essaie de chercher sa grenouille dans l’arbre. “and he tries to look for his frog in the tree”. (Fr L1, F6)</p> <p>Explanation → RT-precedence (if bounded)</p> <p>a. llavors <el>[/] el Tom estava enfadat. “then Tom was angry”</p> <p>b. perquè s’havia trencat el pot. “because the pot had been broken” (Cat L1, C2)</p> <p>Explanation → RT-maintenance (if unbounded)</p> <p>a. van veure “they saw”</p> <p>b. que no hi era la Rita. “that Rita was not there”</p> <p>c. i clar el Pol es va quedar molt molt decebut. “and obviously Pol was very very disappointed”</p> <p>d. perquè <clar> [!] estaven tristos. “because obviously they were sad” (Cat L1, C1)</p> <p>ii. in the absence of overt markers, contextual hypothesis based on lexical and picture book knowledge → RT-shift</p> <p>a. il tombe sur la tête d’un cerf “ he falls on the head of a deer”</p> <p>b. qui l’entraîne avec lui jusqu’à un fossé. “which takes him along to a ditch”</p> <p>(Fr L1, F4)</p>
3. check if the sentences are semantically or pragmatically connected in other ways than cause-effect	<p>i. movement in space entails movement in time → RT-shift</p> <p>a. en Tom va començar a córrer espantat pel mussol “Tom started running scared by the owl”</p> <p>b. que l’anava perseguint. “which was chasing him”</p> <p>c. i <es va> [//] es va dirigi cap a un túmul de # una muntaneyta de pedres. “and he went towards a mound of # a little mountain of stones”</p> <p>d. on al darrera hi havia tot de branques. “behind which there were a lot of branches”</p> <p>e. ell <va> [//] s’hi va enfilear. “he climbed there” (Cat L1, C2)</p> <p>ii. elaboration (part-whole relation) → RT-maintenance</p> <p>a. they start looking for the frog (e). b. the little boy looks (e1) in the boots. c. and the dog puts his head in the jar (e2). (Eng L1, E8)</p>

	<p>iii. protagonist involvement</p> <ul style="list-style-type: none"> • the two protagonists doing different things in the same picture → RT-maintenance <ol style="list-style-type: none"> a. donc il cherche ses souliers. “so he (the boy) searches in his slippers” b. le chien aussi s’y met. “the dog also participates” c. il cherche dans la boîte. “he searches in the box” (Fr L1, F12) • same character doing two different things in the same picture → RT-shift if one is bounded <ol style="list-style-type: none"> a. després d’això continua buscant. “after this he continues searching” b. i es troba amb un # cérvol. “and he comes across a deer” (Cat L1, C3) • same character doing two different things in the same picture → RT-maintenance if unbounded <ol style="list-style-type: none"> a. and they’re -looking towards- trees and this beehive- b. and – the little boy is just calling out the frog’s name (Eng L1, E8)
4. in the absence of temporal and logical connectors	<p>i. apply linear progression principle when change of scene in the picture book → RT-shift</p> <ol style="list-style-type: none"> a. the deer takes off with – the boy strewed across his antlers. b. and the dog runs at his feet. c. yelling at him. d. to stop it. (beginning new scene) e. um – they’re approaching a cliff- f. and the deer – stops abruptly. (Eng L1, E6)
	<p>ii. apply simultaneity principle when change of protagonist in the same scene → RT-maintenance (beginning scene)</p> <ol style="list-style-type: none"> a. !oops! an owl flew out of the hole in the tree – b. and knocked him down out of the tree – c. and the bees chased the dog. d. that boy better let those bees alone. (end scene) (Eng L1, E9)
5. analyse the (un)bounded quality of the sentence	<p>i. establish the aspectual class of the predicate (taking into consideration subject and object NPs) --- Two adjacent clauses / same character</p> <ul style="list-style-type: none"> • achievements (ACH) /accomplishments (ACC) followed by ACH/ACC/ activities (ACT) (or reverse) → RT-shift

	<p>the child and the dog <u>find</u> a trunk; and they <u>search</u> into the trunk. (ACH/ACT) then he <u>meets</u> a reindeer; and he <u>gets on top of</u> the head of the reindeer. (ACH/ACC) it's like a # desert mouse or whatever its name which <u>comes out</u> of the hole; and <u>scares</u> the boy. (ACH/ACH) he <u>went up a tree</u>; and <u>looked</u> inside. (ACC / ACT) and <u>looked</u> um behind <the> [///] a trunk of a tree; that was near the water; and they <u>found</u> #um # a mummy frog and a daddy frog. (ACT/ACH) (Cat L1 Eng L2)</p> <ul style="list-style-type: none"> • ACT followed by ACT → RT-maintenance <p>he <u>holds</u> onto something that he thinks are branches ; and he <u>calls</u> to the – to the frog. (ACT /ACT) (Eng L1)</p> <ul style="list-style-type: none"> • states (ST) followed by any verb type (or reverse order) → RT-maintenance <p>The boy <u>is so preoccupied</u> with his frog that he doesn't notice; and -uh- <u>goes to the window</u> (ST/ACC) (Eng L1)</p> <hr/> <p>ii. consider the re-categorisation impact of tense-aspect form (e.g., progressive + telic predicates) → RT-maintenance</p> <p>a. and he <u>is looking</u> inside the boots. b. and the dog <u>is putting</u> its head in the bowl (Fr L1 Eng L2)</p> <hr/> <p>iii. consider other elements in the clause (e.g. durational adverbials; directional PPs etc.) → RT-shift</p> <p>a. and then the boy seems to be quite angry with the owl. b. 'cause the owl seems to be uh irritating him somehow. c. and up he goes to a # big rock whatever a big stone. (Cat L1 Eng L2)</p>
--	--

Table 4.1. Protocol for interpreting temporality in narrative discourse

Having presented the different theories which deal with the temporal organisation of narrative discourse, we can conclude that temporal progression in narrative discourse does not correspond to a succession of event times but rather of reference times (RTs). Claiming that, in a narrative, sentence order matches the extralinguistic order in which a series of events occurred is invalidated by such contexts in which the past perfect / *plus-que-parfait* form is used or in the case of elaborated events. The concept of RT allows for a more unified interpretation of the narrative, even in those contexts in which the different event times are not temporally ordered, and is

responsible for the “illusion” of movement forward, towards the resolution of the plot. The current RT is generally calculated anaphorically,²¹ with respect to the previously introduced discourse and not with respect to the moment of speech. In this way, “(...) tense is freed from its main job of providing a reference time: events can be understood as having occurred prior to the moment of speaking, with or without the past-tense form” (Schiffrin 1981: 51).

The centrality of the RT in the temporal organisation of narrative discourse places the narrator at the heart of the matter. The narrating consciousness is at all times focused on one or several characters that are involved in a series of situations, connected by temporal, spatial or cause-effect relations. The order in which these situations are narrated is only in part motivated by the existence of the same sequence in some extra-linguistic world. This is what conditions the truth value of the narrative, not its narrativity (Reinhart 1984).

The narrative quality of a discourse comes from the dynamics of the RT: if the current RT is updated, then two events or situations are understood as sequenced; if the current RT is maintained, the narrative time is at a standstill and the events or situations are understood as simultaneous. Several factors which condition the dynamics of the RT in narrative discourse have been identified: the (un)bounded nature of the sentence, the presence of certain temporal adverbials or conjunctions (*then, suddenly, when, after*, etc.), and pragma-semantic relations between situations.

A bounded sentence entails the shift of the RT, whereas the presence of an imperfectivity marker such as the progressive form in English or the *imparfait* in French entails the maintenance of the current RT. However, certain temporal expressions can reset the (un)bounded interpretation of a sentence and allow unbounded sentences to be understood as RT-shifting. Consequently, the importance of parameters such as the progressive marker or the inherent semantics of the predicate in the temporal organisation of narrative discourse should be relativised and we should consider more carefully the role of RT-shifting adverbials which can place on the story line virtually any kind of predicates.

Nevertheless, the existence of a boundary or an RT-instantiating temporal expression does not suffice to account for the processing of the current RT, which is

²¹ In picture book narratives, a deictic linkage is often employed – the current RT is reinstated by means of the adverbial *now*. We shall come back to this point in the chapters of empirical analysis.

carried out both at a local level, that of the sentence, and at a global level, that of the episode or the discourse as a whole. Pragma-semantic theories of temporal relations in narrative discourse (Vetters 1996) argue for the importance of logical relations between the different eventualities as well as of pragmatic mechanisms of inference activated by the type of discourse, *i.e.* the fact that we expect situations in a narrative to observe a certain chronological order. Cause-effect relations or world knowledge are also part of the complex architecture of a narrative and entail temporal progression and RT-shift. Figure 4.1 summarises the different factors which contribute to the interpretation of temporality in narrative discourse.

Hopper's (1979) initial segmentation of the narrative into foreground and background responds to basic saliency criteria of what is relevant or not to the story line. This two-tier organisation is, as we hope to have shown, too rigid to reflect the much more intricate pragma-semantic processing which is necessary to uncover the network of relations existing between situations and characters in a narrative. The linearity of narrative discourse is also a question of interpretation not just of linguistic expression and, consequently, additional criteria need to be established for the analysis of temporal relations in narrative discourse.

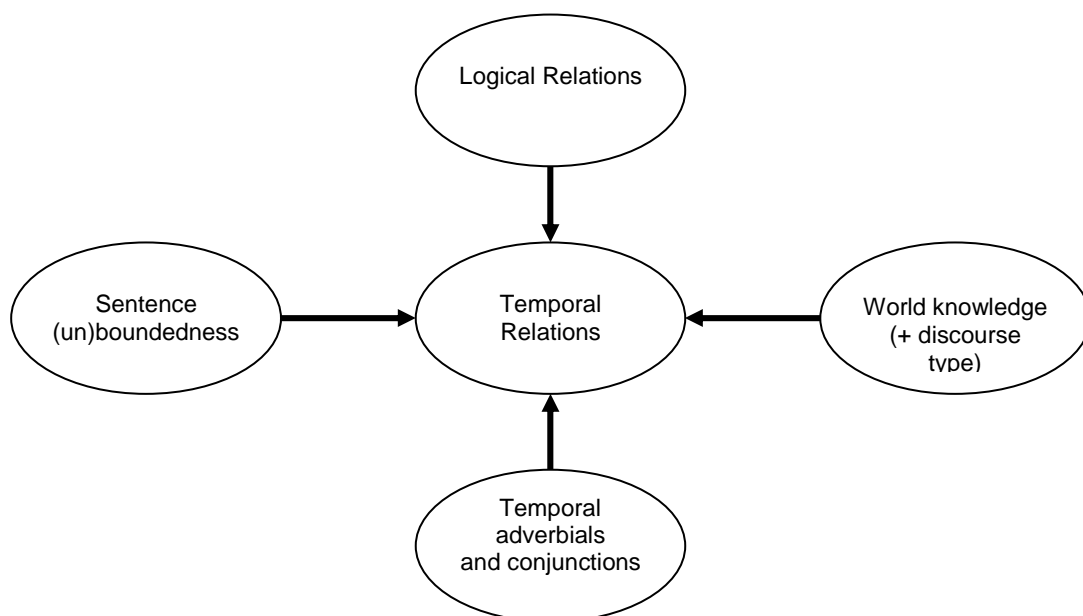


Figure 4.1. Factors contributing to the interpretation of temporal relations in narrative discourse

In chapter 5 we will present an analytical framework which we believe accounts for the particularities of a plot as the one in the *Frog, Where Are You?* picture book.

This framework will allow us to better gauge the use of tense-aspect morphology in English L1 and L2 narratives and to establish whether learners in the final stages of second language learning are guided by the Discourse Hypothesis.

Chapter 5: Temporality in *Frog, Where Are You?*. The Narrative Move

The analytical framework which will be presented in the current chapter was initially put forward by Nakhimovsky (1988) and applied to the analysis of temporality in English short stories by Curell (2002). In this framework, a narrative is understood as an articulated system of moves, where a move represents the way in which the reference time (RT)¹ is established from one sentence to the next. A narrative consists of three types of moves: (1) forward moves (given two adjacent sentences/clauses, the RT of the second sentence/clause is posterior to the RT of the first one); (2) sideways moves² (given two adjacent sentences/clauses, there is a common RT value and the event time (ET) of the second sentence/clause overlaps/is included in/ includes the ET of the first one) and (3) backward moves (given two adjacent sentences/clauses, the RT of the second sentence/clause precedes the RT of the first one). Forward moves correspond to updates of the current RT and constitute passages of narrative progression, whereas sideways moves correspond to passages in which the narrative is at a standstill. Backward moves are associated with retrospective passages which interrupt the chronological flow of the narrative to retrieve narrative material which precedes the current RT.

The three types of moves are “interwoven” into the overall timeline of the narrative and underlie the different elements of the plot.³ Nakhimovsky’s (1988) analytical framework has the notion of RT, rather than ET, at its heart, which is, as discussed in chapter 4, more suitable for an account of temporality in narrative

1 Nakhimovsky reserves the notion of RT for the aspectual perspective of a sentence/clause, its perfective or imperfective quality, and uses the concept of temporal focus to define the different types of moves in a narrative. The concept of temporal focus is wider than that of RT, in the sense that it can remain in the same timeline of the narrative or branch off to potential timelines. However, when referring to the plotline, the temporal focus is equivalent to RT and, given that modality is not dealt with in the present study, we shall not distinguish between temporal focus and RT in this chapter.

2 There is certainly some contradiction in calling “move” what in fact constitutes an instance of RT-maintenance. For formal coherence, we preserve Nakhimovsky’s label, bearing in mind that a sideways move should be understood as a sideways shift of narrative move into a “dilated” RT-interval.

3 This corresponds to what von Stutterheim and Klein (1987) define as referential movement in the domain of time. A well-formed text involves a referential movement within five semantic domains: time, space, entities, predicates and modality. According to the authors, the characteristics of the five domains and their interplay in the construction of referential movement depend on the type of discourse. With respect to the temporal domain, narrative discourse, for instance, requires that the temporal reference be a specific time interval which is updated from one sentence to the next, whereas it remains constant in descriptive discourse.

discourse, and which proves to be particularly useful for a unitary analysis of the intricate web of temporal relations in oral narratives such as the ones elicited by means of the *Frog, Where Are You?* picture book. Moreover, Nakhimovsky acknowledged the relevance of other semantic domains, not just of temporal reference, in the construction of narrative cohesion⁴ - (dis)continuities of topic, space, figure and ground (the main storyline and its surrounding circumstances), perspective (the main storyline and the narrator's evaluation of what is being narrated) or modality (the main timeline as opposed to branching-offs into potential or prospective "worlds") are bound to arise in a narrative "(...) from the tension between the linear nature of the text and the multidimensional structure that it is meant to evoke" (1988: 38).

In the present study, a distinction is made between the narrative material which is directly involved in this global RT construction and genuine background material, which does not contribute to the construction of the narrative timeline but rather to a better understanding of the course of events, such as the descriptions of natural surroundings, the narrator's evaluations of the characters' actions and other (meta-) narrative digressions. This distinction is, as we shall see, crucial if the researcher wants to establish with greater precision the degree of event condensation (Noyau *et al.* 2005), *i.e.*, the degree of hierarchical organisation of the events in the narrative. Background material will be indicated as such in the examples hereafter, but will not be further discussed.

Discriminating between the different types of moves in the corpus was carried out on the basis of the pragmatic, syntactic and semantic criteria discussed in chapter 4, section 4.5. The analysis was concerned exclusively with referential movement in the

4 Following Bamberg and Marchman (1991), Berman and Slobin (1994) and Hickmann (2004), we distinguish between coherence and cohesion in narrative discourse. Roughly, discourse cohesion refers to how clauses and sentences are tied together by means of linguistic devices. According to Hickmann (2004: 284), narrative cohesion is governed by general principles of information organisation: (1) discourse anchoring, *i.e.*, the expression of personal and spatio-temporal parameters of a given situation which allow the interpretation of subsequent discourse, (2) information status, *i.e.*, introduction and maintenance of referents in the universe of discourse, and (3) information grounding, *i.e.*, distinguishing between central and marginal information for the plot development.

Coherence, on the other hand, refers to the conceptual macro-structures or cognitive schemata which underlie the internal representation of complex events and their verbalisation in narrative discourse. These abstract schemata contain the principles or rules which govern structurally well-formed stories, *i.e.*, the existence of certain basic constitutive units (a setting, a complication and a resolution) and the way they should be chronologically and hierarchically organised.

Narrative coherence and cohesion are, hence, "two integrative knowledge systems" (Bamberg and Marchman 1991: 279) in the telling of a story, in that the conceptual macro-structure of a narrative underlies the cohesive ties established at the micro-level of the clauses.

domain of time, drawing on information contributed by domain-specific expressions such as time adverbials but also on information from other semantic domains, particularly those of predicate type, space, logical relations and entities, *i.e.*, reference to protagonists (see criteria in 4.5).

Before exemplifying how Nakhimovsky's (1988) tripartite framework of moves was applied to the oral narratives in our corpus, we would like to briefly discuss the advantages of using this analytical approach with the *Frog* story rather than Hopper's (1979) foreground/background dichotomy. The specificity of the *Frog* story is that its two protagonists, a boy and his dog, are involved in a common plot, the search for a runaway frog, which "branches out" in certain scenes where the protagonists go through parallel series of events. Given that the concepts of foreground and background are strongly conditioned by criteria of information saliency, applying them to the *Frog* story was felt to somehow "demote" one of the characters with respect to the other, when in fact both characters are protagonists in the search for the frog. The temporal move approach, on the contrary, does away with the hierarchy implied by the terms "foreground" and "background" by focusing on a unifying criterion, that of the RT, with respect to which both characters contribute equally.

Moreover, in Hopper's dichotomy, retrospective narrative material and simultaneity in the foreground are not contemplated. Nevertheless, the picture book format of the *Frog* story calls for an often nonlinear account of the search for the frog. While some of the episodes are presented in visually adjacent scenes, for instance the episode of the mole, and the narrator can see a continuity between the characters' acts and their outcomes, other episodes are presented in visually non-adjacent scenes, for instance the episode of the owl, which means that the narrator will need to recall certain visually inaccessible events in order to interpret a particular outcome. The other case of nonlinearity in the *Frog* story is, as we have already mentioned, the necessity to encode two simultaneous series of events which are both motivated by the theme of the search and, as such, equally contribute to the plot. The concept of move enables the researcher to perform an integrated analysis of temporality in the *Frog* story, encompassing not only temporally sequenced material but also retrospective passages in the story as well as simultaneous events.

The greatest benefit of Nakhimovsky's analytical framework is, therefore, the

fact that it allows the researcher to provide a three-dimensional, rather than a two-tiered, account of temporality in narrative discourse. In this way, the analysis better reflects the full range of temporal and aspectual relations which can be linguistically encoded in the languages under study here.

We shall now illustrate and discuss the typology of temporal moves in our English L1 and English L2 corpora of *Frog* stories. All the narratives in our corpus, including those in French and Catalan L1, were analysed in terms of temporal moves applying the criteria discussed in chapter 4 section 4.5 (see samples in Appendix 3). These criteria are cross-linguistic and constitute the basis on which the narrative moves were established. They were applied following the protocol presented in Table 4.1 in chapter 4 (section 4.5).

The analytical framework in the present chapter will be illustrated with samples from the English L1 and English L2 corpora exclusively, given that the main objective of applying Nakhimovsky's concept of narrative move was to obtain a solid testing ground for the Discourse Hypothesis in English L1 and L2. Nevertheless, a subset of temporal moves, namely the sideways moves, will be discussed cross-linguistically in chapter 8 (The Expression of Simultaneity). The data collection procedure, the groups and other methodological considerations regarding the treatment of the narratives are presented in chapter 6 (Research Methodology).

Two important observations need to be made at this point. Firstly, the semantics of tense-aspect forms, particularly of the progressive, was not the main criterion for establishing the temporal moves in a narrative, in order to minimise the circularity inherent in determining the role played by tense-aspect morphology in the temporal "texture" of the narrative, when the different types of temporal moves have been established on the basis of the same tense-aspect forms. This also makes our approach particularly suitable for English, which does not have specialised verb morphology for discourse grounding and does not allow for consistent form-function pairings like the past morphology in Catalan and French.

Furthermore, the fact that the narrative moves were established on other criteria than the tense-aspect forms liberates, at least to a certain degree, the analysis of the L2 narratives from the ambiguity of the forms used in them. Tense-aspect forms do not

always correspond to the communicative intention of the speaker in L2 varieties, particularly in spontaneous oral production, and, as such, are slippery ground for analysis. The criteria used for establishing the narrative moves were homogenously applied to the English L1 and L2 narratives in our corpus. It was only in a limited number of cases, for instance tense switches, where the researcher had to make certain decisions regarding the narrative moves, as we shall show in this chapter.

The three types of moves, forward, sideways and backward moves, were identified in both finite and non-finite clauses. The predicates in these clauses are underlined in the examples hereafter. Other contextual elements relevant for establishing the move type will be indicated in bold. The different move types will be illustrated with examples taken, at each time, from both the English L1 and English L2 corpora in order to show the transversal nature of the analysis.

The following material was considered not to contribute to the construction of temporal reference in the plot and was not categorised in terms of moves (it will be indicated by means of (-) in the examples hereafter):

1. direct and indirect speech, including characters' internal monologue
2. deontic and epistemic modality
3. negative clauses

In addition to the three types of temporal moves in Nakhimovsky's model, two combinations of moves were introduced, which correspond to purely abstract constructs, but which enable us to account more thoroughly for the richness of narrative material in some of the scenes in *Frog, Where Are You?:*

Sideways-forward moves – they correspond to temporal progression in a parallel plot. The sequence of events is simultaneous with another event or series of events which shift(s) the main RT of the story. It is often the case in *Frog, Where Are You?* that the two protagonists, a boy and his dog, are involved in parallel sequences of events at the same time. Sideways-forward moves account for the existence of several temporal “layers” in the same temporal frame. The temporal interval of a scene contains two overlapping series of events, as will be discussed in more detail in section 5.2 of this

chapter. Examples (1 f) and (2 i) below are illustrations of this type of move, where temporal progression is explicitly marked by the RT-shift adverbial *now* and by the conjunction phrase *so that*:

- | | | |
|-----|---|-------------------------------------|
| (1) | a. now the boy - climbs a tree – | FORWARD |
| | b. and looks in this hole | FORWARD |
| | c. thinking | SIDEWAYS |
| | d. the frog might be there - | (-) |
| | e. the dog gets the beehive down | SIDEWAYS |
| | f. and now <u>realizes</u> | SIDEWAYS-FORWARD |
| | g. there might be some danger involved here | (-) |
| | (Eng L1, E5) | |
| (2) | a. uh Tim continued looking for uh the frog. | THEME-REINSTITUTION ⁵ |
| | b. and he went to another tree. | FORWARD |
| | c. he climbed the tree. | FORWARD |
| | d. and looked inside the hideout again. | FORWARD |
| | e. there was another hideout <yeah> [?] | BACKGROUND |
| | f. to see | FORWARD/RT-MAINTENANCE ⁶ |
| | g. if he could find the frog. | (-) |
| | h. and meanwhile the very naughty dog # uh was shaking the tree. | SIDEWAYS |
| | i. so that the beehive and all the bees <u>fell down</u> +... | SIDEWAYS-FORWARD |
| | (Cat L1 Eng L2, T9) | |

Backward-forward moves – they correspond to temporal progression in a sequence of events presented retrospectively. The “flashback” is embedded in the current scene and locates events with respect to an RT which precedes the current RT in the scene. Examples (3 d) and (4 d) below contain an example of this type of move and are an illustration of the three-dimensional temporality in the stories in our corpus:

- | | | |
|-----|---|----------|
| (3) | a. um - the little boy - goes after the dog - | FORWARD |
| | b. and he looks very angry at the dog. | FORWARD |
| | c. because he - put that jar on his head | BACKWARD |

⁵ See discussion in section 5.2.2 below.

⁶ This type of forward move has a prospective value – it does not involve an RT-shift but depicts an intended situation projected from the current RT. Prospective forward moves will be discussed in more detail in section 5.1.4.

	d. and - <u>fell</u> - out the window	BACKWARD-FORWARD
	e. but the dog seems to be friendly.	(-)
	(Eng L1, E8)	
(4)	a. and the little boy peers into <the< [/] the hole.	FORWARD
	b. <oops!> [!] the dog <is> [!] is surprised.	SIDEWAYS
	c. because <he> [/] he shook the tree so much.	BACKWARD
	d. that the hive <u>fell</u> down.	BACKWARD-FORWARD
	e. and the bees are very angry.	SIDEWAYS
	f. and there's a hamster.	BACKGROUND
	g. watching the scene.	BACKGROUND
	(Fr L1 Eng L2, T1)	

In the remaining part of this chapter we would like to illustrate the contexts which have been identified as containing forward, sideways and backward temporal moves in our corpus and discuss some of the analytical decisions that underlie this study. We will concentrate on those aspects which would have been difficult to account for in a foreground/background model such as plot-advancing states or progressives, perfect verb forms, tense switches, the role of non-finite, nominal and subordinate clauses, event nesting, etc., in the hope to demonstrate the plasticity of the concept of temporal move for the interpretation of temporal relations in narrative discourse, plasticity which responds, in our opinion, to the dynamic construction of meaning in discourse.

5.1. Forward Moves

A typical forward narrative move in the *Frog* story arises between two bounded events or situations, which might also involve a cause-effect relation, and is triggered by the existence of two adjacent boundaries. These boundaries can be inherent in the semantics of the predicates (5 a, b, c) and/or established by means of verb complements or other elements in the context (6 a, b):

(5)	a. but he - the dog <u>loses</u> his balance	FORWARD
	b. and <u>slips</u>	FORWARD

- | | |
|--|------------|
| c. and <u>lands</u> right - on the glass jar - | FORWARD |
| d. which is - up to the point he hits the ground - | BACKGROUND |
| e. still attached to his head. | BACKGROUND |
- (Eng L1, E11)

- | | |
|---|----------|
| (6) a. they - <u>walk</u> along | FORWARD |
| b. <u>until</u> they <u>find</u> a hole | FORWARD |
| c. into which the boy <u>peers</u> | FORWARD |
| d. looking for the frog . | SIDEWAYS |
- (Eng L1, E6)

Note that, in a sequence, a forward move can be established in the presence of only one boundary, either the right boundary of the preceding event/situation or the left boundary of the following event/situation. This criterion is particularly important in those contexts containing progressive forms, abundant in picture book narratives like the *Frog* story, as is the case in example (7) below or (2 h, i) above. In (7 a, b), *climbing* and *holding a branch* were interpreted as chronologically sequenced given the existence of a right boundary for the first event (*over a rock*) and also on the basis of our knowledge of the picture book, where the boy is shown holding some branches once at the top of the rock, so once the climbing has reached its right boundary. The RT-shift adverbial *now* places (7 a) on the plot line, irrespective of the unbounding effect of the progressive form:

- | | |
|---|----------|
| (7) a. <u>now</u> <u>he's climbing</u> over a rock. | FORWARD |
| b. and <u>he's holding</u> onto a sort of branch. | FORWARD |
| c. and <u>calling</u> for his frog. | SIDEWAYS |
- (Fr L1 Eng L2, S6)

In the remaining part of this section, we are going to illustrate some of the less typical contexts for forward moves encountered in our corpus.

5.1.1 States with an inchoative reading

When interpreted inchoatively, stative predicates can move the plot forward. Two main types of contexts have been identified in which states acquire such an

interpretation in our corpus:

(i) *The presence of an RT-shift temporal adverbial* which establishes a left boundary to an intrinsically unbounded situation and hooks it onto the story line, like in (8 a), (9 b) and (10 a) below:

- | | | |
|------|--|-----------------------|
| (8) | a. and then -- he ' <u>s afraid</u> of the owl { s - }... | FORWARD |
| | b. follows him - | FORWARD |
| | c. and climbs on top of a rock | FORWARD |
| | d. to call for the frog | FOWARD:RT-MAINTENANCE |
| | e. and - gets caught on a deer | FORWARD |
| | (Eng L1, E7) | |
| | | |
| (9) | a. then unfortunately the frog isn't in this hole either. | (-) |
| | b. there' <u>s</u> an owl. | FORWARD |
| | c. and the dog gets pursued by <the> [/] the bees. | SIDEWAYS |
| | (Fr L1 Eng L2, S3) | |
| | | |
| (10) | a. <and> [/] so he' <u>s suddenly on the top of the reindeer's head.</u> | FORWARD |
| | b. uh# <and> [/] and it suddenly starts to run away. | FORWARD |
| | c. with the boy <on top of> [/] on top of <the> [//] its head. | |
| | (Cat L1 Eng L2, T3) | |

(9 b) above depicts the emergence of the owl, a highly dynamic element of the plot, by means of the existential construction *there is*, which acquires a presentative function in this context. In example (10) above, movement out of a state which is unbounded to the right, *be on the top of the reindeer's head* (10 a), is triggered by the re-instantiation of the RT-shift temporal adverbial *suddenly* (10 b). There is also a cause-effect relation underlying (10 a) and (10 b) which further supports the RT-shift interpretation of the two clauses.

(ii) *A cause-effect relation* holding between a bounded event and an adjacent resultant state. The right boundary of the event is understood as the left boundary of the resultant state. This is illustrated in example (11) below. Note that the forward move between (11 b) and (11 c) is not presupposed by the predicates, like in (11 a) and (11 b), but it is

inferred from our knowledge of the picture book, where the breaking of the jar makes the little boy angry:

- | | | |
|------|--|------------|
| (11) | a. and the little dog falls to the ground. | FORWARD |
| | b. and smashes the jar. | FORWARD |
| | c. the boy's <u>angry</u> – | FORWARD |
| | d. but – {you know -} it's no big deal. | BACKGROUND |
- (Eng L1, E10)

5.1.2 Plot-advancing progressives

The use of the progressive periphrasis to encode plot-advancing events in the *Frog* story is perfectly justified, since the events depicted in the picture book can be understood as unfolding at the RT established with each new scene. This use of the progressive is to be contrasted with the use of the simple (non-progressive) form, particularly the simple present, which offers a more holistic, “from a distance”, quality to the narrative (Leech, 2004: 19; compare, for example, (12 a) and (12 d) below). Several contexts have been identified in which the progressive is associated with a forward move in the plot:

(i) *The presence of RT-shift adverbials* or certain discourse adverbials like *so*:

- | | | |
|------|---|-------------------------|
| (12) | a. I guess now the dog and the boy <u>are – yelling</u> out the window for the frog- | FORWARD |
| | b. the dog is in a dangerous position there- | BACKGROUND |
| | c. cause he's going to lose his balance. | FORWARD/RT- MAINTENANCE |
| | d. so now the boy uh- <u>looks</u> at his dog with wonder xxx in this essential situation. | FORWARD |
- (Eng L1, E5)

- | | | |
|------|--|----------|
| (13) | a. right so they <u>are still looking</u> for the little frog. | FORWARD |
| | b. and they are yelling outside. | SIDEWAYS |
| | c. <then> [/] then the little boy <u>is still looking</u> <for his> [/] for his frog. | FORWARD |
| | d. and his dog is playing # with <a bee hive> [/] that s true a bee hive. | SIDEWAYS |
- (Fr L1 Eng L2, S10)

The forward move in (12 a), (13 a) and (13 c) is triggered by the adverbs *so*, *now* and *then* respectively, which explicitly supply an “imposed” left boundary to the situation encoded by means of the inherently unbounding progressive marker. In other words, the adverbs force a forward interpretation onto an otherwise ongoing situation. Subsequent updating of the RT is not a characteristic of the progressive periphrasis *per se* but of the discourse type, *i.e.*, picture-based narrative, in which the progressive is inserted and which establishes an implicit right boundary to the ongoing situations depicted in (12 a) and (13 a).

(ii) *A cause-effect relation* holding between a bounded event and an adjacent resultant situation encoded in the progressive. The resultant situation is understood as ongoing at an RT beyond the right boundary of the triggering event, as illustrated in (14 d) below. The progressive has a dramatic effect, placing the listener *in media res*. Note also that the state in (10 e) below is understood as a consequence of (14 d), holding at the end of *plummeting*:

- | | | |
|------|--|------------|
| (14) | a. the boy shouted out the window frog! frog! | FORWARD |
| | b. and the dog - being the curious animal that he was hopped onto the ledge. | |
| | | SIDEWAYS |
| | c. but hopped out a little too far. | BACKGROUND |
| | d. the dog <u>was plummeting</u> to his fate. | FORWARD |
| | e. but luckily for the dog he was unharmed. | FORWARD |
| | f. however the boy was quite perturbed. | SIDEWAYS |
| | (Eng L1, E4) | |

(iii) *Discontinuities of location*. Movement in space implies temporal progression. The progressive encodes a situation which is unfolding at a new location, generally involving the same character(s). In (15 a) below the characters are located on the path towards the beehive and in (15 c) the boy has reached a hole which is situated in the proximity of the beehive. There is discontinuity of location in (16 e) as well, where the characters are initially located in their bed in (16 a). The movement forward is established on the basis of locative adverbial adjuncts and other motion information in the sentence:

- (15) a. and...um they get closer to the beehive FORWARD
 b. and there's a hole in the ground BACKGROUND
 c. and the boy is calling for the frog **in there**. FORWARD
 (Eng L1, E12)
- (16) a. and they just discovered the next morning. FORWARD
 b. that their friend had disappeared. BACKWARD/RT-MAINTENANCE⁷
 c. and they were very surprised. FORWARD
 d. and very sad as well.
 e. they were looking for the frog **all over the house**. FORWARD
 (Cat L1 Eng L2, T5)

5.1.3 Pre-posed *when*-clauses

As discussed in chapter 4 section 4.2, pre-posed *when*-clauses update the RT and function as an anchor for the following main clause. The interpretation of the temporal relation between the situations depicted in the subordinate and the main clause depends on the *Aktionsart* of the predicates in both clauses: sequenced RTs if both predicates lack duration (17 a, b), and RT-overlap/inclusion if at least one of the predicates is durative (18 a, b):

- (17) a. **when** the boy and d - dog wake up FORWARD
 b. they realize FORWARD
 c. that the frog is gone. - SIDEWAYS
 d. and they 're really shocked . FORWARD
 (Eng L1, E3)
- (18) a. yeah **at the moment when** he goes to bed. FORWARD
 b. the dog sleeps with him as well. SIDEWAYS
 c. and **then** the frog comes out of the jar <ok> [?] FORWARD
 (Cat L1 Eng L2, S11)

⁷ This type of temporal move reflects the double function of the perfect in a narrative: on the one hand, the perfect (particularly the past perfect) semantically reverses the linear recount of the events in the plot and, on the other, it creates a bond between these events via a temporal interval of “current relevance” (particularly the present perfect). This will be discussed in more detail in section 5.3.2.

Our analysis of the temporal moves in the examples above reflects the fact that *when* takes both time intervals and time points as arguments (Hamann 1989: 138). In (17 a, b), the RTs of the two clauses are time points and, hence, no overlap relation is possible (though the two RTs are understood as nearly simultaneous). In (18 a, b), the RT of the subordinate partially overlaps with the RT of the main clause. The choice of encoding (17 a) and (17 b) as temporally sequenced was also motivated by the fact that *when* can be replaced by *after* when both clauses contain achievement predicates. Note, however, that unlike *after*, which clearly separates events in time, *when* links them through its inherent meaning of immediacy.

5.1.4 Prospective forward moves

Prospective forward moves are not standard forward moves in that they do not involve an RT-shift - the situations they encode have not yet occurred and, hence, do not have a definite RT. They constitute either intentions or anticipations of the course of events from the current RT. Prospective forward moves contribute to the global construction of temporality in that they refer to situations which are part of the plot and condition the subsequent development of the narrative, yet the narrator chooses to present them as current intentions or informed predictions, anchored in the previously introduced RT. In the present study, prospective forward moves were analysed as a case of RT-maintenance, to distinguish them from the full forward moves and to underline their function as a cohesive device in the narrative, introducing a hierarchy among the situations which constitute a given scene or episode. RT-maintenance should be distinguished from sideways moves. The latter depict simultaneous events (ET1 overlaps/is included in ET2), whereas the former refers to sequenced events (ET2 after ET1), one of which is “seen” from the vantage point of the current RT.⁸

Prospective forward moves have been identified mainly in *non-finite adverbial clauses of purpose*. They refer to the outcome of a character’s current situation or

⁸ Prospectivity, in the way we understand it here, could be broadly defined as “future outcome of present circumstances” (Leech 2004: 58). In this sense, prospective forward moves differ from standard forward moves in that they also have a modal value of non-actuality, *i.e.*, they do not entail the final realisation of the propositional content expressed.

intention and constitute a unit of meaning, but not of time, with the event in the main clause, as illustrated in (19 b) and (20 e) below:

- | | | |
|------|--|------------------------|
| (19) | a. and - um - in the morning - the boy and the dog awake | FORWARD |
| | b. to <u>find</u> | FORWARD/RT-MAINTENANCE |
| | c. that the frog is gone / | SIDEWAYS |
| | (Eng L1, E6) | |
| (20) | a. at once Yambo <fell from the> [/] fell from <the> [/] the window. | FORWARD |
| | b. and found himself on the ground <out> [//] outside. | FORWARD |
| | c. Teddy was very furious. | FORWARD |
| | d. and so came outside. | FORWARD |
| | e. to <u>pick up</u> Yambo. | FORWARD/RT-MAINTENANCE |
| | (Fr L1 Eng L2, S2) | |

There are some instances of the periphrasis *be going to* referring to the future in our corpus which have also been analysed as forward moves with RT-maintenance, given that they refer to the future outcome of current circumstances. Once again, the situations encoded by means of *be going to* are part of the plot and, as such, contribute to the overall RT movement in the narrative:

- | | | |
|------|--|------------------------|
| (21) | a. I guess now the dog and the boy are – yelling out the window for the frog. | FORWARD |
| | b. the dog is in a dangerous position there. | BACKGROUND |
| | c. cause he's <u>going to lose his balance</u> . | FORWARD/RT-MAINTENANCE |
| | (Eng L1, E5) | |

5.1.5 Plot-advancing relative clauses

The narrative advancing function of certain relative clauses in *Frog, Where Are You?* stories has been discussed by Dasinger and Toupin (1994). The authors identify different types of relative clauses that contribute to the advancement of the narrative time in the *Frog* story. In certain contexts, relative clauses encode an event that “follows upon” the occurrence of the event in the main clause in a temporal, causal or some other logical sense. The relative clause acquires a continuative function in the narrative and updates the current RT. In example (22) below, the relative clause (22 b)

modifies the direct object of the main clause verb, which undergoes a conversion from affected patient in the main clause to active agent in the relative clause. The main clause and the relative clause are, in this case, also logically connected by a cause-effect relation:

- | | | |
|------|---|------------------|
| (22) | a. and then all the bees start chasing the dog | FORWARD |
| | b. who <u>runs</u> away. | FORWARD |
| | c. and this owl comes out. | SIDEWAYS |
| | d. and um - the boy falls. | SIDEWAYS-FORWARD |
| | (Eng L1, E1) | |

The antecedent of the relative clause in (23 c) is ambiguous between the subject of the main clause (23 b) and the entire main clause, in which case we would have a sentential relative. In any case, the relative has a plot-advancing function in that it refers to a key element in the plot, that of the boy being bitten by the mole. Note that the scene is opened by the adverbial *while* which establishes a new interval of time and introduces a hierarchy between the events in the main clause (23 b) and the temporal subordinate (23 a), hierarchy which is also reflected in the choice of tense-aspect morphology. Consequently, the scene opens with a sideways move (23 a) with respect to the event in the main clause (23 b) in the interval specified by *while*:

- | | | |
|------|---|----------|
| (23) | a. <while> [/] while Teddy <u>was looking</u> into the hole. | SIDEWAYS |
| | b. a sort of <animal> [/] animal sorry <u>came out</u> of it. | FORWARD |
| | c. <and> [/] which <u>surprised</u> Teddy. | FORWARD |
| | d. Yambo was still playing with the flies. | SIDEWAYS |
| | (Fr L1 Eng L2, S2) | |

5.2 Sideways Moves

5.2.1 Simultaneity in the plot

As mentioned in the introduction to the present chapter, sideways moves occur in contexts of RT maintenance and involve an ET simultaneity of some sort: ET1 can entirely overlap with ET2 when two unbounded events/situations are presented as

synchronous (examples (24), (25)) or ET2 can frame ET1 or the other way round (example (26)) or an entire sequence of events in the same scene (examples (27), (28)):

- | | | |
|------|--|------------------------|
| (24) | a. and then the deer <u>went running off</u> with the little boy | FORWARD |
| | b. and the doggie <u>ran</u> along the side | SIDEWAYS |
| | c. because he didn't want to get separated from his master . | BACKGROUND |
| | (Eng L1, E9) | |
| (25) | a. the little boy <u>is looking</u> for the frog in a hole in the ground. | FORWARD |
| | b. the dog <u>is playing</u> with the beehive. | SIDEWAYS |
| | (Fr L1 Eng L2, T5) | |
| (26) | a. a gopher <u>appeared</u> . | FORWARD |
| | b. while the dog <u>was playing</u> with the bees. | SIDEWAYS |
| | c. and ### <the> [/] the bees and its house <u>fell down</u> of the tree. | FORWARD |
| | d. while the boy <u>was looking</u> for the frog inside another tree. | SIDEWAYS |
| | (Cat L1 Eng L2, S2) | |
| (27) | a. as David <u>was looking</u> into the hole. | SIDEWAYS ⁹ |
| | b. a mole <u>came up</u> . | FORWARD |
| | c. and <u>pinched</u> uh David's nose. | FORWARD |
| | (Fr L1 Eng L2, T12) | |
| (28) | a. then the bees nest <u>falls</u> down. | FORWARD |
| | b. and the bees <u>go out</u> very angrily. | FORWARD |
| | c. and # <u>go after</u> the dog. | FORWARD |
| | d. <u>to bite</u> him ok | FORWARD/RT-MAINTENANCE |
| | e. <then> [/] # meanwhile the boy <u>was seeking</u> into a hole in a tree. | SIDEWAYS |
| | f. where an owl was living. | BACKGROUND |
| | (Cat L1 Eng L2, T10) | |

Sideways moves introduce a hierarchy in the presentation of a given scene, which is generally signalled by means of hypotactic devices such as the temporal subordinating conjunctions *while*, *whereas*, *as*, *when*¹⁰ or by means of temporal

⁹ See discussion of example (23) above.

¹⁰ See discussion in section 5.1.3 above.

adverbials such as *meanwhile*, *in the meantime*, *at the same time*. The expression of simultaneity in sideways moves often involves, as will be discussed in chapters 8 and 9, the use of explicit unbounding devices such as the progressive form.

Sideways moves can also be expressed by means of non-finite participial clauses which refer to simultaneous actions carried out by one protagonist (examples (29), (30)) or by two different protagonists (in example (31), the dog is playing with the bees that are flying in the air). This type of non-finite linkage constitutes a condensation strategy and a hypotactic device (Noyau *et al.* 2005), together with the finite linkage in examples (26) and (27), resulting in complex, multi-propositional sentences:

(29)	a. the deer runs away with the little boy on him -	FORWARD
	b. and the dog - uh - is jumping	SIDEWAYS
	c. <u>trying to get</u> the little boy <u>down</u> /	SIDEWAYS
	(Eng L1, E8)	
(30)	a. and finally <the> [/] the boy found his frog.	FORWARD
	b. and he took it away.	FORWARD
	c. <u>saying</u> goodbye to the frog family.	SIDEWAYS
	(Cat L1 Eng L2, S8)	
(31)	a. at some point the little dog ran to its beehive.	FORWARD
	b. and started to play with the bees.	FORWARD
	c. <u>flying</u> in the air.	SIDEWAYS
	d. and the little boy found out a hole.	SIDEWAYS
	e. and tried to find track <of> [/] of the frog.	SIDEWAYS-FORWARD
	(Fr L1 Eng L2, T10)	

As illustrated in example (31) above, simultaneity relations in the plot can be binomial, established between two events or situations (31 b, c), or complex, established between sequences of events in the temporal interval of the scene as a whole (31 d, e). The sideways-forward move in (31 e) indicates temporal progression in the current RT interval established by *at some time*.

Standard sideways moves allow the narrator to account for simultaneous events and narrative “threads” in the same scene and, as such, they introduce a hierarchy in the narrative material. In the remaining part of this section we would like to illustrate a

different type of sideways moves in our corpus, which do not involve the representation of an extra-linguistic simultaneity relation but rather function as discursive strategies, elaborating or specifying previously introduced narrative material.

5.2.2 Event Elaboration

A case of elaboration arises in presentative contexts where a relative clause modifies a semantically neutral main clause, asserting relevant information about a newly introduced referent, as illustrated in example (32) below. The narrator introduces a hierarchy, in the same time lapse (RT), between the apparition of a key protagonist, the owl, and its interaction with the other protagonist(s) in the scene:

- | | | |
|------|---|----------|
| (32) | a. now – the frog isn’t there either – | (-) |
| | b. but there’s an owl in there | FORWARD |
| | c. who <u>bumps</u> him <u>down</u> to the ground . | SIDEWAYS |
| | (Eng L1, E10) | |

Another case of event elaboration is what Bamberg and Marchman (1991) refer to as event forestalling and nesting – a general activity is elaborated or specified into several, more specific events which maintain and elaborate the RT established by the former – “(...) the first more general reference forestalls other more specific and temporally more comprised activities that are nested into the former one” (290). This typically occurs in relation with the theme of the search for the frog, as illustrated in examples (33) and (34) below. (33 a) instantiates the beginning of the search for the frog, whereas (33 b) and (33 c) elaborate the time slot established by the previous sentence and, hence, do not move the plot ahead.

- | | | |
|------|--|-----------------------|
| (33) | a. they <u>start looking</u> for the frog | FORWARD/FORESTALLING |
| | b. the little boy looks into the boots | SIDEWAYS |
| | c. and - the dog puts his head in the jar... | SIDEWAYS |
| | (Eng L1, E8) | |
| (34) | a. so they just <u>decided to look for</u> the frog. | FORWARD/FORESTALLING. |
| | b. they looked for it <absolutely> [!] <everywhere> [!]. | SIDEWAYS |
| | c. under the bed. | |

- d. in the boots #.
 - e. absolutely everywhere.
 - f. in and out the house as well.
- (Cat L1 Eng L2, T11)

It is sometimes the case that, in the course of the narrative, the narrator explicitly re-instantiates the theme of the search by means of continuative periphrases of the type *continue his search* (example (35 a) below). In such cases, the subsequent material should be understood as an elaboration of this overarching statement that the search has reached a new stage towards the achievement of its goal. However, given the meta-narrative function of these re-instantiations (*i.e.*, they do not depict concrete elements in the scene, their function being to remind the listener that the goal of the search has not been reached yet), this type of global RT-maintenance is not labelled as such in the corpus, as illustrated in example (35) below. Note that the RT-shift relation between (35 b) and (35 c) is established on the basis of knowledge from the picture book, where the boy is depicted as shouting for the frog once at the top of the rock:

- (35) a. so he continues his search with his friend the dog #. THEME-REINSTITUTION
 b. he climbs on a rock. FORWARD
 c. and shouts for the frog #. FORWARD
- (Fr L1 Eng L2, T7)

5.3 Backward Moves

5.3.1 Linearity Breaks: RT-backshift

Backward moves are not particularly abundant in the corpus, probably because they run counter to the linear progression principle of narrative discourse and the specificity of the picture book elicitation.¹¹ When they occur, backward moves fulfil two distinct functions. On the one hand, they constitute “recalls” of certain plot constituents which are located beyond the visual boundary of one image. The narrator breaks the linearity of the plot to go back in time and retrieve the motivation of the current course

¹¹ What is rather common, particularly in learner-produced narratives, is a certain instability in the temporal anchorage of the narrative, which can change more than once throughout a given narrative. Backward moves, as we understand them, constitute punctual departures from an otherwise consistent temporal anchor, generally to refer to events which precede the current RT.

of action by means of a shift in the anchor tense (mainly from present to past) or a subordinate adverbial clause of cause introduced by *because*. On the other hand, backward moves represent a discourse strategy to deal with informationally complex scenes, such as the owl scene, in which simultaneous narrative material is encoded as chronologically, though not linearly, sequenced.¹² In this case, the narrator atomises the RT-interval of the scene into different RTs and presents some of the events in the scene as having occurred previously to the other events in the same scene. In what follows, we shall look in more detail at these two types of backward moves.

(i) Out-of-sequence simple past predicates inserted in a present-anchored narrative are a strong anteriority cue. The simple past form in (36 e), (37 b) and (38 b) introduces a temporal reference which precedes the current RT. This interpretation is reinforced by the fact that the events they encode are not directly available in the current scene, but appear as already performed (the stool is on the floor in (36), the boy is in the tree in (37), and the dog has the jar on his head in (38)):

- | | | |
|------|---|----------------------|
| (36) | a. and - they look all over the room - | FORWARD/FORESTALLING |
| | b. the dog slips the jar over his head | SIDEWAYS |
| | c. and the boy looks into his boots and - | SIDEWAYS |
| | d. crawled around the room. | (-) |
| | e. he <u>knocked</u> the stool over | BACKWARD |
| | f. he - opens the window | FORWARD |
| | g. and calls - for him | FORWARD |
| | (Eng L1, E7) | |
| (37) | a. # um # <the> [/] the little boy is still looking for the frog now <in> [/] in a tree. | FORWARD |
| | b. the little boy <u>climbed</u> <in> [/] in the tree. | BACKWARD |
| | c. and we notice there is a hole in the tree #. | BACKGROUND |
| | d. and and the little dog is still with his bees ##. | SIDEWAYS |
| | (Fr L1 Eng L2, S4) | |
| (38) | a. in the fifth picture they start calling out for the frog. | FORWARD |
| | b. unfortunately the dog <u>put</u> his head inside the jar. | BACKWARD |

¹² As such, the use of backward moves can also be said to respond to the narrator's representation of the degree of comprehensibility of what is being narrated.

- c. and **in the following picture** he fall(s) out of the window. FORWARD
 e. smashing the jar with it. SIDEWAYS
 (Cat L1 Eng L2, S12)

(ii) Subordinate adverbial clauses of cause introduced by *because* (and marginally by *as*) typically occur in a post-posed position with respect to the main clause and are encoded in the simple past or present perfect in present-based narratives, or in the past perfect in past-based narratives, as illustrated in examples (39), (40) and (41) below:

- (39) a. and **then** the bees start chasing the dog FORWARD
 b. and the boy falls off the tree SIDEWAYS
 c. **because** the owl came out of the hollow part... BACKWARD
 (Eng L1, E12)
- (40) a. **now** the owl [which came out of this hole] isn't very happy. RT-SHIFT/(-)
 b. which came out of this hole. BACKWARD
 c. **because** it has been woken up in the middle of the day. BACKWARD
 d. and owls are sleeping in the day. BACKGROUND
 (Fr L1 Eng L2, T2)
- (41) a. **in the morning** the sun shone. BACKGROUND
 b. and the little boy and the dog woke up. FORWARD
 c. and **immediately** they wanted to see the frog. FORWARD
 d. and were really disappointed. FORWARD
 e. **because** the frog had left. BACKWARD
 (Fr L1 Eng L2, T12)

In the examples above, the backward move is established by the subordinating conjunction together with the semantics of the predicates: the bounded quality of the events in the *because* clauses (*come out*, *wake up* and *leave* are achievements) makes them necessarily prior to the events/situations in the main clause, which means that the events/situations in (39 b, c), (40 a, c), (41 d, e) need to be interpreted in temporally reversed order. Note that in the case of the present perfect, the bound between prior cause and current consequence is more explicit than in the case of the simple past, given the “current relevance” aspectual value of the perfect. The past perfect, on the other

hand, is ambiguous between a purely temporal value of anteriority and an aspectual value of “current relevance”.

Adverbial subordinate clauses of cause can also introduce an elaboration on an event in the plot, by means of an inherently and/or grammatically unbounded situation. In this case, the adverbial subordinate is interpreted as a sideways move, maintaining the current RT established by the main clause, as illustrated in example (42) below:

- | | | |
|------|---|----------|
| (42) | a. and the little boy then fell off the tree. | FORWARD |
| | b. down onto the floor. | (-) |
| | c. while his dog ran away. | SIDEWAYS |
| | d. because he's actually <u>being followed</u> by <all the wasps> [//] all the bees. | SIDEWAYS |
- SIDEWAYS
- (Fr L1 Eng L2, T10)

(iii) In informationally complex scenes, namely those in which the two protagonists are involved in parallel plots, the narrator can opt for replacing the relation of simultaneity by one of temporal anteriority. Backward moves have, hence, a flashback quality. They are embedded in the current scene and normally comprise at least two temporally displaced clauses - the first clause establishes a displaced RT with respect to which the RT of the following clause in the flashback is calculated, as illustrated in examples (43) and (44) below. These flashbacks always contain a forward move, which has been encoded as *backward-forward* to indicate its double temporal displacement with respect to the main RT of the scene and with respect to the RT of the previous event in the flashback:

- | | | |
|------|--|------------------|
| (43) | a. and then the beehive falls - down. | FORWARD |
| | b. the dog – he probably <u>knocked it down</u> . | BACKWARD |
| | c. and then he <u>jumped</u> . | BACKWARD-FORWARD |
| | d. and the little boy is looking in the tree trunk for – the frog. | SIDEWAYS |
- (Eng L1, E1)
- | | | |
|------|---|------------------|
| (44) | a. so the bees are chasing after the dog. | FORWARD |
| | b. and an owl <u>came out</u> of the tree hole. | BACKWARD |
| | c. and the little boy <u>fell down</u> on the ground. | BACKWARD-FORWARD |
| | d. the situation is quite dramatic. | BACKGROUND |

(Fr L1 Eng L2, S6)

Backward moves do not always involve an RT-backshift. In the remaining part of this section, we shall deal with more complex backward moves involving perfect forms.

5.3.2 Current Relevance Perfect

As discussed in chapter 3 section 3.3, the (present) perfect establishes an explicit link between a temporal vantage point and a previous event via a resultant state which holds beyond the right boundary of the event, *i.e.*, the current relevance interpretation of the (present) perfect. In a narrative, the perfect allows the narrator to look backwards and incorporate out-of-sequence material, while maintaining the current RT. This means that the perfect does not constitute a proper backward move, but a case of RT-maintenance, as illustrated in examples (45) and (46) below. The narrative material encoded in the perfect is temporally anterior to but overlaps, via its unbounded resultant state, with the current RT established in the previous clause. In other words, the current RT is maintained to include a past event as the cause of a current change of state:

- (45) a. **early the next morning** the – both discover FORWARD
 b. that the frog has escaped. BACKWARD/ RT-MAINTENANCE
 (Eng L1, E7)
- (46) a. and # uh # <how bad> [!] **and** the deer www (a) www (b) threw the boy and the dog
 away. FORWARD
 b. who was not very kind (a). (-)
 c. and had been annoyed and a little bit angry (b).
 BACKWARD/RT-MAINTENANCE¹³
 d. **and then** suddenly they both realised. FORWARD
 e. that <it was> [/] it was night time. BACKGROUND
 (Cat L1 Eng L2, T5)

¹³ Note that the past perfect is ambiguous with respect to the current relevance value and can also have a purely anterior value.

In examples (45) and (46) above, the perfect binds together two different moments in the narrative and, as such, acts as a cohesive device. A temporally anterior event, *escaping* and *being annoyed*, is seen as contemporaneous via its persisting effects on the subsequent unfolding of the narrative, the discovery of the empty jar and the fact that the deer throws the little boy and the dog away.

In some contexts, particularly in French learners' L2 narratives, an entire flashback can be encoded by means of perfect forms. While in native speaker English it is difficult to conceive of a plot developed by means of the present perfect, simply because the current relevance of this form checks the possibility of RT-shift from one perfect predicate to the other (Michaelis 1994), passages of chronologically ordered events are sometimes encoded in the present perfect in English L2 narratives. It is certainly difficult to fathom the reasons behind the choice of a verb form in learner narratives. This is why such passages were analysed not on the basis of the forms but using other, more stable criteria such as the inherent semantics of the predicates and our knowledge of the picture book. In example (47) below, we have opted for encoding (47 f) as a *backward-forward* move with respect to (47 c) given the inherently bounded quality of *climb* in (47 f) which instantiates a right boundary with respect to which *trying to find balance* in (47 f) takes place at a new RT:

- | | | |
|------|---|-------------------------|
| (47) | a. things are calming down a little bit. | BACKGROUND |
| | b. the dog <u>is sniffing</u> <around> [/] around a big boulder. | FORWARD |
| | c. onto which <the> [/] the boy <u>has climbed</u> . | BACKWARD/RT-MAINTENANCE |
| | d. <to> [/] to get on top of things a little bit. | FORWARD/RT-MAINTENANCE |
| | e. <and to > [/] and to call for the frog <at> [/] at a broader distance. | |
| | | FORWARD/RT-MAINTENANCE |
| | f. <and> [/] and the boy <has> [/] <u>has tried to find balance</u> . | |
| | | BACKWARD-FORWARD |
| | g. by grasping what looks like a branch. | SIDEWAYS |
- (Fr L1 Eng L2, T9)

Note that the other protagonist in the scene, the dog, also receives an “aspectualised” treatment, presented in the process of sniffing around the boulder by means of the progressive form (47 b). The RT-shift in (47 b) is not triggered by the

progressive but by the linear progression principle of narrative discourse activated at the change of scene.

To conclude the discussion about backward moves and the perfect, we would like to refer now to a specific use of this form, particularly the present perfect, in the presence of an RT-shift temporal adverbial at the beginning of a scene. The narrator uses the present perfect to refer to the visible effects of a previous event at the onset of a new scene. In this type of contexts, the present perfect has a clear resultative meaning and the current RT, updated by means of a temporal adverbial or a locative phrase, is located beyond the right boundary of the event, in the resultant state interval opened up by the resultative present perfect (Curell and Coll 2007). The entire scene converges in a unifying RT interval in which the resultant state of the event in the present perfect overlaps with the other elements in the scene, which are either inherently unbounded (*i.e.*, atelic) or presented imperfectively by means of the progressive form:

- (48) a. **now** the beehive has been knocked down out of the tree by the dog-
BACKWARD/RT-SHIFT
- b. and the bees are intrigued – with the dog. SIDEWAYS
- c. **while** the boy is sitting in a tree. SIDEWAYS
- (Eng L1, E2)
- (49) a. anyway so **on the next picture** the little boy has recovered from the fall.
BACKWARD/RT-SHIFT
- b. so he is sitting in the water. SIDEWAYS
- c. with the dog is clinging to his head. SIDEWAYS
- d. who was probably quite afraid. (-)
- (Fr L1 Eng L2, T8)
- (50) a. and **next** <he's> he's being followed by the owl. BACKWARD/RT-SHIFT
- b. but still he doesn't give up. (-)
- c. and he's trying to call out his frog in and outside in the forest. SIDEWAYS
- (Cat L1 Eng L2, S12)

The “snapshot” quality of the examples above is also due to the cohesive role of the temporal adverbials *now*, *next* and of the locative expression *on the next page* which act as an orientation point for the entire scene and which trigger the RT-shift in (48 a),

(49 a) and (50 a) above. The impact of these linguistic devices on the update of the RT is such that in example (51) below the double use of *now* forces a temporally ordered interpretation of the resultative present perfect in sentence (51 a) and the ongoing situation in (51 b), where the progressive is interpreted inchoatively:

(51)	a. now the hive <u>has fallen</u> .	BACKWARD/RT-SHIFT
	b. now the bees <u>are getting out</u> .	FORWARD
	c. the little boy <u>is looking for</u> the frog.	SIDEWAYS
	(Fr L1, Eng L2, T2)	

The analysis carried out in this chapter has hopefully shown that the notion of temporal move can provide a coherent account of the intricate web of temporal-aspectual relations underlying the double protagonist *Frog* stories in our corpus. It is, nevertheless, true that temporality in oral narratives is a delicate construct, built on spontaneous communicative intentions and with limited monitoring of the use of linguistic devices, which puts any analytical grid to a test. The unexpected use of certain forms, particularly in L2 production, is not necessarily a proof of poor command of the target language, but simply a result of the strenuous task of producing an online narrative based on a picture book. However, the only way to distinguish individual idiosyncrasies from consistent features of the advanced English L2 variety is by establishing some common ground of comparison, and the temporal move framework is, in our opinion, a fitting tool.

One of the strengths of this analytical approach is that it relativises the role of tense-aspect morphology in the construction of temporal reference in narrative discourse, and takes into account other semantic, pragmatic and contextual factors which play a central role in updating, maintaining or backshifting the RT. Apart from the methodological circularity we mentioned in the introduction to this chapter, relativising the role of tense-aspect morphology when analysing learner narrative corpora is also necessary because forms in interlanguage do not always match the communicative intention of the narrator and are not necessarily discourse motivated. Moreover, it is often the case that learners and native speakers alike rely on linguistic devices other than the tense-aspect forms to indicate the nature of the temporal relation holding between two adjacent events, such as the adverbials *now* and *then*. The

narrative move framework used here rightfully accounts for such strategies.

Nevertheless, this does not mean that tense-aspect morphology has a minor function in the narratives. Tense-aspect morphology informs the temporal “texture” of the different scenes and imposes a hierarchical relational order onto the narrative material. The passage from the linear picture book format to the multidimensional, dynamic temporality in the oral narrative relies on a discourse-motivated use of tense-aspect morphology. This is reflected in our analysis of the progressive form as a framing device or the perfect form as a retrospective device with a cohesive dimension. Our only claim is that a thorough analysis of temporality in narrative discourse should also take into account the role played by factors other than the tense-aspect morphology.

By way of conclusion, we would like to return to example (1) in the introduction to chapter 4 (and repeated here below in (52) for convenience), which we presented as an illustration of the difficulty to apply the foreground/background dichotomy to the intricate network of temporal relations existing in our corpus of oral narratives. We would like to show here how this passage can be interpreted in the light of the temporal move framework discussed in the present chapter:

- | | | |
|------|--|------------------|
| (52) | a. the dog <u>falls</u> out of the window – with the jar on his head | FORWARD |
| | b. and the little boy just <u>watches</u> | SIDEWAYS |
| | c. him fall | SIDEWAYS |
| | d. still wondering where - the frog is... | SIDEWAYS |
| | e. um – the little boy <u>goes</u> after the dog – | FORWARD |
| | f. and he <u>looks</u> very angry at the dog | FORWARD |
| | g. because he – <u>put</u> the jar on his head | BACKWARD |
| | h. and <u>fell</u> out of the window | BACKWARD-FORWARD |
| | i. but the dog seems to be friendly. | (-) |
- (Eng L1, E8)

The passage contains a variety of moves, ranging from a temporal sequence of events in (52 a), (52 e) and (52 f), simultaneity in (52 b, c and d) and a flashback episode in (52 g, f). Several advantages of using the move approach in the interpretation of temporality can be observed: the framework accommodates the change of protagonist from (52 a) and (52 e); it allows us to account for (52 b) as simultaneous with (52 a) in the absence of an explicit aspectual mark of unboundedness such as the progressive

form; it also renders the inner temporality of the flashback episode in (52 g, f), allowing us to anchor it with respect to the current RT. While a qualitative approach to the interpretation of temporality in narrative discourse such as the one attempted here remains bound to numerous subjective decisions, it seems to us that the criteria discussed in chapter 4 and in the present chapter converge into a coherent and uniform interpretive model.

We are now in possession of the full range of analytical tools that will be used in our study. We remind the reader that the research questions we try to answer are as follows:

1. *To what degree do the inherent semantic properties of predicates condition the use of tense-aspect morphology in oral narratives by advanced EFLLs (the Aspect Hypothesis)?*

We would like to see whether the distribution of verb forms in advanced English L2 is skewed towards certain predicate types and to what extent this bias fits in with the developmental trends observed in the earlier stages of English L2 learning and with the distributional patterns found in English L1.

2. *How do advanced EFLLs use tense-aspect forms to encode temporal relations in narrative discourse (the Discourse Hypothesis)?*

We are interested in the correlations between verb forms and different types of temporal moves in oral *Frog* stories (forward, sideways and backward) in English L2, and to what extent these correlations match the ones observed in English L1. This question focuses on the form-function mappings in the domain of tense-aspect morphology in English L1 and English L2 picture book narratives.

3. *How does L2 tense-aspect morphology interact with other morphosyntactic devices when encoding a specific temporal relation, namely that of simultaneity, and to what extent is the expression of simultaneity in English L2 influenced by*

certain form-function coalitions and information selection patterns in the learners' L1?

To answer this question, we are going to look at sideways moves in two specific episodes, that of the “mole” and that of the “owl”, in English L1 and English L2. A cross-linguistic comparison with the choices made by native speakers in Catalan and French L1 will be used to give us a better insight into the subtle imprint of the mother tongue on the learners’ expression of simultaneity in English L2.

In chapter 6 we are going to present the different learner groups that participated in this study and the procedure used for data collection together with some criteria for the quantitative analysis of the data obtained. Chapters 7, 8 and 9 will be devoted to the quantitative and qualitative analysis of the *Frog* stories in our corpus and will specifically address the research questions underlying this study.

Chapter 6: Research Methodology

6.1 Participants

The advanced EFLs who participated in this study were all specialists in the target language, either majoring in English Studies at several French and Catalan state universities or with a degree in English Studies from the same universities. In terms of accredited language proficiency, all the subjects had been assessed as proficient users of the target language in their respective educational systems (ranging between the C1 and C2 levels in the CEFR, see description in chapter 1). Our intention was to sample learners from the lower and the higher ends of the advanced learner variety for a better insight into the use of tense-aspect morphology at this L2 developmental stage. To this purpose, we elicited oral narratives from two populations: students majoring in English Studies at several French or Catalan universities¹ and university professors or experienced English FL teachers (12 subjects each) at the same universities.²

The subjects were grouped according to the time spent studying English at university and their last English FL university qualification. As a result, 4 test groups were set up: 2 groups of students (12 subjects each) and 2 groups of university professors or experienced English FL teachers (12 subjects each). The groups were labelled according to the L1 – L2 combination and their academic status, namely FRENGS for the French L1 English L2 students, FRENGT for the French L1 English L2 professors/teachers, CATENGS for the Catalan L1 English L2 students, and CATENGT for the Catalan L1 English L2 professors/teachers. We refer to Catalan as an L1 in that it is the mother tongue of the learners analysed in the present study. All the Catalan speakers used in the present study were bilingual speakers of Catalan and Spanish. The characteristics of the learner groups are presented in Table 6.1.³

1 For the French L1 English L2 students, the data collection was carried out at the Université Paris Ouest Nanterre la Défense, the Université Paris V Diderot, the Université de Perpignan and the IUFM Créteil (Paris Val-de-Marne). For the Catalan L1 English L2 students, all the data were collected at the Universitat Autònoma de Barcelona (Spain).

2 Except for two of the French L1 English L2 professors who came from the Université de Montpellier.

³ Ages are presented in the form of years and months separated by a semi-colon.

Groups	FRENGS	FRENGT	CATENGs	CATENGT
Number of participants	12	12	12	12
Age range	22; 3 – 28; 0	26; 1 – 44; 9	20; 3 – 25; 4	26; 5 – 41; 9
Mean age	25; 02	35; 4	22; 4	33; 6
Years of English FL at university	3 – 4 years; minimum 1 year in the CAPES preparation program	≥ 5 years	4 years	≥ 5 years
Last English FL university qualification	<i>Licence</i> (BAC + 3 years) / <i>Maîtrise</i> (BAC + 4 years)	M.A. in English Literature or Linguistics; Agrégation in English; PhD in English Literature or Linguistics	Instrumental English II course	M.A. In English Literature or Linguistics; PhD in English Literature or Linguistics

Table 6.1. Learner profiles in the test groups (FRENGS, FRENGT, CATENGs, and CATENGT)

Due to organisational limitations, it was not possible to administer a proficiency test and we had to rely on the assessment carried out by the different universities where the participants had obtained their L2 qualifications and on the criteria of the researcher carrying out the data collection who was also an English FL teacher and examiner. We are aware, nevertheless, that course attainment is only a partial proof of proficiency in the target language, often tapping into the learner's declarative knowledge more than into their procedural ability to use the language for communicative purposes, and that additional screening devices (such as native-speaker judgement or an independent assessment of the four language skills) would have increased the reliability of the organisation of the groups. We hope, nevertheless, that the choice of a specialist population, with several years of language training at university level, safeguards their status of advanced learners for the purpose of this study.

In the case of the French L1 English L2 groups, all the subjects in the FRENGS group were students who had a *Licence* (3-year diploma) or a *Maîtrise* (a 4-year degree) in English and were preparing the *Certificat d'aptitude au professorat de l'enseignement secondaire* (CAPES, *Certificate of aptitude for teaching in secondary schools*, our translation) or the *Agrégation*⁴ examination in a French state university. All the

⁴ This is a state examination which selects teachers for positions in French high schools and certain lower ranking teaching positions in state universities.

subjects in the FRENGT group held a teaching position at a French university⁵ and had been screened by means of highly competitive processes (such as the *Agrégation* examination for English and/or had a PhD in English linguistics or literature). The interviews were recorded between 2006 and 2008.

As for the Catalan L1 English L2 groups, the data used in this study were collected at the Universitat Autònoma de Barcelona (Spain) as part of the research project *Temporalitat i combinació d'events en anglès i en català (Temporality and event conflation in English and Catalan, PNL2004-11)*, led by Professor Hortènsia Curell i Gotor. The author of this dissertation participated in the collection and transcription of some of the data with a research grant in 2005. The subjects in CATENGS were all students in their final year of the English Philology degree, who had passed the Instrumental English II course, a highly demanding English course which conditions students' access to the second cycle subjects of the degree. Similar to FRENGT, all the subjects in CATENGT held a teaching position in the Departament de Filologia Anglesa i de Germanística at the Universitat Autònoma de Barcelona or in the Language Service of the same university and had been screened by means of highly competitive processes.

Three control groups were also set up, namely an American English L1 group (ENG), a French L1 group (FRE), and a Catalan L1 group (CAT). The English L1 data were provided by Professor Dan I. Slobin (University of Berkeley, US) and were also used in Berman and Slobin (1994). The Catalan L1 data were collected in the research project mentioned above. The French L1 data were collected by the author of this dissertation in Paris (France) and with French native speakers on short stays in Barcelona (Spain) between 2006 and 2008. The characteristics of the control groups are presented in Table 6.2 below.

⁵ Except for one FRENGT who was the Head of Studies of a language school in Paris (France).

Groups	ENG	FRE	CAT
Age range	18; 0 – 40; 0	23; 3 – 37; 11	20; 6 – 40; 7
Mean age	(-)	27; 7	30; 6
Socio-professional profile	college students or graduates from the San Francisco Bay Area in California (Berman and Slobin 1994)	university graduates	university graduates (Curell 2006)

Table 6.2. Characteristics of the control groups (ENG, FRE, and CAT)

6.2 Task and data collection procedure

The oral narratives in our corpus were elicited by means of the picture book *Frog, where are you?* by Mayer (1969) (see Appendix 1). This picture book consists of 24 scenes. In brief, the story is about a boy and his dog that set out to look for their runaway frog. The search for the frog takes them through a series of adventures in a nearby forest, in which the protagonists come across different animals (a mole, bees, an owl, and a deer) to eventually reach a pond where the frog has made a family with another frog. The story ends with the boy and the dog returning home with a little frog, presumably an offspring of the frog they had at the beginning of the story, though it could also be the runaway frog itself.

The *Frog* story complies with the typical format of a children's story, namely a hero (the boy with his dog) confronted with a problem (the disappearance of the frog) who undertakes a series of actions to solve this problem (the search for the missing frog) and whose mission has a happy ending (the boy finds the frog or gets another one in exchange). The standard format of the story makes it easily recognisable by speakers from different cultural backgrounds and, hence, useful for cross-linguistic research (Berman and Slobin 2004: 20).

As regards the macro-structure of the story, picture 1⁶ constitutes the prelude or the orientation of the story (the boy with his dog and his frog in his room); pictures 2 and 3 present the problem or the complication (the escape of the frog and the protagonists' ensuing discovery of the disappearance). Pictures 4 through 22 depict a series of search episodes (Bamberg and Marchman 1991: 281-282). The first search

⁶ Pictures are available in Appendix 1.

episode (pictures 4-7) takes place in the house and at the window, ending with the dog's fall out of the window and its rescue by the boy. The second search episode occurs in the forest and ends with the boy having his nose bitten by a mole while the dog is playing with a beehive (pictures 8-10). In the third search episode, the boy looks for the frog in a tree and ends when an owl emerges and chases him while the bees chase the dog (pictures 11-13). In the fourth search episode, the boy calls for the frog on top of a rock and ends up on a deer's antlers, who was hiding behind the rock and who takes the boy to a pond (pictures 14-18). The fifth episode completes the search, as the boy and the dog successfully encounter their frog and its family somewhere near the pond (pictures 19-23). The last picture, picture 24 presents the resolution of the search, namely the boy and the dog going back home with one of the frogs.

There was a double motivation behind our choice of the picture book. Under the apparent linearity of the picture book format, the *Frog* story is rather complex as regards the range of temporal relations underlying its plot. As observed by Berman and Slobin (1994), the events in the *Frog* story can follow one another sequentially (*e.g.*, the frog gets out of the jar and then runs away), relate back to prior circumstances not depicted in the pictures (*e.g.*, the boy has climbed in the tree to look for his frog) or take place simultaneously (*e.g.*, the dog is playing with a beehive while the boy is bitten by a mole). The presence of two protagonists makes the *Frog* story a particularly useful tool for exploring the expression of simultaneity and, with it, the use of tense-aspect forms.

Working with the *Frog* story also meant accessing a wealth of studies that have used the picture book to gain insight into the development of narrative competence and form/function mappings in a variety of L1s and L2s, both with adults and children (Berman and Slobin 1994, Strömquist and Verhoeven 2004 for extensive collections). According to Berman and Slobin (1994: 23), one of the strong points of the *Frog* story as an elicitation tool is precisely that it allows for different levels of task-construal, which makes it suitable both for children and adult informants.

With respect to the data collection procedure, the subjects were videotaped individually.⁷ All the subjects were given the same instructions (in their mother tongue for the control groups and in English for the test groups). They were told that they were going to look at a picture book where there were three main characters, a boy, a dog and

⁷ Except for one French L1 English L2 informant who refused to be videotaped. In this case, the story was recorded by means of an audio recorder.

a frog. They were instructed to look through the entire picture book to ensure that all the subjects were familiar with the content and had had a chance to grasp the overall goal of the story.

The subjects were then asked to tell the story with the book open in front of them.⁸ In the meantime, the researcher, who had visual access to the book, would mark the passage from one page to another by means of a pencil tap. This was done in order to identify the picture the subject was referring to at any given time during the task. When a page was skipped, this was noted down and indicated in the transcript.

The subjects were helped when they needed a particular lexical item, given that the purpose of the study was not to measure their lexical accuracy or range. Even though the word “story” was explicitly used in the instructions preceding the task, no other indications as to the type of narrative were provided. The subjects were given complete freedom in choosing their own narrative “style” and were not prompted into telling a story as they would have told it to a child or to an adult. The researcher tried to be as neutral as possible and not intervene unless required to (for instance, to provide a difficult word).

6.3 Transcription and coding

Following Berman and Slobin (1994), the conventions used in the transcriptions of the oral narratives captured not only the linguistic but also some of the prosodic features of the different productions. We followed the CHAT conventions presented in MacWhinney (2002)⁹ (see Appendix 2 for a full list and Appendix 3 for sample transcriptions). Nevertheless, given the purpose of our study, the prosodic information was not taken into account except in those cases where it helped us assign the narrative material to a specific picture. The transcription of the oral narratives also involved their

8 The exact instructions used were: “This is the story of a boy [*pointing at the boy on the cover*], his dog [*pointing at the dog on the cover*], and his frog [*pointing at the frog on the cover*]. I would like you to have a look at the pictures and, when you are ready, tell me the story”. These instructions follow the ones in Berman and Slobin (1994: 22). The title of the picture book was covered so as not to influence the subjects.

9 Note that our conventions differ from the ones used in the English L1 data from Berman and Slobin (1994). These specific conventions are presented in Appendix 2 in a separate table and illustrated in the sample transcripts in Appendix 3.

segmentation into units of analysis. Following Berman and Slobin (1994: 26), the narratives were segmented into clauses, *i.e.*, “(...) any unit containing a unified predication”. As such, the clause is closer to the semantic notion of proposition than to the syntactic construct of the sentence. The clauses were then assigned a temporal value, *i.e.*, a narrative move, using the criteria discussed in chapters 4 and 5.

In what follows, we would like to present some of the main types of clauses that make up the narratives in our corpus and how we extended the criteria provided by Berman and Slobin (1994) to account for the variety of strategies our subjects use to refer to the different situations in the picture book. We also relied on the analytical criteria proposed by de Lorenzo (2002), with certain differences that are explained below.

Apart from the standard clauses containing one finite verb, we identified as one clause:

The verb periphrases of phase. We identified as a unified predicate the inchoative periphrases with verbs such as *begin (to)*, *start (to)*, *proceed (to)* for English, *començar (a)*, *posar-se (a)*, *llençar-se (a)*, *ficar-se (a)* for Catalan and *commencer (à)*, *se mettre (à)* for French;¹⁰ the continuative periphrases with verbs such as *continue (+ gerund)*, *keep (+ gerund)* for English, *continuar (+ gerund)*, *seguir (+ gerund)*, *tornar (a)* for Catalan, and *continuer (à)* for French; the periphrases which focus on the final stage (*stop (+ gerund)* in English, *parar (de)* in Catalan and *arrêter (de)* in French) or the outcome of a situation such as *succeed (in)* for English, *aconseguir (+ infinitive)* for Catalan and *réussir (à)* or *arriver (à)* for French.

Note, also, that the periphrasis *anar a parar* in Catalan (the English equivalent is *end up (in a place)*) was analysed as one predicate, denoting a trajectory with its intrinsic and involuntary end state. This analysis contrasts with that of, for instance, *anar a mirar (go to see)* which was analysed as two separate clauses – the trajectory and a subsequent voluntary activity, which motivates the trajectory but does not integrate it (see example (1 c) below).

¹⁰ Other verb periphrases were also analysed as unified predicates, *e.g.*, *se retrouver (à)* in French which has an iterative meaning, or *to be busy doing something* in English with a progressive meaning or the construction *vinga a (correr)* in Catalan, with a durative/iterative reading.

Repeated verbs which convey the protraction of a situation (example (1 a)). We considered such structures to refer to a unique situation extending over an interval of time and, therefore, we analysed them in a single clause (and one narrative move).

(1)	a. <u>busquen busquen</u> . “they look (and) look”	FORWARD
	b. i <u>decideixen anar</u> al bosc. “and decide to go to the forest”	FORWARD
	c. a <u>mirar</u> . “to see”	FORWARD/RT-MAINTENANCE
	d. si troben la granota. “if they find the frog” (Cat L1 Eng L2, C10)	(-) ¹¹

The *verb periphrases* containing the verbs *try (to)* and *decide (to)* in English (and their equivalents in Catalan and French). Unlike de Lorenzo (2002), we opted for analysing the periphrases with *decide* as integrated predicates and we do not distinguish between the decision of acting and the actual enactment of this decision. In our opinion, the decision as such, severed from its enactment, does not contribute to the temporal relations underlying the plot. Hence, the analysis in (1 b) above.

Modal periphrases. Periphrases including modal verbs such as *must, can, have to*, etc. in English, *haver de, poder* in Catalan or *devoir, pouvoir* in French constitute one clause. Nevertheless, these predicates were not analysed in terms of temporal moves in our corpus. As already stated, the objective of our study was to focus on the use of tense-aspect morphology in English L2 narrative discourse. Modal verbs are, generally, invariable with respect to tense-aspect inflections in English and were, hence, left out of our study but will be included in a future study of temporality in narrative discourse.

Non-finite verbs encoding adverbial subordinates of purpose (see (1 c) above), time (example (2 b) and (2 e)), reduced relative clauses (example (3 c)), etc.

(2)	a. mentrestant el gosset encara té la garrafa al cap.	SIDEWAYS
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¹¹ Conditional clauses were not interpreted in terms of narrative moves. See chapter 5.

- “meanwhile the little dog still has the vase on the head”
(p 6 and p 7)
- b. # amb aquestes que el gosset intentant ajudar. SIDEWAYS
“in such a way that the little dog trying to help”
- c. el que fa és. BACKGROUND
“what he does is”
- d. caure de la finestra. FORWARD
“fall-INF off the window”
- e. # i # **al** caure al terra. SIDEWAYS
“and on fall-INF on the ground”
- f. se li trenca la garrafa. FORWARD
“the vase breaks-REFLEX”
(Cat L1 Eng L2, C4)
- (3) a. (l'élan) fait en sorte de basculer l'enfant dans ce petit trou. FORWARD
“the elk makes the child fall into this little hole”
- b. où le chien lui même [emporté dans sa course] basculât. SIDEWAYS
“where the dog himself fall-PFV-PS”
- c. emporté dans sa course. SIDEWAYS
“carried along in his race”
(Fr L1 Eng L2, F2)

Periphrastic causative and resultative constructions. We analysed as one clause causative structures such as *make/let something fall* (and its equivalents in French and Catalan) (example (4)) and also resultative structures, with the verb *get* in English (*get stuck, get scared, get thrown, etc.*) (example (5)) or *se retrouver* (*tombés par terre*) in French and *quedar* (*penjat, dormit, etc.*) in Catalan (example (6)). Note, also, that the main verbs in these constructions (*make, get, se retrouver, quedar*) are not fully lexical and constitute a predicate only with the following non-finite construction or AdjP.

- (4) a. recordes que el gos # estava olorant tot el dia? [+ bch]
“do you remember that the dog was smelling all day long?”
- b. així que va fer caure el niu d abelles <ostres>[!]. FOREWARD
“consequently he made the beehive fall <gosh>[!]”
(Cat L1, C7)
- (5) a. and apparently one of the holes the boy was looking in. SIDEWAYS

- b. <was a> [///] well there was an animal in there. FORWARD
 c. **so** <the boy> [/] the boy got scared. FORWARD
 (Cat L1 Eng L2, S8)

- (6) a. **pendant ce temps** le petit chien faisait des bêtises. SIDEWAYS/FORESTALLING
 “during this time the little dog was being naughty”
 b. il mettait sa tête dans le bocal. SIDEWAYS
 “he put-IMPARF his head in the pot”
 c. et se retrouvait coincé. SIDEWAYS-FORWARD
 “he find-IMPARF himself stuck”
 (Fr L1, F7)

Event conflation. According to Berman and Slobin (1994: 151), event conflation is a cohesive strategy by means of which “(...) speakers choose to compress different facets of the situation within a single clause rather than arranging them linearly in successive clauses”. Motion verbs followed by a gerund encoding manner of motion information were analysed as one clause but as two narrative moves. While clear cases of event conflation and discourse cohesion, such situations were, for us, also cases of simultaneity – one character involved in two simultaneous activities, namely that of going somewhere and howling in pain (example (7)) or of coming out of the pot by stepping over its brim (example (8)). This analysis was hoped to capture certain typological differences in the expression of temporality among the languages in our study. Moreover, unlike the constructions in examples (4) to (6) above, the motion verbs *run* and *s'enfuir* in examples (7) and (8) are fully lexical.

- (7) a. the boy tumbles down from the branch FORWARD
 b. because of an owl who's popped up from the hole
 BACKWARD/RT-MAINTENANCE
 c. and the dog - runs - um - howling by SIDEWAYS/SIDEWAYS
 d. with this swarm of bees chasing him. SIDEWAYS
 (Eng L1, E6)
- (8) a. et donc il se couche. FORWARD
 b. et pendant la nuit la grenouille elle s'enfuit enjambant <le> [/] le bord du bocal.
 FORWARD/SIDEWAYS
 (Fr L1, F9)

Verbless clauses containing NPs, AdjPs. Following Berman and Slobin (1994: 661) and de Lorenzo (2002), we treated as separate clause structures in which the verb semantics is fully recoverable from the text (example (9)) or in which the copula has been deleted (example (10)). Such clauses were not analysed in terms of narrative moves in this dissertation, but will make the object of a further study of temporality in narrative discourse.

- | | | |
|------|---|---------|
| (9) | a. they find the empty vase. | FORWARD |
| | b. they look everywhere in the bedroom. | FORWARD |
| | c. <u>inside boots.</u> | |
| | d. <u>under the bed.</u> | |
| | e. and <wow> [!] Tim gets its head stuck into the vase. | FORWARD |
| | f. well there's nothing in the bedroom. | (-) |
| | (Fr L1 Eng L2, T3) | |
| | | |
| (10) | a. gos pot tot <u>trenca</u> t per terra. | |
| | “dog pot everything broken on the ground” | |
| | b. i el nen ben <u>preocupa</u> t. | |
| | “and the boy very worried” | |
| | c. per si s’havia fet mal el seu gosset. | |
| | “in case his little dog might have got-REFLEX hurt” | |
| | (Cat L1, C7) | |

Onomatopoeias. Following de Lorenzo (2002), they were considered to be self-standing clauses, even though they were not analysed in terms of narrative moves in this study (example (11)).

- | | | |
|------|--|---------|
| (11) | a. <u>plouf</u> ! | |
| | “splash!” | |
| | b. ils sont tous les deux tombés dans la marre. | FORWARD |
| | “the two of them fell into the swamp” | |
| | c. <les fesses en premier> [///] le garçon la tête en premier. | |
| | “their buttocks first the boy head first” | |
| | d. puis le chien. | |
| | “the the dog” | |

e. mais ça leur fait rien.	BACKGROUND
f. ça a plutôt l'air de les amuser.	BACKGROUND
(Fr L1, F6)	

Evaluative material and other references to the narrator. Following Berman and Slobin (1994: 660), predicates that refer to the presence of the narrator in the text, either by means of comments, judgements, or other types of evaluative material, or as a visual locus, were analysed in one clause with the narrative material they introduce (example (12)).

(12) a. a. so <the arrival> [//] the sudden emergence of the of the owl has startled him.	
	BACKWARD / RT-MAINTENANCE
b. and he lost his balance.	BACKWARD-FORWARD
c. and we can see him <u>sprawling</u> on his back.	SIDEWAYS
d. and the bees the bees are chasing the dog.	SIDEWAYS
(Fr L1 Eng L2, T8)	

6.4 Data analysis

6.4.1 Predicate types

Given the purpose of our study and the richness of the narrative material obtained from the elicitation process, a certain degree of “trimming” of the data was necessary in order to adjust it to our research objectives. This involved, in the first place, establishing certain criteria regarding which tense-aspect forms in the narratives were going to be analysed with respect to the aspectual class or the *Aktionsart* of the predicate (the Aspect Hypothesis) and the expression of temporality in narrative discourse (the Discourse Hypothesis).

A first screening of the English L1 and English L2 corpus was carried out in order to discard predicates which were invariable with respect to tense-aspect forms (namely, modal verbs)¹² and predicates which did not directly contribute to the plot line of the *Frog* story. As already discussed in chapter 5, the latter category consisted of

12 Modal verbs in French and Catalan combine with tense-aspect inflections. Nevertheless, for comparison purposes, modal verbs were also excluded from the analysis of the French L1 and Catalan L1 data.

cases of counter-factuality (e.g. negative clauses, conditional clauses, certain prepositional constructions like *instead of + gerund*), potentiality (e.g. expressions of future time, constructions with *seem, appear, look like*, etc.), and instances of direct and indirect speech.

The Aspect and Discourse Hypotheses were analysed on the basis of data from English L1 and English L2. Our intention was to establish how the advanced EFLs fit within the developmental predictions made for the early stages of L2 learning with respect to the impact of the semantic prototypes and the narrative function on the distribution of tense-aspect morphology and, also, to what extent this distribution matches the patterns observed in native speaker *Frog* stories. We focused on the distribution of four verb forms, namely the simple present (PRES), the present progressive (PROG), the simple past (PAST) and the past progressive (PPROG). The choice of the forms was motivated, on the one hand, by their dominant presence in our corpus and, on the other, by the availability in the literature of baseline data on the distribution of these forms in English L2 oral narratives with less proficient learners (Bardovi-Harlig 1998, 2000; Collins 2002).

Other forms, such as the present perfect or the past perfect, were only analysed in relation to the Discourse Hypothesis, because of the low percentage rates within the aspectual categories in the Aspect Hypothesis. One of the shortcomings of production tasks like the *Frog* story, as opposed for instance to cloze tasks, is the fact that certain verb forms are under-represented both in learner and native speaker discourse. The *Frog* story has, on the other hand, the advantage of allowing us to see a more complex interaction of semantic, discourse and cross-linguistic factors in L2 production than the cloze task.

The L1 parameter was systematically discussed in relation to the expression of simultaneity, where it was considered to play a role in the construction of the temporal perspective. Nevertheless, it turned out to be relevant also in the discussion of the Aspect Hypothesis, to account for the distribution of verb forms within activities in English L2, and of the Discourse Hypothesis, to account for the overall choice of narrative moves.

The criteria used for establishing the narrative moves in our corpus were already discussed in chapters 4 and 5. Hereafter, we will deal exclusively with the testing

procedure for the Aspect Hypothesis.

To test the Aspect Hypothesis, we needed to categorise the predicates in our corpus into Vendler's (1967) aspectual classes: states (STA), activities (ACT), accomplishments (ACC) and achievements (ACH). For this purpose, a series of operational tests designed by Robinson (1995a) were applied to a total of 2627 predicate tokens (corresponding to 237 unique predicate types). Aspectual predicates of the type *start*, *continue*, periphrastical constructions of the type *try (to)* and *decide (to)* as well as non-finite verb forms were not included in this analysis. The tests are presented in Table 6.3 below.

115 predicate types, approximately 50% of the total number of predicate types, were submitted to an inter-rater reliability test with an experienced linguist. An initial 71% rate of agreement was obtained, which rose to 100% after discussion of the divergences. Table 6.4 below contains the predicate types in our corpus and their distribution into Vendler's aspectual classes. Elements in the context, such as the subject NP or certain PPs, were also taken into account when assigning predicates to one aspectual class or another (they appear between brackets with some of the predicates in Table 6.4 below). The categorisation with respect to the *Aktionsart* was done with the predicates in their base form to minimise the impact of the tense-aspect form on the categorisation.

<i>Aktionsart</i> Contrast	Test	Examples
Stative vs. Dynamic (STA vs. ACT, ACC, ACH)	<p>1. Non-states are regularly used in the progressive, states normally are not.</p> <p>2. Non-states only can insert <i>do</i> -cleft. Non-states only can answer the question <i>What did he do?</i></p> <p>3. With the verb in the simple present form in a non-narrative context the predicate is stative if it can be assigned a clearly non-habitual meaning.</p>	<p>*Carla is knowing the answer. Carla is working.</p> <p>*What Carla did was know the answer./What Carla did was work.</p> <p>Carla knows the answer. (non-habitual implies state) Carla works. (habitual implies non-state)</p>
Telic vs. Atelic (ACT vs. ACC, ACH)	<p>1. Imperfective paradox: Assume that SUBJECT is (in the process of) PREDICATE [verb in present progressive form]. If SUBJECT stops in the middle, is it true that SUBJECT PREDICATE [verb in present perfect form]? If the answer is “yes”, the predicate is atelic; otherwise, it is telic.</p> <p>2. Which of the following frames is more natural, assuming the interpretation that the entire situation occurs within the time period? Atelic: He/she can _____ FOR two minutes (hours, days, etc.). Telic: He/she can _____ IN two minutes (hours, days, etc.)</p> <p>3. Which of the following frames is more natural, assuming the interpretation that the entire situation occurs within the time period? Atelic: He/she spent two minutes (or 2 hours, etc.) _____ (verb in present participle form) Telic: It took him/her two minutes (or 2 hours, etc.) to _____</p>	<p>a. Assume that Ana is (in the process of) studying. If she stops in the middle, is it true that she has studied? [yes] b. Assume that Victor is (in the process of) walking home. If he stops in the middle, is it true that he has walked home? [no]</p> <p>a.? Victor can walk home for ten minutes. Victor can walk home in ten minutes. b.? Ana can study in ten minutes. Ana can study for ten minutes.</p> <p>a.? Victor spent ten minutes walking home. It took Victor ten minutes to walk home. b.? It took Ana ten minutes to study. Ana spent ten minutes studying.</p>
Punctual vs. Durative (ACC vs. ACH)	<p>1. With the verb in the simple past or past progressive, does the predicate accept a unitary, non-anticipatory meaning when it co-occurs with an adverbial of duration? The time adverbial must modify the verb, not the resulting state or preceding activity.</p> <p>2. With the verb in the present participle form, does the predicate have a non-iterative, non-anticipatory meaning? (reference must be to the verb itself, not the resulting state or preceding activity).</p> <p>3. When modified by a time phrase, does the predicate have a perfective meaning, not inchoative or inceptive? That is, is the entire event conceived as having happened at the given time?</p>	<p>a. Elizabeth walked home in twenty minutes. b. *Rebekah jumped for twenty minutes. c. *The policeman caught the thief in three days.</p> <p>a. Elizabeth is no longer walking home. b. *Rebekah is no longer jumping. c.? The policeman is no longer catching the thief.</p> <p>a. *At 9:00 a.m., Elizabeth walked home. b. At 9:00 a.m., Rebekah jumped. c. At 9:00 a.m., the policeman caught the thief.</p>

Table 6.3. Operational tests used for establishing the aspectual class (the *Aktionsart*) of the predicates in our corpus (adapted from Robinson (1995))

STA	ACT	ACC	ACH
be	admire	Agree	abandon
believe	annoy	appear (several frogs)	adopt
feel	attack	approach	appear
have	bark	ask (+ DS/IS)	awake
hear	bother	become interested	bend over
hope	call	bid farewell	bite
know	carry on his horns	call (+DS/IS)	break
lie	chase	carry (away to)	bump into
love	check	caution (+DS/IS)	capture
need	cling	chase (to a rock)	catch
see	concentrate	climb (onto a tree)	cause
sense	contemplate	come (out/the bees)	collapse
sit	continue	crawl to (the bank)	come (out/across)
stand	examine	creep up (on a rock)	crash
stay	expostulate	dress up	crawl out (jar)
think	find (animals)	emerge (babies/from behind the reeds)	depart
want	flap about	escape (the bees/from the hive)	deposit
	flee	find (a lot of bees)	destroy (vase)
	fly	found (a family)	disappear
	follow	get (dressed/into the forest/ on top of)	discover
	get chased	go (to)	disparate
	go running	grow tired	disturb
	have a look	have a good night sleep	drop
	help	head to	dump
	hide (the deer)	indicate to do smth.	end up
	hold	limp into the picture	escape
	laugh	lose interest	fall
	lean	make (a deal/some babies)	fend off (the owl)
	lick	manage to climb	find
	listen	present smb. to smb. else	fling
	look	put on (clothes; boots)	fly out (owl)
	look for	recover (from the fall)	frighten
	make fun	rescue	get (stuck/to a cliff)
	make noise	return home	go (out/frog; blocked)
	meet animals	run (to/at)	grab
	menace	save	hit
	mess with	say (+DS/IS)	hop
	miss	shout (+DS/IS)	hush
	peek over	sneak to	interrupt
	peer	succeed in	jump
	play	swarm (out/the bees)	kneel
	pursue	swim onto	knock down
	reprimand	take (back home/ to a cliff)	land
	rummage	tell (+DS/IS)	leap
	run	thank for	leave
	rush after	wade to	let fall
	scowl	walk (to/back)	lie down
	scream		lift
	search		look up
	seek		lose (balance)
	shake		lower his head
	shout		make an appearance
	sick on		make fall
	sleep		meet (a mole)
	smell		
	sniff		

	<p>struggle sulk swim watch wave wear whimper wonder yell threaten fall down (many times) persecute take care</p>		<p>motion move notice open pick up pinch place(head inside) plummet pop out prick up project push put raise (head) reach realise recognise resume roll over (trunk) run away (frog) scare seize set free shsh signal sit up slip over smash sneak out splash splat stand up start startle step out stick out sting stop stumble surprise take off throw tiptoe out (jar) trap tumble turn over wake up walk off wreck (the beehive)</p>
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Table 6.4. Predicate types in the English L1 and English L2 narratives

6.4.2 Quantitative analysis

Research using the *Frog* story has traditionally been considered unsuitable for hard statistical tests for two reasons: the relatively small number of subjects (12 individuals per group), numbers which become even smaller when we focus on a particular language feature, and the varying length of the narratives elicited by means of the picture book (Berman and Slobin 1994: 27). Breaking with this tradition, statistical tests were used in the present study for two reasons: first, to provide additional proof of the robustness of our empirical findings and, second, to stimulate a reflection on the choice of statistical tools in narrative corpus research as the one carried out here.

Following Bardovi-Harlig (2000) and Comajoan (2001), the Aspect and Discourse Hypotheses were tested on predicate tokens rather than on predicate types. According to Bardovi-Harlig (2000: 243), while “(...) a type analysis controls for multiple uses of a single form in a corpus, it does not respect the integrity of the text and thus cannot be used to analyse the structure of narratives”. Given that we were interested in the use of tense-aspect morphology both with respect to the inherent semantic properties of the predicates and their discourse function, the type analysis was discarded as unsuitable for our study.

Subsequently, we needed to decide whether the quantitative analysis was going to be performed on the raw number of predicate tokens in the corpus. Two major issues have been outlined in the literature with respect to testing the Aspect and Discourse Hypotheses in oral narratives (Bardovi-Harlig 2000, 2002). One has to do with the variable length of the narratives. High counts of certain form/predicate coalitions in a narrative may not be the result of an individual's predilection for a given coalition but simply the side effect of a longer narrative.

The other issue is related to the characteristics of the narrative as a discourse type. Narrative discourse favours the use of telic predicates, which update the reference time (RT) and make the plot advance towards its resolution. As can be seen in Table 4 above, the range of predicates in the *Frog* stories in our corpus is clearly dominated by accomplishments and achievements. Once again, high counts of certain form/predicate coalitions may simply be the effect of an initial dominance of certain predicates in the narrative as discourse type.

Consequently, we opted for a conversion of the raw counts of predicate tokens into percentages. The percentages were calculated within, rather than across, predicate classes (Bardovi-Harlig 2000, 2002) to outweigh the dominance of telic predicates and the impact of the varying length of the narratives. Apart from having the advantage of not being influenced by the number of tokens in a predicate class, the within approach seems to provide a better insight into L2 competence than the across approach. According to Bardovi-Harlig (2000: 265), “(l)earners may be able to inflect accomplishments (in the simple past, our note) with the same regularity as they inflect achievements, but the across-category analysis will never reveal this unless the numbers of achievements and accomplishments are held constant”. Tables 6.5 and 6.6 illustrate how percentages vary from one approach to the other (the arrows indicate the direction of the calculation).

Group	Form	Predicate Class							
		ST		ACT		ACC		ACH	
		%	Total observed tokens	%	Total observed tokens	%	Total observed tokens	%	Total observed tokens
FRENGS n=12	PRES	55.56	65	21.6	27	27.87	17	34.2	66
	PROG	2.56	3	49.6	62	14.75	9	4.66	9
	PAST	39.32	46	14.4	18	50.82	31	54.4	105
	PPROG	0.85	1	14.4	18	0	0	0	0
	OTHER	1.71	2	0	0	6.56	4	6.74	13
		100	117	100	125	100	61	100	193

Table 6.5. Conversion of predicate tokens into percentages using the within predicate class approach (FRENGS data)

Group	Form	Predicate Class								Total predicate tokens
		ST		ACT		ACC		ACH		
		%	Total observed tokens	%	Total observed tokens	%	Total observed tokens	%	Total observed tokens	
FRENGS n = 12	PRES	37.14	65	15.43	27	9.71	17	37.71	66	175
	PROG	3.61	3	74.7	62	10.84	9	10.84	9	83
	PAST	23	46	9	18	15.5	31	52.5	105	200
	PPROG	5.26	1	94.74	18	0	0	0	0	19
	OTHER	10.53	2	0	0	21.05	4	68.42	13	19

Table 6.6. Conversion of predicate tokens into percentages using the across predicate class approach (FRENGS data)

Turning now to the statistical tools used in the present study, all frequency counts were carried out using the CHILDES subprogram CLAN (MacWhinney 1995). Non-parametric statistical tests were considered to fit the type of data in our corpus.

Non-parametric tests are applicable when the sample size is small and the distribution of the data in the sample is uneven, as is the case with our narrative corpus.

While previous research (Robinson 1990) relied on the chi-square test to establish the existence of form/predicate coalitions, this test was discarded in the present study. Two factors motivated this decision. First, the fact that the chi-square test is run on group totals. As already discussed, given the variation in the length of the narratives produced by the different individuals in each group, some individuals often contributed many more tokens of a given coalition than anyone in their group, with an “undue influence on the total for their group.” (Woods *et al.* 1986: 148). Moreover, one of the fundamental assumptions for the use of the chi-square test, namely the independence of the values inserted in the different cells, is clearly infringed by our data. The percentage rates established within a predicate class are inter-dependent – a predicate encoded in the progressive form is not encoded in the non-progressive form. Taking all this into consideration, it seemed to us that the chi-square test was not applicable to our data (see Comajoan 2001 for a similar position).

Instead, following a recent study by Muñoz and Gilabert (2011), all intra-group comparisons, for instance between PRES rates in ST, ACT, ACC and ACH or between PRES rates in FWD, SIDE and BACK moves, were performed using a Wilcoxon Signed Rank test. This is a non-parametric test used to compare the median difference between data that come from the same population, when the sample is not normally distributed. For inter-group comparisons, we used repeated non-parametric Mann-Whitney U tests. Non-parametric tests require fewer and weaker assumptions about the underlying distribution of the samples used in the study. Such tests are, hence, more appropriate to small groups and to data obtained by means of oral narratives, whose length varies from one individual to another inside the same group. Reference to the tests will be systematically made throughout the data analysis in the following chapters.

While every effort was made to preserve the statistical rigour of the quantitative analysis in our study, certain concessions had to be made to accommodate such methods to the relatively small size of the corpus used in this study. For inferential statistics to be efficient, larger samples than ours are required. Smaller samples run the risk of not reaching the threshold of statistical relevance not because the populations sampled from are not different but simply because there are not enough individuals in the groups.

Consequently, while the standard threshold for statistical relevance is established at .05, values between .05 and .1 were considered to be marginally relevant, pointing at tendencies in the use of certain forms which would hopefully become clear-cut patterns with additional data. In such cases, further corroboration of the findings was provided by means of percentage rates and/or proportion of individuals in a group using that form.

When a subset of the data was used, namely in chapter 9 (Encoding Complex Events in Advanced English L2. The Expression of Simultaneity), the significance threshold was raised to .1, and values ranging between .1 and .15 were considered to be marginally significant. According to Butler (1985), statistical levels depend on the practical consequences entailed by rejecting the null hypothesis (*i.e.*, there is no difference between the means of two populations with respect to the analysed language feature). A certain degree of leniency seems to be acceptable when what the researcher is looking for is, above all, “(...) evidence on which to decide whether further work may be useful” (71).

In the remaining chapters of this dissertation, we undertake a comprehensive analysis of the use of tense-aspect morphology in English L2 oral narratives by advanced EFLLs. We tap into the semantic and discourse factors shaping the distribution of verb forms in a picture book narrative such as the *Frog* story, in the hope to obtain more insight into how grammaticalised devices such as verb inflections are deployed in the expression of temporality by advanced EFLLs with Catalan and French as L1s.

As discussed in the present chapter, the analysis has required a qualitative preparation of the narrative material, *i.e.*, the distribution of the predicates into aspectual classes and the identification of the temporal moves, which, no matter how scrupulous and systematic, supposes a degree of subjectivity. Oral narratives constitute a complex “raw material” for L2 research and certain decisions had to be taken in ambiguous cases which may be debatable by other fellow researchers. We have tried to minimise the inherent subjectivity of our analysis by establishing a series of criteria, presented here and in chapters 4 and 5, criteria which we have applied systematically to our corpus. We have also tried to obtain, as much as possible, the validation of the analysis by a second

rater, even though it was not possible to have the corpus analysed in such a way in its entirety.

Another shortcoming of our study is the fact that it is based on a limited number of narratives. Working with groups of 12 subjects makes it difficult to claim that our findings can be generalised to the advanced Catalan and French EFLs as a population. Our analysis remains, for the time being, limited to the groups of learners who participated in the present study, in the hope that more data will be collected in the near future to corroborate our findings.

Despite all these limitations, we consider that the *Frog* story has proven to be an excellent task for our advanced learners and has allowed us to see the “language at work” in the domain of temporality and particularly of the expression of simultaneity. The analysis presented in the following chapters attempts to chart the domain of the Aspect and Discourse Hypotheses in the advanced learner variety and to scrutinize what lies beyond their limits.

Chapter 7: The Aspect Hypothesis in Advanced English L2

In the present chapter we test the reach of the Aspect Hypothesis (AH) in the oral narratives of four groups of advanced learners of English: two groups of French L1 learners (FRENGS and FRENGT) and two groups of Catalan L1 learners (CATENGS and CATENGT).¹ We analyse the distribution of four tense-aspect forms, the present (from now on PRES), the present progressive (from now on PROG), the simple past (from now on PAST) and the past progressive (from now on PPROG) in Vendler's (1967) four aspectual classes, *i.e.*, states, activities, accomplishments and achievements. The patterns found in English L2 are compared with those in the oral narratives of twelve English L1 speakers (ENG).

The objective of our analysis in this chapter is to see to what extent the coalitions between verb morphology and predicate type identified in the production of the different groups of learners in our corpus match the ones in the English L1 *Frog* stories. While certain prototypical coalitions such as those between PROG or PPROG and activities are believed to be strong both in English L1 and English L2, PRES and PAST inflections are expected to be more uniformly spread in the other predicate classes, both in native speaker and learner narratives. As discussed in chapter 2, the distribution of tense-aspect morphology in adult English L1 is less bound by the inherent semantics of the predicates than at the early stages of L1 acquisition. A similar flexibility in the use of tense-aspect morphology is expected in the production of the advanced English L2 learners in our corpus.

The chapter is divided into two parts. In section 7.1 we present the overall token and type distribution of the four verb forms (PRES, PROG, PAST, PPROG) within the four aspectual classes in each of the five groups mentioned above. In section 7.2, we discuss the distribution of the PRES, PROG, PAST and PPROG in relation to the aspectual classes both in English L1 and English L2. In the conclusion section of this chapter, we analyse how the form/predicate coalitions identified in advanced English L2 fit in with the developmental trends identified at earlier English L2 stages and to what extent the distributional patterns for certain forms in L2 may draw on prototypical coalitions of similar devices in Catalan and French L1.

¹ See learner profiles in chapter 6 (Research Methodology).

7.1 General results

7.1.1 Distribution of tense-aspect forms by group

As discussed in chapter 6 (Research Methodology), both a type and token count was performed with the predicates² in our corpus. Table 7.1 presents the total number of types and tokens produced by the four groups of learners and by the group of native speakers. An inter-group Mann-Whitney U test established statistically robust differences between FRENGS and FRENGT both in terms of the number of predicate types ($U = 26.5$, $z = -2.634$, $p = .008$) and the number of predicate tokens ($U = 24.5$, $z = -2.44$, $p = .006$) produced. The French L1 professors produce a bigger and lexically wider variety of predicate types in English L2 narratives than the French L1 students. Statistically robust differences also exist between the two Catalan L1 English L2 groups both in terms of the number of predicate types ($U = 37$, $z = -2.032$, $p = .042$) and the number of predicate tokens ($U = 31$, $z = -2.37$, $p = .018$) produced. Just like their French L1 counterparts, the Catalan L1 professors in our corpus produce more and lexically more diverse predicate types in English L2 than the Catalan L1 students.

Group	Predicate Types	Predicate Tokens
FRENGS	318	496
FRENGT	404	657
CATENGs	251	379
CATENGt	312	539
ENG	387	556
TOTAL	1672	2627

Table 7.1. Types and tokens produced in English L1 and English L2

When compared with the native speakers, CATENGs are robustly different from ENG both in terms of predicate types ($U = 9$, $z = -3.646$, $p = .000$) and predicate tokens

² Aspectual predicates of the type *start*, *continue* or and periphrastical constructions with *try (to)* and *decide (to)* have not been included in the analysis. We considered that, with these constructs, the inherent semantic properties were not clearly attributable to the inflected verb. Unlike Bardovi-Harlig (2000) and Comajoan (2001), high-frequency stative predicates such as *be* and *have* have been included in the type/token count. This was done to allow for a homogeneous analysis of the Aspect and Discourse Hypotheses on roughly the same set of predicates (see chapter 8) and, also, to maximise the opportunities to detect non-prototypical coalitions within this class of predicates (particularly between the progressive form and highly static predicates like *be*).

($U = 21.5$, $z = -2.921$, $p = .003$). In other words, CATENGS produce a smaller and lexically more limited predicate range than ENG. FRENGS, on the other hand, differ from ENG only with respect to the number of predicate types produced ($U = 30.5$, $z = -2.405$, $p = .016$), no statistically significant difference existing between the two groups in terms of predicate tokens. It seems that, while different from ENG with respect to the lexical range, the narratives of FRENGS are comparable in terms of the overall number of predicate tokens to those produced in English L1.

In the case of the professors, the picture is more complex. No significant difference exists between FRENGT and ENG in terms of predicate types, but a marginally significant difference was established with respect to the total number of predicate tokens ($U = 41.5$, $z = -1.765$, $p = .078$).³ The French L1 professors produce relatively more predicate tokens than the English native speakers in our study, but are comparable to the latter in terms of the lexical variety of the predicates produced. In the case of the Catalan L1 English L2 professors, they produce a similar amount of predicate tokens to that of ENG, but differ from the latter in terms of the total number of predicate types ($U = 34$, $z = -2.208$, $p = .027$). While comparable in the overall number of predicate tokens, the narratives of CATENGT are lexically less varied than the narratives of ENG with respect to predicates.

The boxplots in Figures 7.1 and 7.2 below present a close-up of the intra-group distribution of predicate tokens and types. They give an indication of the degree of dispersion in each of the five groups – the box represents the middle range of values produced by each group and the whiskers indicate the maximum and minimum values in the groups.⁴ One of the specificities of working with the *Frog* story is that different individuals can be more or less prolific narrators. The type/token scores of a very prolific narrator in one group can totally alter the overall type/token values of this group. Consequently, as discussed in chapter 6, intra-group variability of type/token values needs to be carefully controlled and the boxplot allows for an overview of the dispersion of values within the five groups in our study.

³ Given the reduced size of our sample, values between .05 and .1 are considered marginally significant in the present study. See chapter 6 for a discussion.

⁴ The numbered circles in the boxplot represent outliers with respect to the rest of the groups. The presence of outliers indicates that the population we sampled from is not normally distributed.

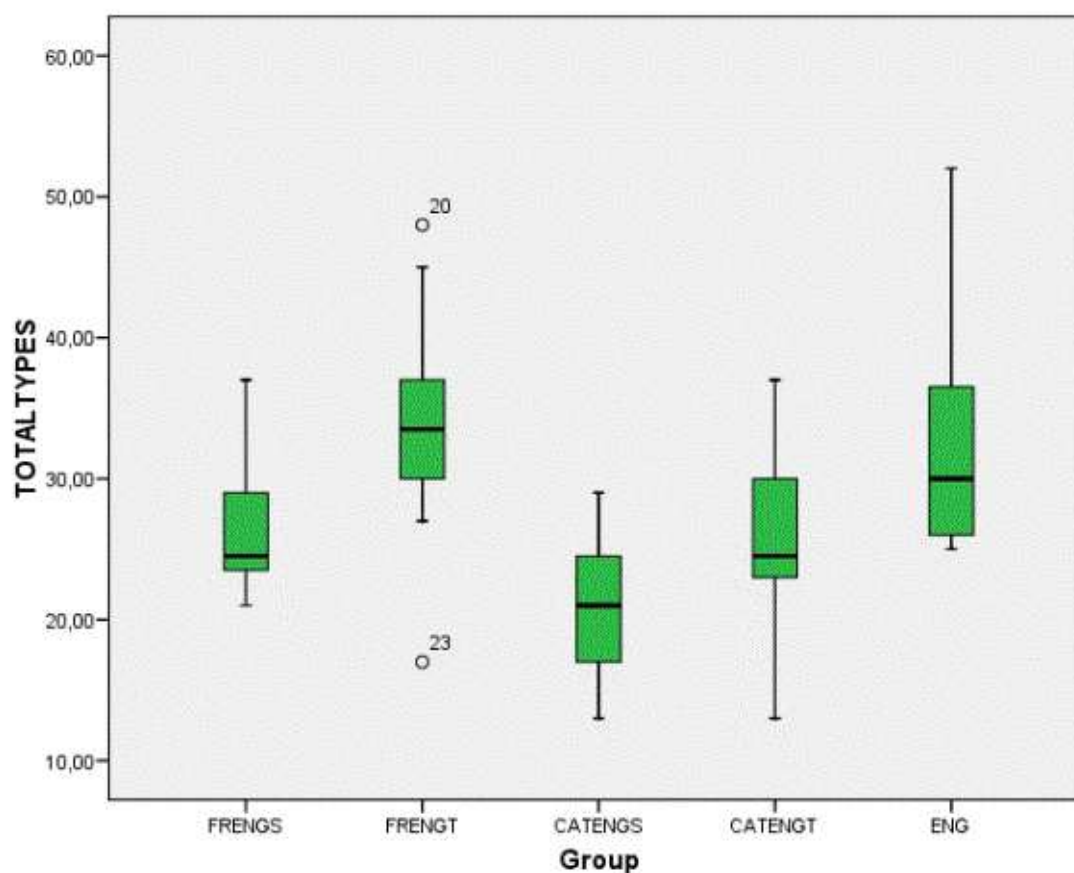


Figure 7.1. Distribution of predicate types in FRENGS, FRENGT, CATENGS, CATENGT and ENG

The amount of predicate types and predicate tokens distinguishes between the learner groups in our study, but it is not a measure of nativelikeness. The most proficient groups, FRENGT and CATENGT, are either more prolific in terms of predicate tokens or produce a smaller variety of predicate types than ENG. This indicates that other, non-linguistic factors like the readiness of the speaker to carry out the task at a given time need to be taken into account when interpreting type/token counts, particularly in native speaker production. Nevertheless, the amount of predicate types/tokens seems to distinguish between the learner groups in our study – the more proficient groups produce more tokens and a wider lexical range of predicates the less proficient groups.

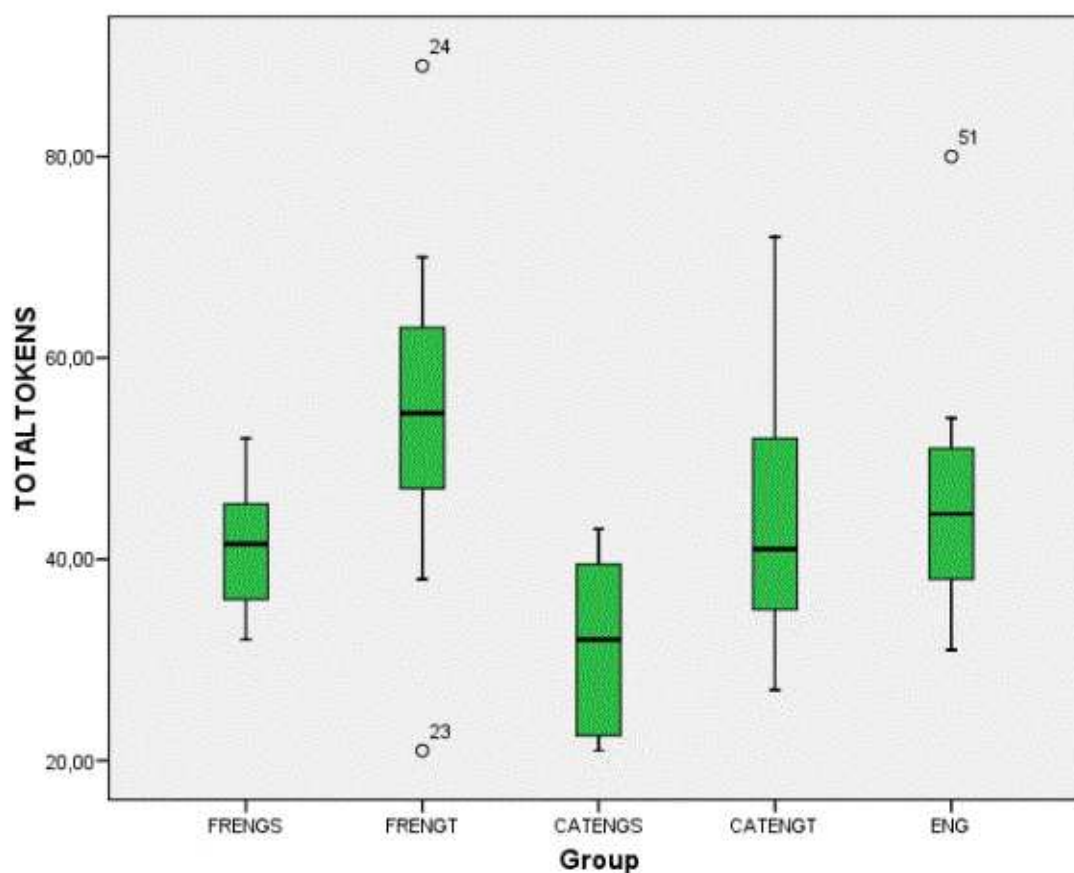


Figure 7.2. Distribution of predicate tokens in FRENGS, FRENGT, CATENGS, CATENGT and ENG

7.1.2 Distribution of tense-aspect forms within aspectual classes

Following Bardovi-Harlig (1998, 2000), the analysis presented here is based on a token count. While a type approach controls for repeated uses of a predicate in the corpus, it does not allow the researcher to analyse the distribution of the tense-aspect forms with respect to the structure of the narrative. The token approach allows us to perform an integrated analysis of both the Aspect and Discourse Hypotheses, facilitating the comparison between the findings.⁵

In this section, we look at the distribution of the tense-aspect forms (PRES PROG, PAST, and PPROG) within the four aspectual classes, states (ST), activities (ACT), accomplishments (ACC), and achievements (ACH) in each of the five groups. Following Bardovi-Harlig (2000), raw figures were converted into percentages using a

⁵ Detailed group figures for both token and type counts are available in Appendix 4.

within-category approach (see chapter 6 for discussion of this approach). This allowed us to control for unbalanced use of aspectual classes in the narrative. The narrative as a type of discourse favours telic predicates (ACC and ACH), which have a plot-advancing function, at the expense of the other aspectual classes (ACT and ST). The within-category analysis is not sensitive to this type of distributional skewing.

Table 7.2 below contains two types of information: the number of PRES, PROG, PAST and PPROG tokens observed in each aspectual class and the group means calculated for each verb form by means of the within-category approach (indicated by the downward arrow). Group means were preferred to direct conversion of the tokens into percentages in order to control for excessive weight of some individuals in the groups (indicated by the broken arrow).⁶ Group medians, typically used in correlation with non-parametric tests to control for group outliers, were discarded because they are not sensitive to less prototypical coalitions in the domain of tense-aspect morphology. Group medians seize the dominant form/predicate mappings in the group and ignore the more marginal phenomena, whereas it is precisely these phenomena which indicate a flexible use of tense-aspect morphology within each predicate class.⁷ The distribution of the tense-aspect forms within each aspectual class will be discussed in sections 7.2 and 7.3 of this chapter.

7.2 The Distribution of Present Tense-Aspect Morphology

In this section we will deal with the distribution of the PRES and the PROG within states, activities, accomplishments and achievements in English L2 and English L1 narratives. For English L2, the discussion will be based exclusively on the data from FRENGS and FRENGT, given that these groups are the ones who anchor their stories in the present (7 out of 12 FRENGS and 10 out of 12 FRENGT). Data regarding these two forms in the Catalan L1 English L2 narratives was considered to be insufficient for a conclusive analysis (only 3 CATENGs and 4 CATENGt produce present-based narratives). The distribution of the verb forms will be discussed at group level first and then analysed in the light of an inter-group comparison.

⁶ More details about how the group means were obtained are given in Appendix 4.

⁷ These considerations apply to all the data analysis in this dissertation.

Group	Form	Aspectual class							
		ST		ACT		ACC		ACH	
		% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens
FRENGS <i>n</i> =12	PRES	52.65	65	18.76	27	34.17	17	39.08	66
	PROG	2.08	3	43.08	62	19.31	9	4.76	9
	PAST	42.6	46	18.64	18	39.86	31	49.78	105
	PPROG	1.04	1	19.52	18	0	0	0	0
	OTHER	1.62	2	0	0	6.67	4	6.38	13
		(100)	(117)	(100)	(125)	(100)	(61)	(100)	(193)
		ST		ACT		ACC		ACH	
FRENGT <i>n</i> =12	PRES	74.28	102	43.99	77	61.13	50	57.47	112
	PROG	4.31	9	38.75	82	10.95	7	4.15	9
	PAST	19.07	53	10.41	16	17.37	22	20.88	53
	PPROG	0	0	5.59	9	0	0	0	0
	OTHER	2.34	6	1.26	3	10.55	9	17.49	38
		(100)	(170)	(100)	(187)	(100)	(88)	(100)	(212)
		ST		ACT		ACC		ACH	
CATENGS <i>n</i> =12	PRES	22.22	12	18.33	19	20.57	13	24.56	34
	PROG	1.04	1	8.52	7	4.17	2	0.69	1
	PAST	70.21	61	35.53	25	69.91	45	69.32	110
	PPROG	3.82	2	34.7	30	5.36	3	0.64	1
	OTHER	2.71	1	2.92	2	0	0	4.79	9
		(100)	(77)	(100)	(83)	(100)	(63)	(100)	(155)
		ST		ACT		ACC		ACH	
CATENGT <i>n</i> =12	PRES	31.48	22	22.23	16	30.99	20	29.69	59
	PROG	0	0	9.58	7	1.19	1	0.88	2
	PAST	67.74	112	26.98	39	53.72	68	61.9	107
	PPROG	0.78	2	39.89	55	8.74	9	0	0
	OTHER	0	0	1.32	2	5.36	6	7.53	12
		(100)	(136)	(100)	(119)	(100)	(104)	(100)	(180)
		ST		ACT		ACC		ACH	
ENG <i>n</i> =12	PRES	78.7	88	46.04	69	65.97	61	64.61	132
	PROG	2.06	3	30.74	47	11.57	12	2.16	5
	PAST	19.25	20	13.34	17	20.58	18	28.06	59
	PPROG	0	0	9.82	13	0	0	0.83	1
	OTHER	0	0	0	0	1.88	2	4.33	9
		(100)	(111)	(100)	(146)	(100)	(93)	(100)	(206)

Table 7.2.. Distribution of tense-aspect forms within aspectual classes by group (group means)

7.2.1 The Simple Present (PRES)

7.2.1.1. FRENGS

The four aspectual classes show different rates of PRES – the highest rates are to be found in states (52.65%, 65 tokens), followed by achievements and accomplishments

(39.08%, 66 tokens and 34.17%, 17 tokens respectively). Activities show the lowest occurrence of PRES of the four aspectual classes (18.76%, 27 tokens). A Wilcoxon signed rank test was used to contrast PRES rates in states (ST), activities (ACT), accomplishments (ACC) and achievements (ACH) in FRENGS (Muñoz and Gilabert 2011).⁸ The results of the Wilcoxon signed ranks test are presented in Table 7.3 (significant values underlined) and the overall distribution of the PRES in the production of FRENGS is illustrated in Figure 7.3.

	ACTTO - STTO	ACCTO - STTO	ACHTO - STTO	ACCTO - ACTTO	ACHTO - ACTTO	ACHTO - ACCTO
Z	-2.666(a)	-2.103(a)	-2.075(a)	-2.524(b)	-2.100(b)	-.736(b)
Asymp. Sig. (2-tailed)	<u>.008</u>	<u>.035</u>	<u>.038</u>	<u>.012</u>	<u>.036</u>	.462

- a Based on positive ranks.
- b Based on negative ranks.
- c Wilcoxon Signed Ranks Test

Table 7.3. Differences between PRES rates within aspectual classes (Tokens) – FRENGS

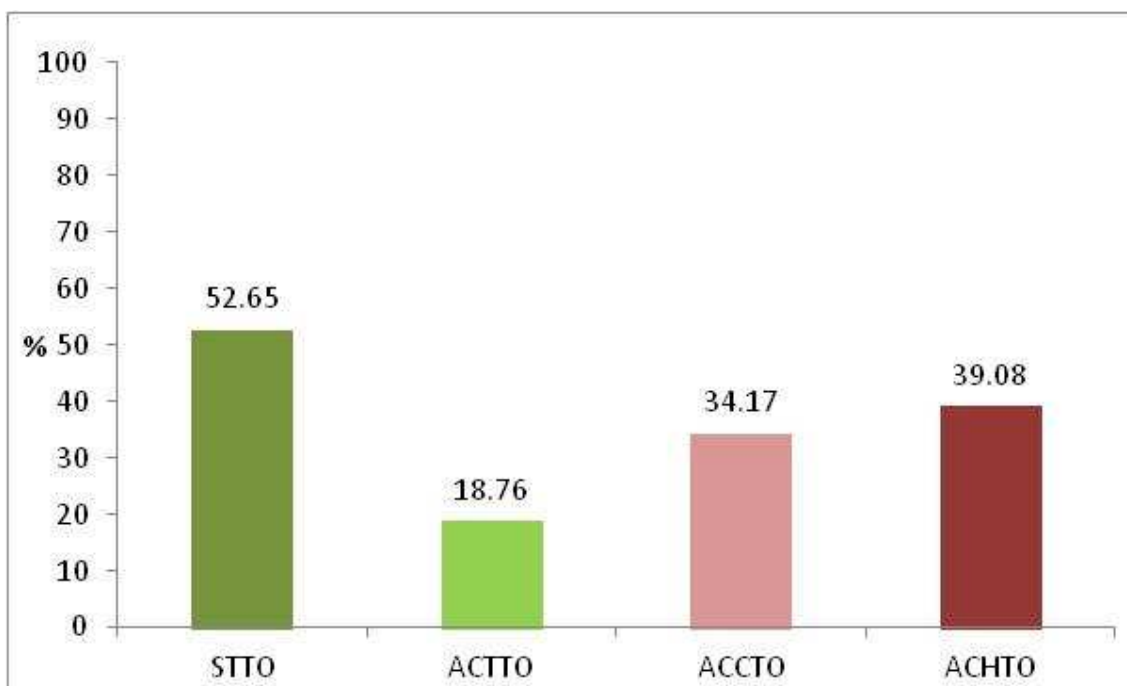


Figure 7.3. Distribution of PRES within aspectual classes (Tokens) - FRENGS

A statistically robust influence of the [+/- dynamic] feature on the distribution of

⁸ All non-parametric tests were run on the percentage rates established within each aspectual class (see Table 7.2 above) for tokens. Raw figures do not have the same weight from one individual to another in the same group. Let us suppose that one individual produced 5 tokens of activities in PROG (*i.e.*, 50%) and 10 tokens of activities in all (*i.e.*, 100%). This 5 would have weighed differently (*i.e.*, 25%) if the individual had produced 20 tokens of activities in all. Percentages were, therefore, considered to balance out the disparity in narrative length both at intra- and inter-group level.

the PRES form was established in the FRENGS data – the rate of PRES in states is significantly higher than in any of the other aspectual classes. The [+/- telic] feature is also a conditioning factor in the distribution of the PRES. A robust difference exists between PRES activities and all the other aspectual classes. This finding is not surprising – states, accomplishments and achievements experience weaker competition from other verb forms, namely the PROG and the PPROG, whereas competition from these forms is stronger in activities. No significant difference was found between the two types of telic predicates – accomplishments and achievements pattern similarly in the PRES in the oral narratives of FRENGS.

7.2.1.2. FRENGT

The four aspectual classes show different rates of PRES in the oral narratives of FRENGT. The overall pattern is similar to that in FRENGS, *i.e.*, the coalition remains strongest in states (74.28%, 102 tokens), followed by accomplishments and achievements (61.13%, 50 tokens and 57.47%, 112 tokens respectively), and is weakest in activities (43.99%, 77 tokens). The results of the Wilcoxon signed ranks test are presented in Table 7.4 (significant values underlined) and the overall distribution of the PRES form in FRENGT is illustrated in Figure 7.4 below.

	ACTTO - STTO	ACCTO - STTO	ACHTO - STTO	ACCTO - ACTTO	ACHTO - ACTTO	ACHTO - ACCTO
Z	-2.805(a)	-2.191(a)	-2.599(a)	-2.934(b)	-1.274(b)	-.459(a)
Asymp. Sig. (2-tailed)	<u>.005</u>	<u>.028</u>	<u>.009</u>	<u>.003</u>	.203	.646

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 7.4 Differences between PRES rates within aspectual classes (Tokens) – FRENGT

Similar to what was observed with FRENGS, a statistically robust influence of the [+/- dynamic] feature on the distribution of the PRES form was established in the FRENGT data – PRES states are significantly more numerous than any of the other aspectual classes. This is due to the distributional restrictions existing with states in English and the minimal competition from other verb forms, particularly PROG and PPROG, in this class of predicates.

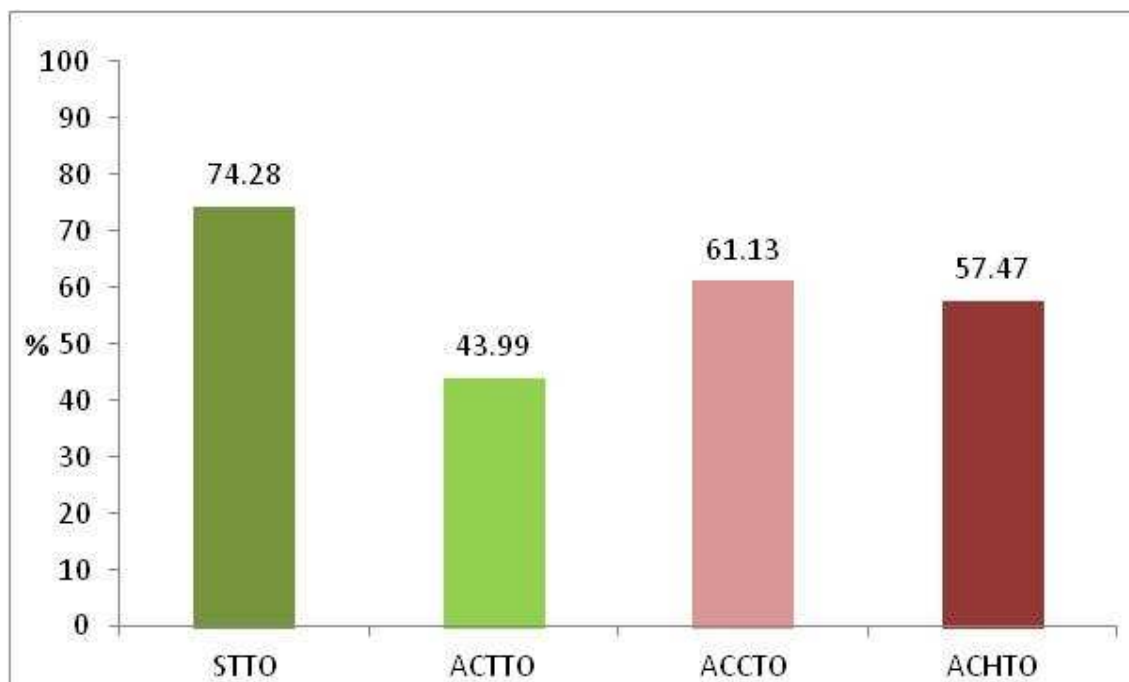


Figure 7.4. Distribution of PRES within aspectual classes (Tokens) – FREN GT

With respect to the influence of the [+/- telic] feature, while the general tendency is to have more PRES in telic predicates and less PRES in dynamic atelic predicates (a statistically significant difference was established between PRES activities and accomplishments), no statistically significant difference was identified between activities and achievements. We believe that this is due to the fact that, with FREN GT, competition from other forms, particularly the PROG and the PPROG, in the activities class seems to become weaker than in FREN GS, leading to a higher percentage of activity predicates encoded in the PRES. On the basis of the intra-group analysis, the French L1 professors appear to make a more grammaticalised use of PRES than the French L1 students, showing a more uniform spread of the PRES form in the four predicate classes.

7.2.1.3 ENG

In the oral narratives of ENG, the rate of PRES is highest in states (78.70%, 88 tokens), followed closely by accomplishments and achievements (65.97%, 61 tokens and 64.61%, 132 tokens respectively), and is lowest in activities (46.04%, 69 tokens). The results of the Wilcoxon signed ranks test are presented in Table 7.5 below

(significant values underlined) and the overall distribution of PRES is shown in Figure 7.5.

	ACTTO – STTO	ACCTO – STTO	ACHTO – STTO	ACCTO – ACTTO	ACHTO – ACTTO	ACHTO – ACCTO
Z	-2.803(a)	-2.201(a)	-2.429(a)	-2.497(b)	-2.429(b)	-.178(a)
Asymp. Sig. (2-tailed)	<u>.005</u>	<u>.028</u>	<u>.015</u>	<u>.013</u>	<u>.015</u>	.859

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 7.5. Differences between PRES rates within aspectual classes (Tokens) – ENG

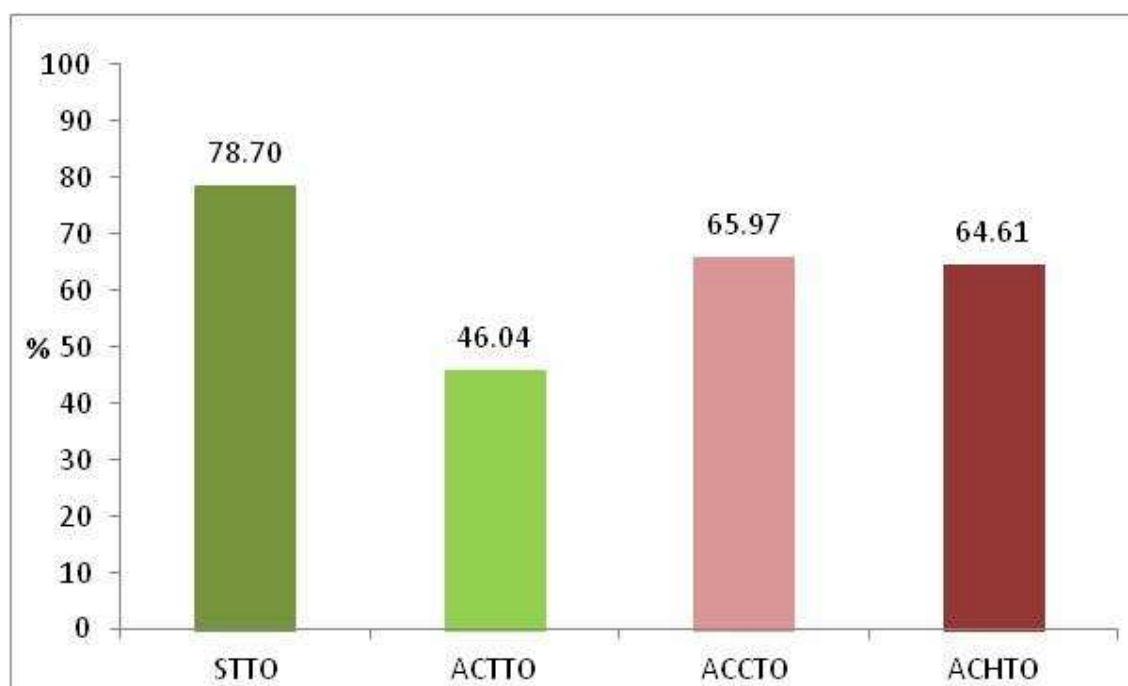


Figure 7.5. Distribution of PRES within aspectual classes (Tokens) – ENG

A statistically robust influence on the distribution of the PRES form was identified both for the [+/- dynamic] feature and the [+/- telic] feature. The PRES is significantly more frequent in states than in any of the other aspectual classes. As expected, states experience limited competition from other forms, particularly the PROG and the PPROG, which leads to a higher percentage of PRES tokens in this class. The [+/- telic] feature has an equally conditioning effect on the distribution of the PRES form: the PRES is significantly less frequent in dynamic atelic predicates (activities) than in dynamic telic ones (accomplishments and achievements). Accomplishments and achievements were once again found to pattern similarly in the PRES.

7.2.1.4 Inter-group comparison

Repeated Mann-Whitney U tests established significant differences between FRENGS and ENG with respect to the rates of PRES in activities ($U = 30$, $z = -2.444$, $p = .015$) and accomplishments ($U = 3.5$, $z = -2.189$, $p = .029$), a marginally significant difference for PRES in states ($U = 39$; $z = -1.951$, $p = .051$) and no difference with respect to the rate of PRES in achievements. No significant differences were detected between FRENGT and the native speakers. The comparison between the learner groups (FRENGS and FRENGT) established marginally significant differences with respect to the rate of PRES in activities ($U = 41$, $z = -1.804$, $p = .071$) and accomplishments ($U = 40$; $z = -1.862$, $p = .063$) and no differences in the other classes.

The coalition between the PRES form and [- punctual] [+ dynamic] predicates (activities and accomplishments) is an area of discrepancy between the less proficient French L1 learners and the English native speakers in our study and a potential criterion for distinguishing between the two advanced learner groups. PRES activities are more common in the oral narratives of ENG (46.04%; 69 tokens) and FRENGT (43.99%; 77 tokens) than in the production of FRENGS (18.27%; 27 tokens). The boxplots in Figure 7.6 below show a clear difference between the dispersion of PRES activities in ENG and FRENGS – the middle range of PRES rates produced by ENG spans from 30 to 70% (the length of the box) of the total activity predicates produced by this group, whereas in the case of FRENGS it spans from 0 to 30%. In the case of FRENGT, the dispersion of the PRES rates is bigger than in both ENG and FRENGS (from 10 to 70%), with 5 out of the 12 professors producing more than 60% of the activity predicates in the PRES. However, 4 of the 12 professors produce low rates of PRES in activities (less than 20%), which is probably why only a marginally significant difference can be established between this group and FRENGS.

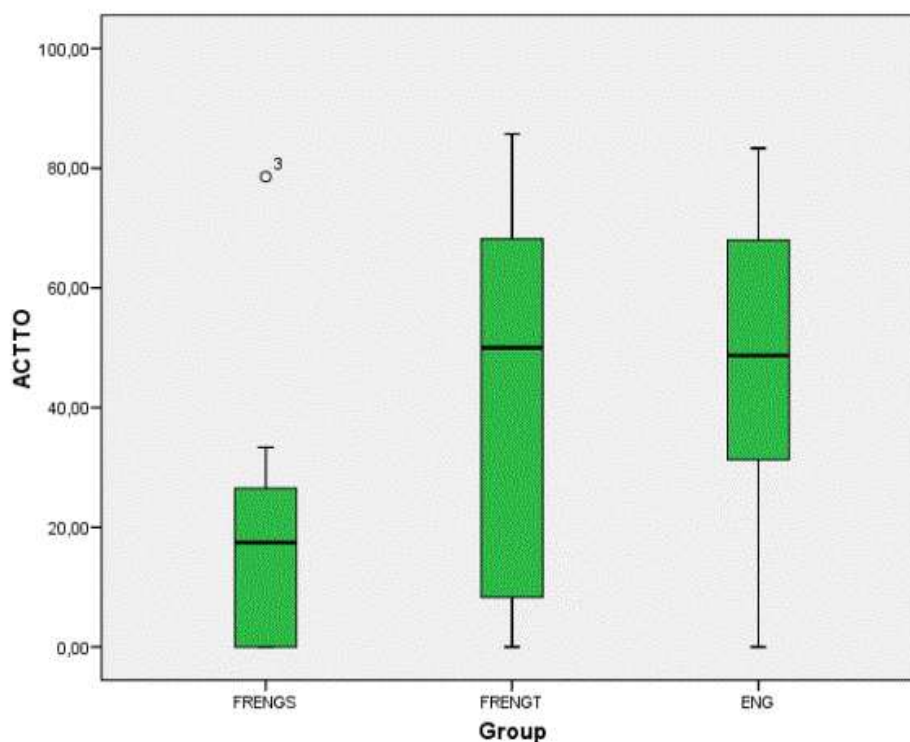


Figure 7.6. Distribution of PRES activities in FRENG, FRENGT and ENG

PRES accomplishments are also more numerous in ENG narratives (65.97%; 61 tokens) and in FRENGT narratives (61.13%; 50 tokens) than in FRENGS (34.15%; 17 tokens). The boxplot in Figure 7.7 below shows a similar spread to that in Figure 7.6 above. There is a clear difference between the spread of PRES accomplishments in ENG and FRENGS – the middle range of PRES rates produced by ENG spans from 50 to 90% (the length of the box), whereas in the case of FRENGS it spans from 0 to 50%. In the case of FRENGT, the dispersion of the PRES rates is bigger than in both ENG and FRENGS (from 30 to 90%). The professors are once again split between high producers of PRES accomplishments (8 out of 12 professors encode more than 60% of the total accomplishments in the PRES) and low producers (the remaining 4 produce rates of less than 40%).

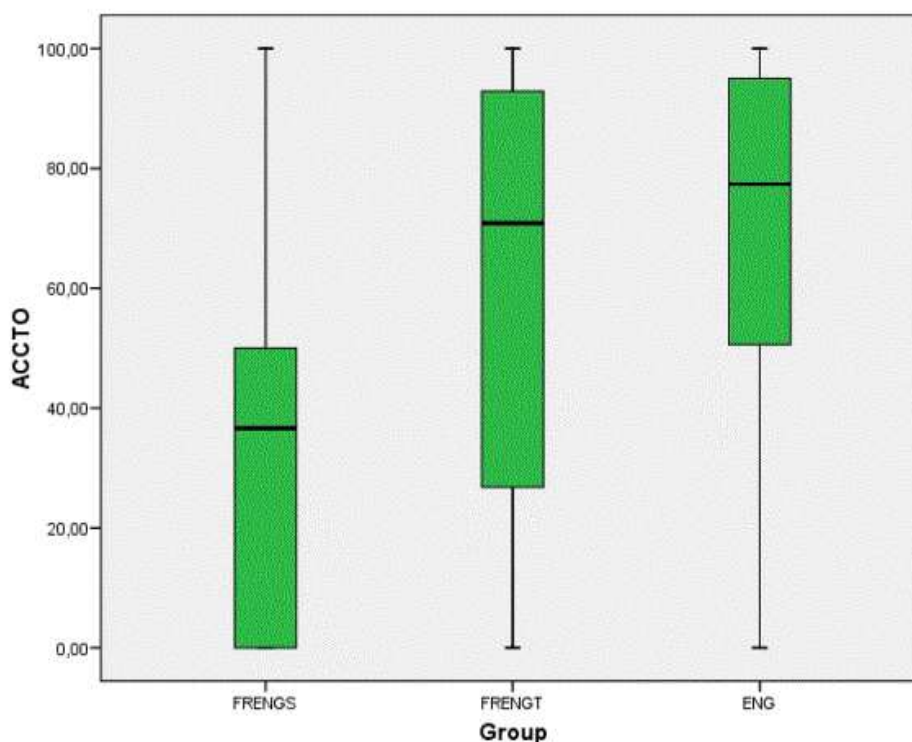


Figure 7.7. Distribution of PRES accomplishments in FRENGS, FRENGT and ENG

7.2.1.5 Main points regarding the distribution of the PRES form in English L1 and English L2

The distribution of the PRES form is skewed with respect to the inherent semantic properties of the predicates. The PRES form is sensitive to the [+/- dynamic] feature of the predicates both in English L1 and English L2. The PRES rates are robustly higher in states than in any of the other aspectual classes, both in learner and native speaker narratives.

The distribution of the PRES form is also sensitive to the [+/- telic] feature - the PRES is clearly a less prototypical coalition for activities when compared to telic predicates (accomplishments and achievements) both in English L1 and English L2. Nevertheless, native speakers of English are less reluctant to pair the PRES with [- punctual] [+ dynamic] predicates (activities and accomplishments) than the French L1 students. The French L1 professors behave natively with respect to the distribution of the PRES in activities and accomplishments. Nevertheless, intra-group variation does not allow us to robustly establish an L2 proficiency-related trait.

7.2.2 The Progressive (PROG)

7.2.2.1 FRENGS

In line with the predictions of the AH, the PROG patterns differently within the different aspectual classes – the highest rate of PROG is to be found in activities (43.08%, 62 tokens), followed by accomplishments (19.31%, 9 tokens) and is weakest with achievements (4.76%, 9 tokens) and states (2.08%, 3 tokens). The results of the Wilcoxon signed ranks test are presented in Table 7.6 (significant values underlined) and the overall distribution of the PRES form is shown in Figure 7.8.

	ACTTOPROG - STTOPROG	ACCTOPRO G - STTOPROG	ACHTOPRO G - STTOPROG	ACCTOPRO G - ACTTOPROG	ACHTOPRO G - ACTTOPROG	ACHTOPROG - ACCTOPROG
Z	-2.524(a)	-2.032(a)	-.921(a)	-2.521(b)	-2.524(b)	-1.992(b)
Asymp. Sig. (2- tailed)	<u>.012</u>	<u>.042</u>	.357	<u>.012</u>	<u>.012</u>	<u>.046</u>

- a Based on negative ranks.
- b Based on positive ranks.
- c Wilcoxon Signed Ranks Test

Table 7.6. Differences between PROG rates within aspectual classes (Tokens) – FRENGS

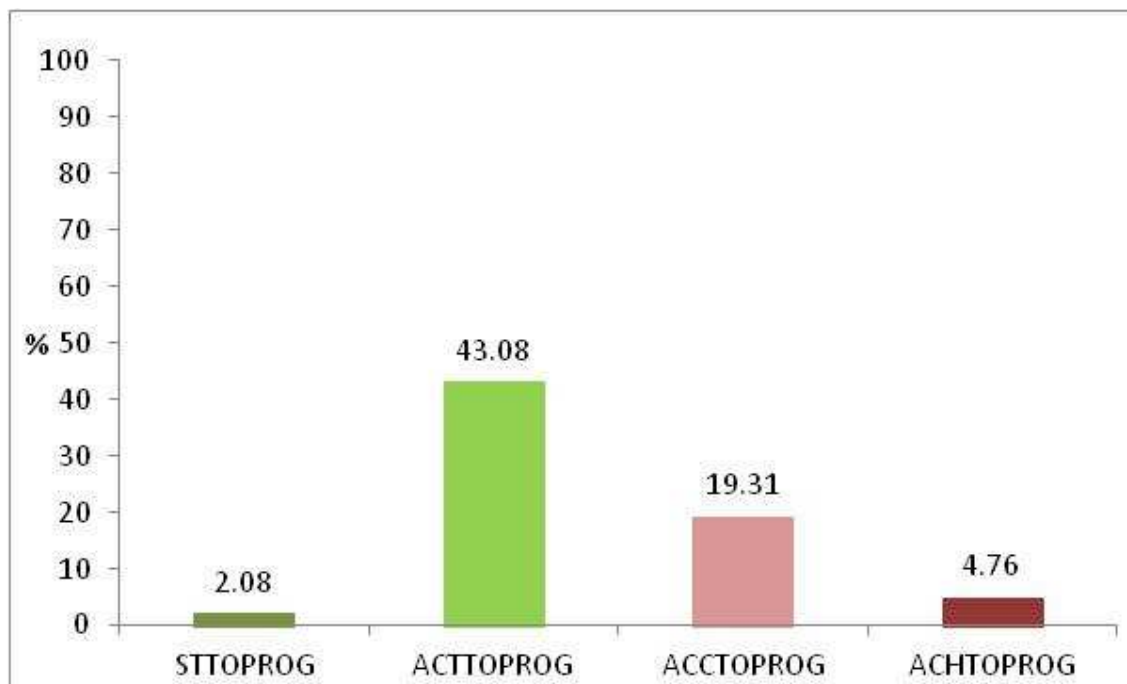


Figure 7.8. Distribution of PROG within aspectual classes (Tokens) – FRENGS

Statistically relevant differences were identified between activities and all the other semantic classes in the production of FRENCS. Accomplishment predicates are also more often encoded in the PROG than achievements, whereas no statistically relevant difference was established between states and achievements. The distribution of the PROG form appears to be conditioned both by the [+/- telic] semantic division and by the [+/- punctual] one, but durativity takes precedence over atelicity – the PROG can be used with telic predicates when they are [- punctual]. The French L1 English L2 students show an overall predilection for pairing the PROG with activities and accomplishments but a clear skewing with respect to [- punctual] [- telic] predicates (activities). This is in line with the predictions of the AH and accounts for the lower rates of other tense-aspect forms, particularly the PRES, in activities.

7.2.2.2 FRENGT

The distribution of the PROG form in the oral narratives of FRENST is clearly skewed with respect to the inherent semantic properties of the predicates. The strongest coalition is between the PROG and activities (38.75%, 82 tokens of activity predicates are encoded in the PROG), while weaker coalitions were found within the other aspectual classes: only 10.95% (7 tokens) of accomplishments are encoded in PROG, 4.15% (9 tokens) of achievements and 4.31% (9 tokens) of states. The Wilcoxon signed ranks test established statistically relevant differences between activities and all the other predicate classes, whereas no such differences exist between states and telic predicates, nor between telic predicates, as can be seen in Table 7.7 (statistically significant values underlined). The overall distribution of the PROG is illustrated in Figure 7.9 below.

	ACTTOPROG - STTOPROG	ACCTOPRO G - STTOPROG	ACHTOPRO G - STTOPROG	ACCTOPRO G - ACTTOPROG	ACHTOPRO G - ACTTOPROG	ACHTOPROG - ACCTOPROG
Z	-2.936(a)	-1.153(a)	.000(b)	-2.934(c)	-2.934(c)	-.943(c)
Asymp . Sig. (2- tailed)	<u>.003</u>	.249	1.000	<u>.003</u>	<u>.003</u>	.345

a Based on negative ranks.

b The sum of negative ranks equals the sum of positive ranks.

c Based on positive ranks.

d Wilcoxon Signed Ranks Test

Table 7.7. Differences between PROG rates within aspectual classes (Tokens) – FRENST

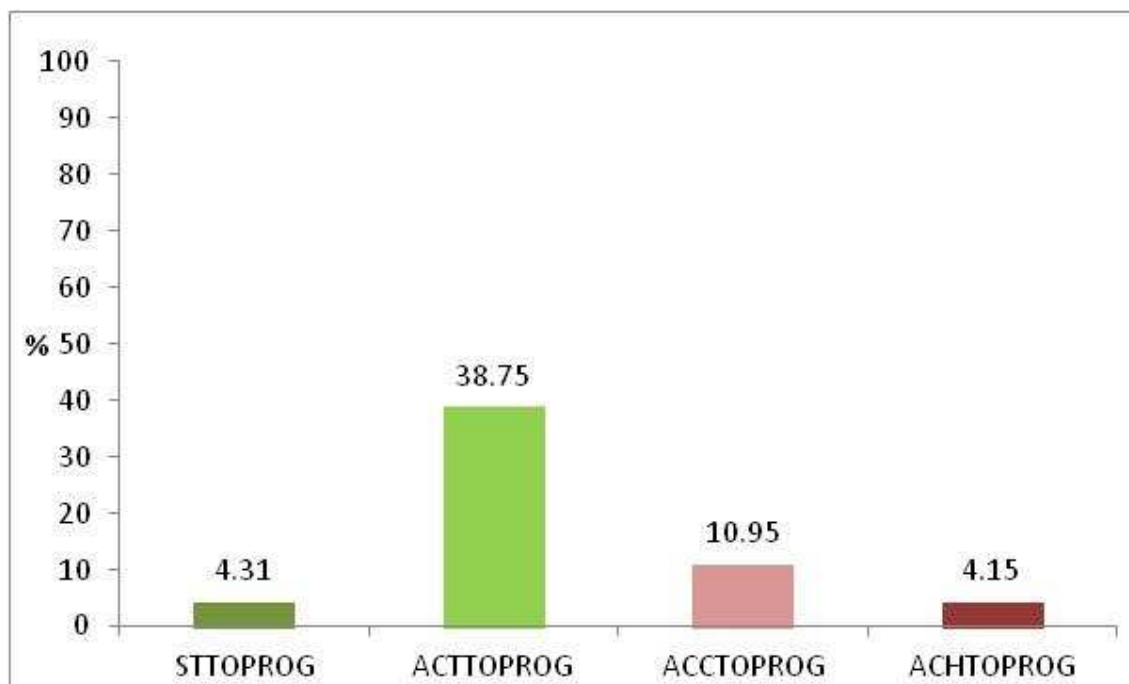


Figure 7.9. Distribution of PROG within aspectual classes (Tokens) – FRENGT

While the overall pattern is similar to that in FRENGL, *i.e.*, the highest rate of PROG is to be found in activities, atelicity seems to consolidate as a conditioning factor in the distribution of the PROG form, more than durativity. The presence of the PROG form strengthens in activities in the English L2 narratives produced by the French L1 professors, whereas PROG accomplishments and PROG achievements no longer pattern differently from one another (in spite of the apparent divergence in percentage rates). This is due to competition from the PRES within these two categories.

7.2.2.3 ENG

The distribution of the PROG form in the oral narratives of ENG is skewed with respect to the inherent semantic properties of the predicates, in line with the Distributional Bias Hypothesis. The highest rate of PROG is to be found in activities (30.79%, 47 tokens) and decreases in accomplishments (11.57%, 12 tokens) to reach minimal values in achievements and states (2.16%, 5 tokens and 2.06%, 3 tokens respectively). Statistically relevant differences were established between activities and all the other predicate classes, as well as between accomplishments and all the other classes. No statistically relevant difference was established between states and achievements in the PROG, as can be seen in Table 7.8 below (statistically significant

values underlined). The overall distribution of the PROG is illustrated in Figure 7.10.

	ACTTOPROG - STTOPROG	ACCTOPRO G - STTOPROG	ACHTOPRO G - STTOPROG	ACCTOPRO G - ACTTOPROG	ACHTOPRO G - ACTTOPROG	ACHTOPROG - ACCTOPROG
Z	-2.805(a)	-2.201(a)	-.365(a)	-2.807(b)	-2.805(b)	-2.201(b)
Asymp. Sig. (2- tailed)	<u>.005</u>	<u>.028</u>	.715	<u>.005</u>	<u>.005</u>	<u>.028</u>

- a Based on negative ranks.
- b Based on positive ranks.
- c Wilcoxon Signed Ranks Test

Table 7.8. Differences between PROG rates within aspectual classes (Tokens) – ENG

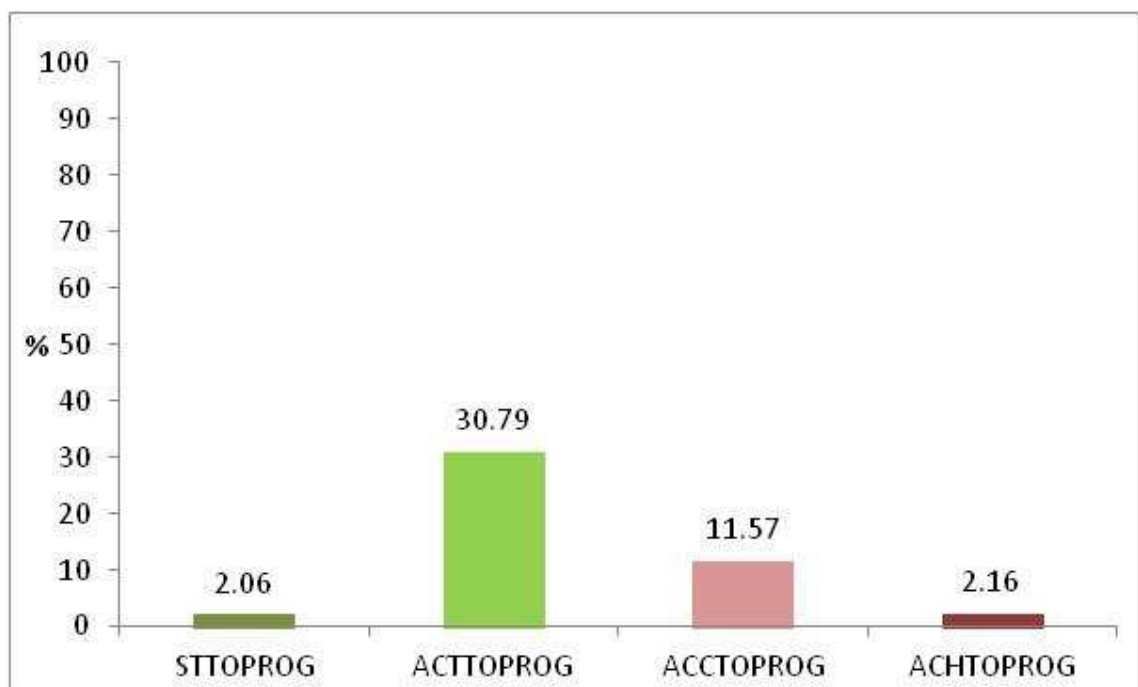


Figure 7.10. Distribution of PROG within aspectual classes (Tokens) – ENG

The semantic division [+/- dynamic] is not relevant for the distribution of the PROG form – states and achievements pattern similarly in the progressive and seldom take this form in English L1. The semantic features [- punctual] and [- telic] seem to be equally relevant for the distribution of the PROG form in the English L1 narratives - according to the results from the Wilcoxon signed ranks test, English native speakers use the PROG form mainly with durative atelic predicates (activities) and with durative telic predicates (accomplishments).

7.2.2.4 Inter-group comparison

Repeated Mann-Whitney U tests detected no significant differences in the rates of PROG between FRENGS and ENG, nor between FRENGT and ENG. Moreover, no significant differences were established between the two learner groups. The distribution of the PROG seems to be similarly skewed in English L1 and English L2 in our corpus. However, a closer look at the intra-group distribution of the PROG in activities and accomplishments reveals different group patterns, even though in need of statistical validation.

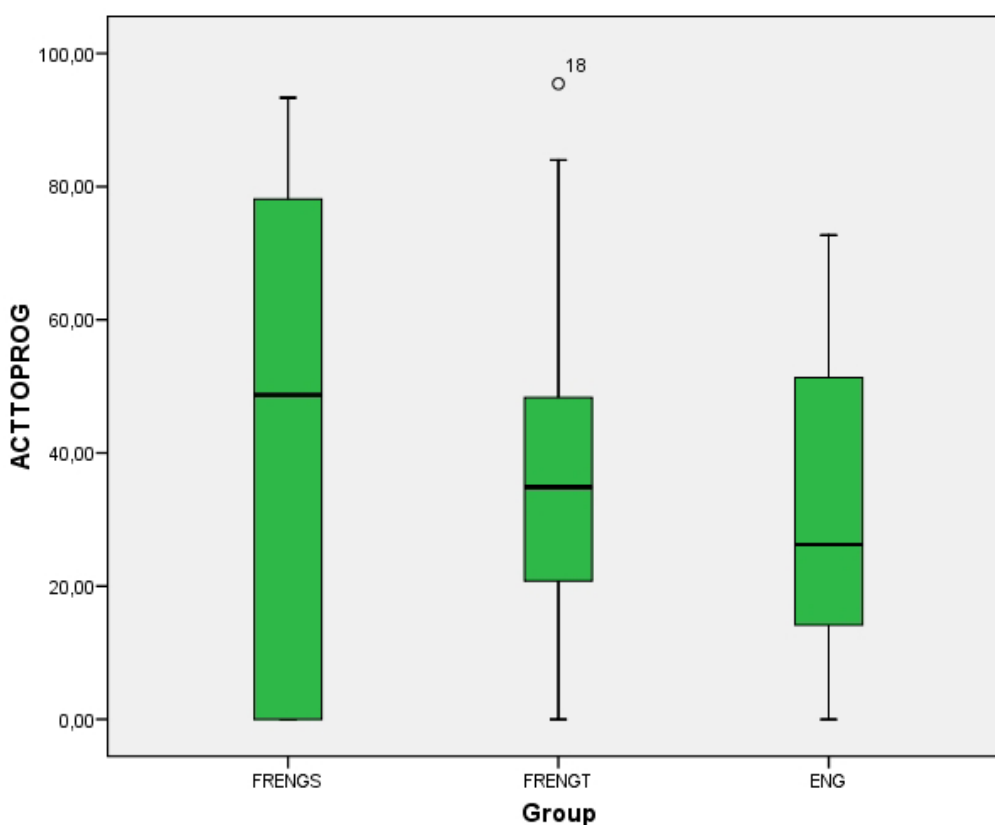


Figure 7.11. Distribution of PROG within activities in FRENGS, FRENGT and ENG

The boxplot in Figure 7.11 above shows a higher dispersion of the PROG rates within activities in the oral production of FRENGS than with FRENGT and ENG. The middle range of PROG rates produced by FRENGS spans from 0% to 80% compared to 20% to 47% in FRENGT and 10% to 53% in ENG. Translated in terms of individual use, FRENGS are divided between 6 high producers of PROG activities who encode

between 60 and 100% of their total activity predicates in the PROG, and 6 very low producers of this coalition, who encode less than 20% of their total activity predicates in this form. The PROG form with activity predicates seems to receive a rather “extreme” treatment in FRENGS narratives – some subjects scarcely use it, while the rest use it abundantly with this type of predicates.

In FRENGT and ENG, the rates of PROG in activities tend to be lower than in FRENGS, with 8 out of 12 speakers encoding between 0 and 40% of their total activity predicates in PROG in both groups. This indicates that, in these two groups, activity predicates as a category are less bound to the PROG form and can be encoded in other forms, particularly the non-progressive PRES. Factors such as discourse function and task type are expected to come into play, as shall be discussed in chapter 8 (Discourse Hypothesis). In line with Collins (2002), it seems that the use of tense-aspect morphology in activities, rather than in states, represents the greatest challenge for advanced French L1 learners of English. We shall come back to this point in section 7.4.

The boxplot in Figure 7.12 below shows a different spread of the PROG form in accomplishments in the three groups. As in the case of the PROG activities, FRENGS pattern differently from FRENGT and ENG, even though the difference does not reach statistical relevance. The number of PROG accomplishments tokens in our corpus is very limited: 9 for FRENGS, 7 for FRENGT and 12 for ENG (see Table 7.2 above), meaning that no generalisations can be made safely from our data with respect to the PROG/accomplishments coalition.

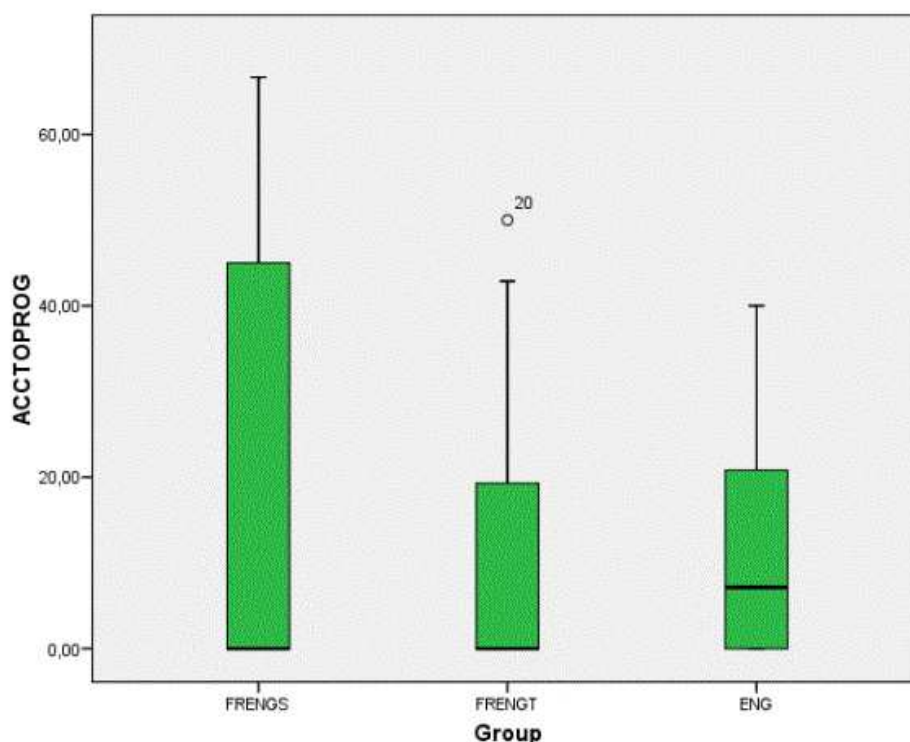


Figure 7.12. Distribution of PROG within accomplishments in FRENGS, FRENGT and ENG

Limiting our discussion to the data available, the PROG seems to be more frequently paired with accomplishments by ENG though at lower rates than FRENGS. The 6 native speakers who produce this combination encode 10 to 40% of the total accomplishment predicates in the PROG, whereas the majority of FRENGS who produce PROG accomplishments (4 subjects) encode 40 to 70% of the total accomplishments in this form. In other words, there are fewer individuals who use the PROG with accomplishments in FRENGS than in ENG, but those who use it do so at higher rates than the native speakers. PROG accomplishments represent 30 to 50% of the total accomplishments used by FRENGT in our corpus (produced by 3 members of the group). The rates are lower than those of FRENGS and similar to those of ENG. We believe this is, at least in part, due to the fact that there is strong competition from the non-progressive PRES in this aspectual class in the oral narratives of the native speakers and the French L1 professors.

7.2.2.5 Main points regarding the distribution of the PROG form

The distribution of the PROG form is not sensitive to the [+/- dynamic] semantic division, neither in English L1 nor in English L2. The strong distributional restrictions governing the use of the PROG with states and achievements in the target language are by and large observed by both groups of learners.

The distribution of the PROG is strongly skewed towards [- punctual], [- telic] predicates (activities) both in English L1 and English L2. However, the PROG is also used with [+ telic] predicates as long as they have a [- punctual] quality (accomplishments). This happens particularly in the narratives of the less proficient learner group (FRENGS). In ENG and FRENGT, the PROG coalesces mainly with durative atelic predicates (activities) even though, with these two groups, activity predicates as a category are less bound to the PROG form and can be encoded in other forms, particularly the non-progressive PRES.

7.3 The Distribution of Past Tense-Aspect Morphology

In this section we will deal with the distribution of the PAST and the PPROG within states, activities, accomplishments and achievements in English L2 and English L1 narratives. For English L2, the discussion will be based exclusively on the data from CATENGS and CATENGT, given that these groups are the ones who anchor their stories in the present (9 out of 12 CATENGS and 8 out of 12 CATENGT). Data regarding these two forms in the French L1 English L2 narratives was considered to be insufficient for a conclusive analysis (only 4 FRENGS and 2 FRENGT produce past-based narratives).

Only 3 out of the 12 English L1 native speakers in our corpus tell their stories totally or partially in the past, which weakens considerably the validity of any claims we make on the distribution of the past forms in English L1. With this serious limitation in mind, we will, however, refer to the distribution of the PAST and the PPROG in English L1 for contrastive purposes, even though the distributional trends identified in our English L1 corpus need to be validated with more data. This section is structured in

a similar way to section 7.2 above: the distribution of the verb forms will be discussed at group level first and then analysed in the light of the inter-group comparison.

7.3.1 The simple past (PAST)

7.3.1.1 CATENGS

The rates of PAST are homogeneous in three of the four aspectual classes in the oral narratives of CATENGS – similar rates of PAST were observed in states (70.21%, 61 tokens), accomplishments (69.91%, 45 tokens) and achievements (69.32%, 110 tokens). The use of the PAST is more limited with activities (35.53%, 25 tokens). As shown in Table 7.9 (statistically significant values underlined), no significant differences exist between states and telic predicates, nor between the classes of telic predicates (accomplishments and achievements). Activities in the PAST were significantly less frequent than achievements, accomplishments and states. The overall distribution of the PAST form is illustrated in Figure 7.13 below.

	ACTTOPAST - STTOPAST	ACCTOPAST - STTOPAST	ACHTOPAST - STTOPAST	ACCTOPAST - ACTTOPAST	ACHTOPAST - ACTTOPAST	ACHTOPAST - ACCTOPAST
Z	-2.552(a)	-.210(b)	-.357(a)	-2.524(b)	-2.803(b)	-.841(a)
Asymp. Sig. (2- tailed)	<u>.011</u>	.833	.721	<u>.012</u>	<u>.005</u>	.400

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 7.9. Differences between PAST rates within aspectual classes (Tokens) – CATENGS

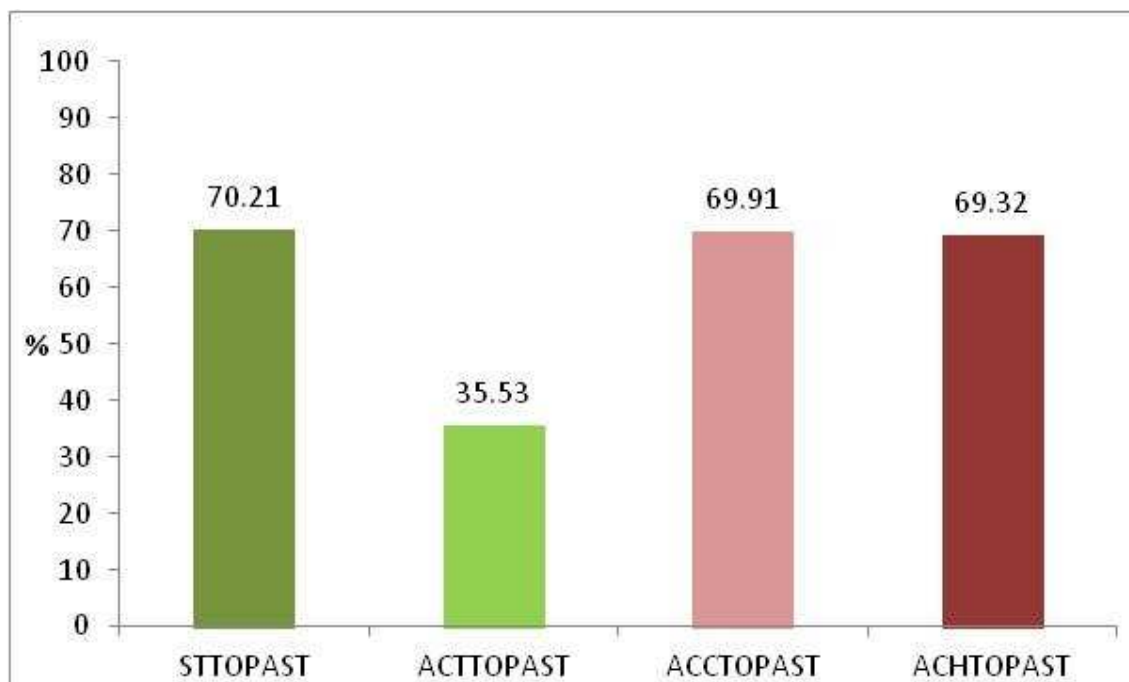


Figure 7.13. Distribution of PAST within aspectual classes (Tokens) – CATENGs

According to the results in Table 7.9 above, the distribution of the PAST form in the oral narratives of the Catalan L1 students is not conditioned by the [+/- dynamic] semantic distinction – the rate of distribution of the PAST in states is similar to that in accomplishments and achievements. This seems to be also a consequence of the fact that competition from other verb forms (namely the PROG and the PPROG) is weak in these classes, which leads to higher rates of non-progressive forms, mainly PAST.

A statistically robust influence on the distribution of the PAST form was identified for the [+ telic] feature - PAST rates are higher in telic predicates (accomplishments and achievements) than in atelic ones (activities), certainly due to the fact that the latter are often encoded in other verb forms, especially the PPROG. The [+ punctual] feature, on the other hand, does not seem to be a criterion in the use of the PAST in English L2 narratives by CATENGs – while [+ punctual] predicates (achievements) in the PAST outnumber PAST activities ([- punctual]), no statistically relevant difference was established between PAST achievements and PAST accomplishments ([- punctual]).

7.3.1.2 CATENGT

The distribution of the PAST form in the narratives of the Catalan L1 professors is not as homogeneous as in the CATENGS data. The coalition is strongest with states (67.74%, 112 tokens) and achievements (61.90%, 107 tokens), weaker with accomplishments (53.72%, 68 tokens), and weakest with activities (26.98%, 39 tokens). The results of the Wilcoxon signed ranks test are shown in Table 7.10 (statistically relevant differences underlined) and the overall distribution of the PAST form is illustrated in Figure 7.14 below.

	ACTTOPAST - STTOPAST	ACCTOPAST - STTOPAST	ACHTOPAST - STTOPAST	ACCTOPAST - ACTTOPAST	ACHTOPAST - ACTTOPAST	ACHTOPAST - ACCTOPAST
Z	-2.666(a)	-2.100(a)	-1.997(a)	-2.366(b)	-2.521(b)	-1.782(b)
Asymp. Sig. (2-tailed)	<u>.008</u>	<u>.036</u>	<u>.046</u>	<u>.018</u>	<u>.012</u>	.075

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 7.10. Differences between PAST rates within aspectual classes (Tokens) – CATENGT

Statistically significant differences were established between states and all the other classes and also between activities and the rest of the predicate types. The effect of the [- dynamic] feature is robust in the CATENGT production – rates of PAST are higher within states than in all the dynamic predicates. The [+/- telic] semantic division also has a conditioning effect on the distribution of the PAST form with this group – statistically relevant differences exist between PAST activities and PAST accomplishments and between PAST activities and PAST achievements. The PAST form is less frequent in activities, due to competition from other verb forms, mainly the PPROG, in this class. The [+ punctual] feature is only marginally relevant in the distribution of the PAST form – while punctual predicates (achievements) are significantly more frequent in the PAST than activities, there is only a marginally significant difference between PAST achievements and PAST accomplishments.

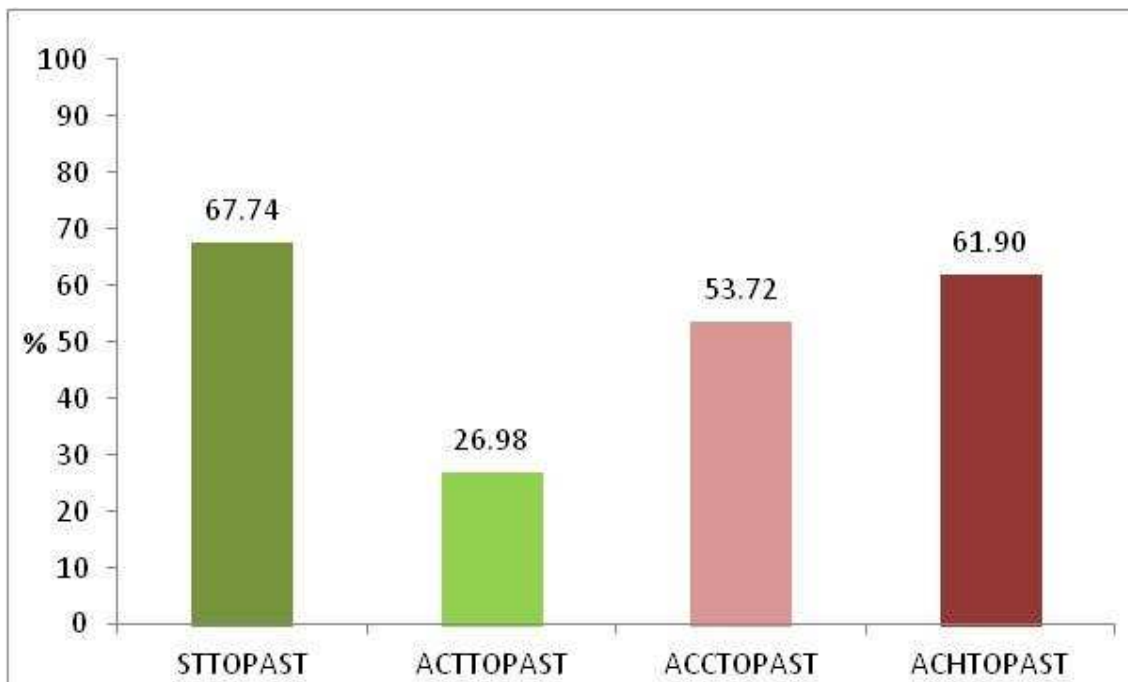


Figure 7.14. Distribution of PAST within aspectual classes (Tokens) – CATENGT

7.3.1.3 ENG

As mentioned in the introduction to this section, only 3 out of the 12 English L1 native speakers in our corpus tell their stories totally or partially in the past. Bearing this serious limitation of our data in mind, the distribution of the PAST in English L1 appears to be biased with respect to the semantic class of the predicates, in line with the Distributional Bias Hypothesis. The strongest coalition is within achievements (28.06%, 59 tokens), followed by accomplishments (20.58%, 18 tokens) and states (19.25%, 20 tokens). The weakest coalition is within activities (13.34%, 17 tokens). The results of the Wilcoxon signed ranks test are presented in Table 7.11 (statistically relevant values underlined) and the overall distribution of the PAST form is illustrated in Figure 7.15 below.

	ACTTOPAST - STTOPAST	ACCTOPAST - STTOPAST	ACHTOPAST - STTOPAST	ACCTOPAST - ACTTOPAST	ACHTOPAST - ACTTOPAST	ACHTOPAST - ACCTOPAST
Z	-1.483(a)	-.365(b)	-1.838(b)	-2.207(b)	-2.701(b)	-1.718(b)
Asymp. Sig. (2-tailed)	.138	.715	.066	<u>.027</u>	<u>.007</u>	.086

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 7.11. Differences between PAST rates within aspectual classes (Tokens) –ENG

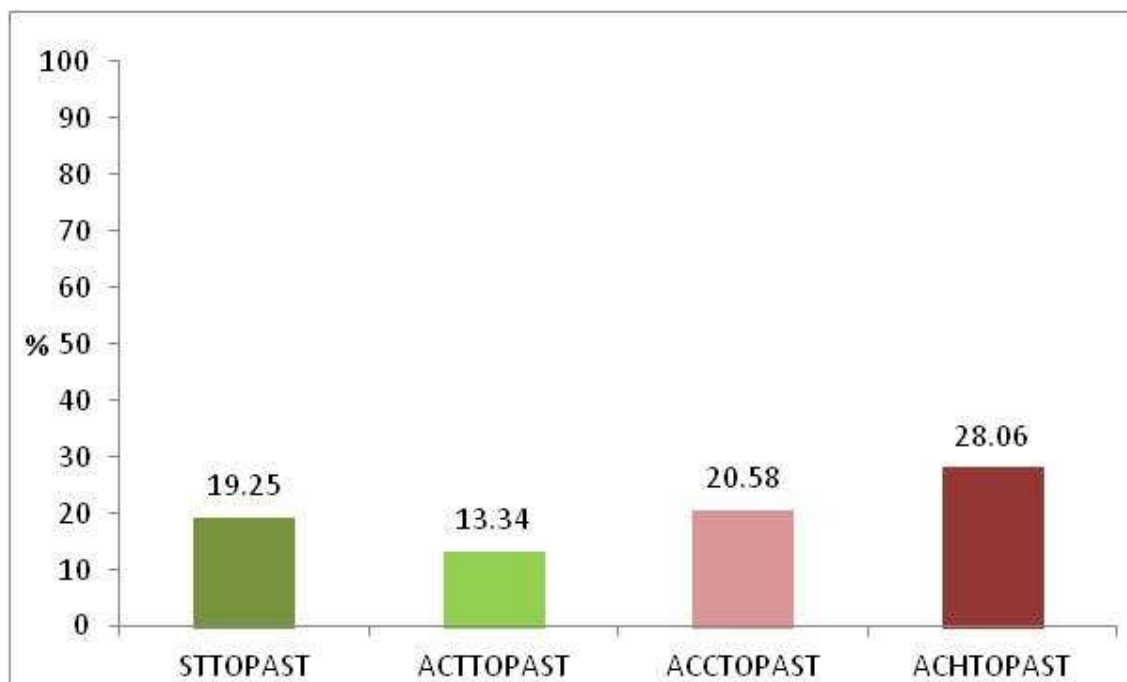


Figure 7.15. Distribution of PAST within aspectual classes (Tokens) – ENG

A statistically robust influence on the distribution of the PAST form was identified for the [+ telic] feature in dynamic predicates – telic predicates (accomplishments and achievements) are more frequently encoded in the PAST form than atelic ones (activities), due to the fact that the latter are often encoded in other verb forms, especially the PRES and the PROG. The [+ punctual] feature, which forms part of the PAST prototype at early stages of English L1 (Andersen and Shirai 1994), only marginally influences the distribution of the PAST form in our adult English L1 data: PAST achievements strongly outnumber PAST activities, but are only marginally more numerous than PAST states and PAST accomplishments. This rather homogeneous distribution of the PAST across achievements, accomplishments and states in native speaker oral production was also identified by Robinson (1995b) and seems to indicate that, with adults, the [+ telic] semantic feature outweighs the [+ punctual] feature in the semantic prototype of the PAST form.

7.3.1.4 Inter-group comparison

Repeated inter-group Mann-Whitney U tests established statistically relevant differences between CATENGS and ENG with respect to the rates of PAST in all four aspectual classes. The Catalan L1 students produce significantly more PAST than ENG

in states ($U = 36$, $z = -2.231$, $p = .026$), activities ($U = 28$, $z = -2.074$, $p = .038$), accomplishments ($U = 33$, $z = -2.341$, $p = .019$), and achievements ($U = 37$, $z = -2.025$, $p = .043$). No statistically robust differences were established between CATENGT and ENG, with a similar spread of the PAST except for states, which are more frequently used in the PAST by the Catalan L1 professors than by the English native speakers ($U = 36$, $z = -.231$, $p = .026$). Note, however, that the very low rates of PAST in the ENG production make it difficult to account for this surprising imbalance among the groups. No statistically robust differences were found between CATENGS and CATENGT with respect to the distribution of the PAST in the four aspectual classes.

Nevertheless, a closer look at the Catalan L1 English L2 groups reveals, even though only impressionistically, that more Catalan L1 students than professors typically encode accomplishments in the PAST – 8 out of the 12 students in the CATENGS group encode more than 80% of the total accomplishments in the PAST form, whereas this is the case only with 6 out of the 12 professors (boxplot in Figure 7.16). In past-based narratives, CATENGT encode accomplishments in other past forms, among which the past perfect (PPERF), not observed with accomplishments in the production of CATENGS ($U = 48$, $z = -2.135$, $p = .033$).

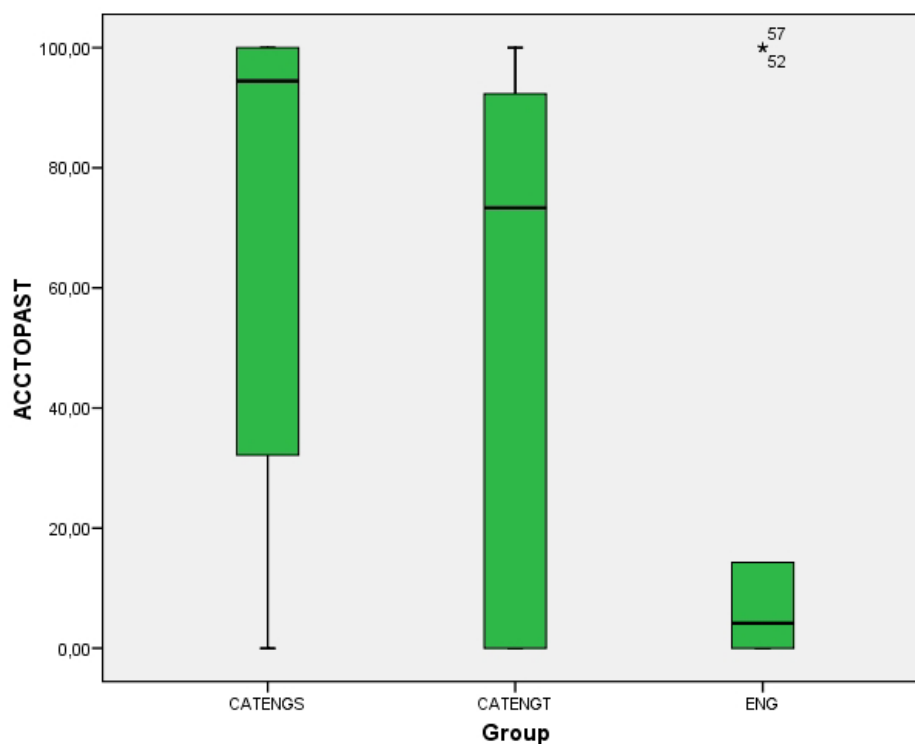


Figure 7.16. Distribution of PAST within accomplishments in CATENGS, CATENGT and ENG

7.3.1.5 Main points regarding the distribution of the PAST form

The distribution of the PAST form is sensitive to the [+ telic] feature in the narratives of English native speakers and of both Catalan L1 English L2 groups. Accomplishments and achievements are the two aspectual classes most frequently encoded in the PAST in both our English L1 and L2 corpora.

The Catalan L1 professors are also sensitive to the [- dynamic] feature – in their narratives, states in the PAST outnumber all the other types of predicates. We suggest that the PAST acts as a default form for states in CATENGT production, whereas competition from other past forms, namely the PPROG and the PPERF, is stronger in accomplishments and achievements than with CATENGS and ENG, which results in lower rates of PAST in these two classes.

The [+ punctual] feature is only marginally relevant in the distribution of the PAST form in the ENG, CATENGS and CATENGT data. PAST rates in achievements and accomplishments were not found to pattern differently, which seems to indicate that the PAST is homogeneously spread within telic predicates in English L1 and advanced English L2.

7.3.2 The past progressive (PPROG)

7.3.2.1 CATENGS

The rates of the PPROG form observed in the oral narratives of CATENGS are skewed with respect to the inherent semantic properties of the predicates, in line with the predictions of the AH. The coalition is strongest in activities (34.70%, 30 tokens) and weaker in the other aspectual classes: 5.36% (3 tokens) in accomplishments, 3.82% (2 tokens) in states and 0.64% (1 token) in achievements. The results of the Wilcoxon signed ranks test are presented in Table 7.12 below (significant values underlined) and the overall distribution of the PPROG form is shown in Figure 7.17 below.

	ACTTOPPROG - STTOPPROG	ACCTOPPROG - STTOPPROG	ACHTOPPROG - STTOPPROG	ACCTOPP ROG - ACTTOPP ROG	ACHTOPP ROG - ACTTOPP ROG	ACHTOPP ROG - ACCTOPP ROG
Z	-2.318(a)	-.365(a)	-1.069(b)	-2.366(b)	-2.524(b)	-1.342(b)
Asymp. Sig. (2-tailed)	.020	.715	.285	.018	.012	.180

- a Based on negative ranks.
- b Based on positive ranks.
- c Wilcoxon Signed Ranks Test

Table 7.12. Differences between PPROG rates within aspectual classes (Tokens) – CATENGs

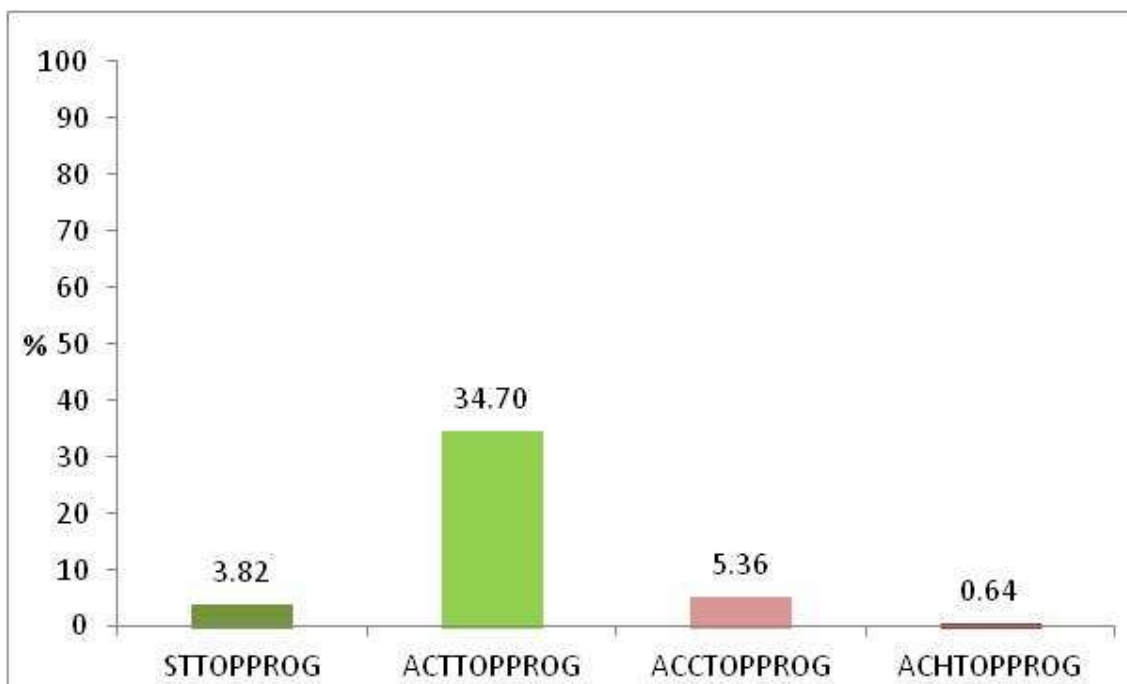


Figure 7.17. Distribution of PPROG within aspectual classes (Tokens) – CATENGs

The semantic division [+/- dynamic] does not seem to be relevant for the distribution of the PPROG within the different aspectual classes – no statistically significant differences were established between states and accomplishments, nor between states and achievements in the PPROG.⁹ The semantic features [- punctual] and [- telic] are both relevant for the distribution of the PPROG form in the narratives of CATENGs. The results from the Wilcoxon signed ranks test corroborate the percentage rates in Figure 7.17 above – the Catalan L1 students use the PPROG form mainly with durative atelic predicates (activities) and only marginally with durative telic predicates

⁹ Note, however, that the number of PPROG tokens observed in states is very low (2 tokens) and they belong to the same verb type *stand*, which is only marginally stative.

(accomplishments).

7.3.2.2 CATENGT

In line with the AH, the distribution of the PPROG form is sensitive to the lexical class of the predicates in the oral production of CATENGT. The overall pattern is similar to that in CATENGS, *i.e.*, the rate of PPROG is highest in activities (39.51%, 55 tokens), followed by accomplishments (8.74%, 9 tokens), and is only marginally used in states (0.78%, 2 tokens). The results of the Wilcoxon signed ranks test are presented in Table 7.13 (statistically significant values underlined) and the overall distribution of the PPROG form in illustrated in Figure 7.18.

	ACTTOPPROG – STTOPPROG	ACCTOPPROG – STTOPPROG	ACHTOPPROG – STTOPPROG	ACCTOPPROG – ACTTOPPROG	ACHTOPPROG – ACTTOPPROG	ACHTOPPROG – ACCTOPPROG
Z	-2.666(a)	-1.572(a)	-1.342(b)	-2.295(b)	-2.666(b)	-1.826(b)
Asymp. Sig. (2- tailed)	<u>.008</u>	.116	.180	<u>.022</u>	<u>.008</u>	.068

a Based on negative ranks.

b Based on positive ranks.

c Wilcoxon Signed Ranks Test

Table 7.13. Differences between PPROG rates within aspectual classes (Tokens) – CATENGT

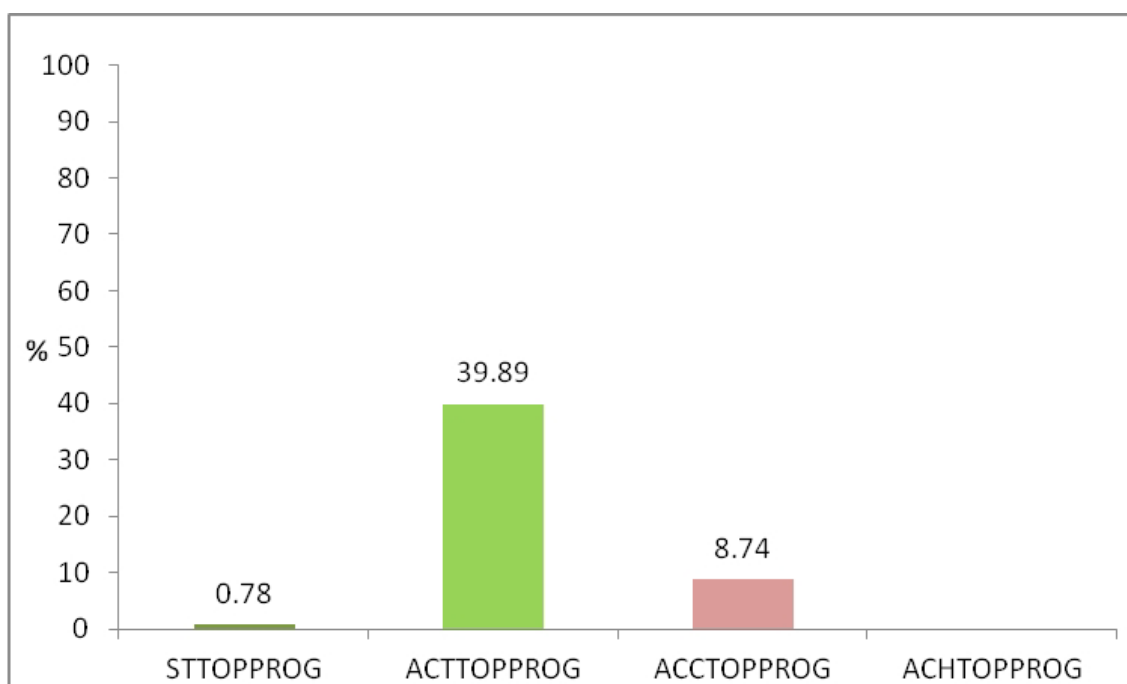


Figure 7.18. Distribution of PPROG within aspectual classes (Tokens) – CATENGT

CATENGT predominantly use the PPROG with certain [+ dynamic] predicates, namely activities and accomplishments. Nevertheless, as in the case of CATENGS, the coalition between the PPROG and [- dynamic] predicates (states) is not totally absent from their English L2 narratives.¹⁰ The PPROG is also distributed in terms of the [- punctual] and [- telic] features. The Catalan L1 English L2 professors use the PPROG with durative predicates, and particularly with durative atelic predicates (activities). The Wilcoxon signed ranks test established statistically significant differences between PPROG in activities and in all the other aspectual classes. Note, however, that, the Catalan L1 professors also use the PPROG with [+ telic] predicates as long as they are [- punctual], which is the case with accomplishments.

7.3.2.3 ENG

As in the case of the PAST form, the data available for the analysis of the distribution of the PPROG in English L1 is extremely limited in our corpus (only 3 out of the 12 English L1 speakers produce past-based narratives). Consequently, what is presented hereafter does not in any way claim to be more than a trend to be corroborated with further data. The distribution of the PPROG in our English L1 data is highly skewed, in that the PPROG form is exclusively used with activities (9.82%, 13 tokens), except for 1 achievement predicate token (0.83%).¹¹ The results of the Wilcoxon signed ranks test for ENG are presented in Table 7.14 (significant values underlined) and the overall distribution of the PPROG form is illustrated in Figure 7.19 below.

	ACTTOPPRO G - STTOPPROG	ACCTOPPRO G - STTOPPROG	ACHTOPPRO G- STTOPPROG	ACCTOPPROG - ACTTOPPROG	ACHTOPPRO G - ACTTOPPRO G	ACHTOPPRO G - ACCTOPPRO G
Z	-2.207(a)	.000(b)	-1.000(a)	-2.207(c)	-2.207(c)	-1.000(a)
Asymp. Sig. (2- tailed)	<u>.027</u>	1.000	.317	<u>.027</u>	<u>.027</u>	.317

a Based on negative ranks.

b The sum of negative ranks equals the sum of positive ranks.

c Based on positive ranks.

d Wilcoxon Signed Ranks Test

Table 7.14. Differences between the aspectual classes in the PPROG form (Tokens) – ENG

¹⁰ 2 tokens of PPROG states were observed in the CATENGT production, corresponding to the predicates *sit* and *be(naughty)*.

¹¹ *Plummet to his fate*.

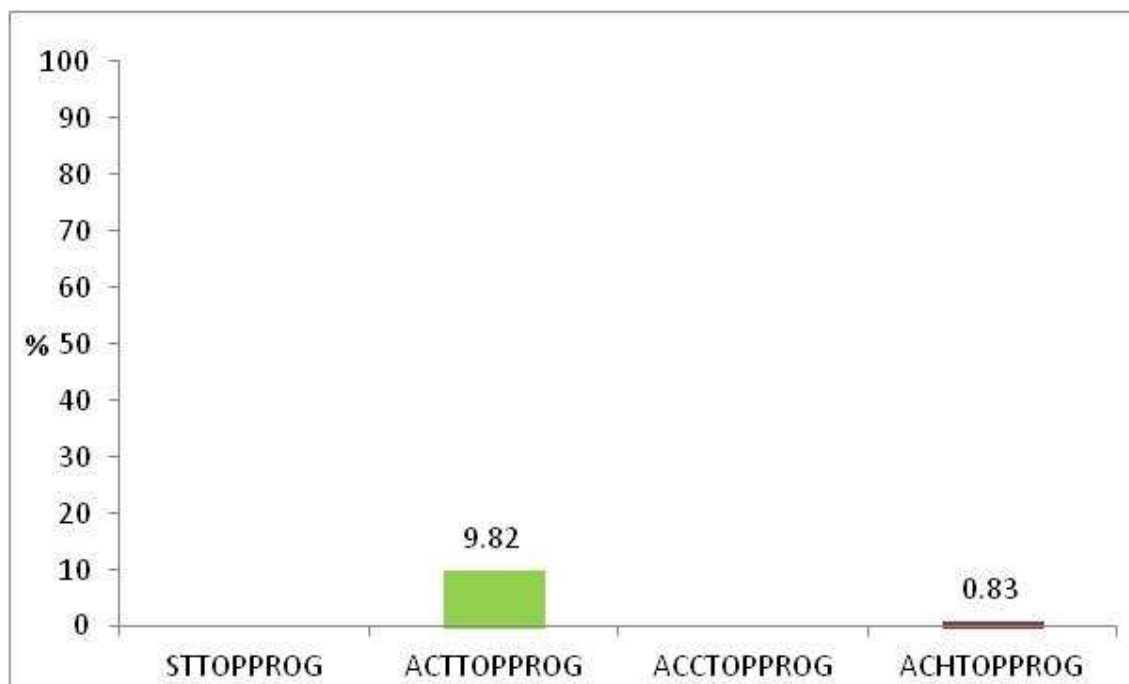


Figure 7.19 Distribution of PPROG within aspectual classes (Tokens) – ENG

The English native speakers in our corpus exclusively (but for one token) use the PPROG form with [+ dynamic], [- punctual] and [- telic] predicates, namely activities. The PPROG is, on the basis of the data available, the verb form with the highest sensitivity to the inherent semantic properties of a given predicate class in the English L1 data.

7.3.2.4 Inter-group comparison

Repeated inter-group Mann-Whitney U tests established statistically relevant differences with respect to the distribution of the PPROG in activities both between CATENGS and ENG and between CATENGT and ENG. PAST activities in CATENGS narratives are marginally more frequent than in English L1 narratives ($U = 39.5$, $z = -1.953$, $p = .051$). CATENGT use robustly more PPROG activities ($U = 34.5$, $z = -2.226$, $p = .026$) and PPROG accomplishments ($U = 48$, $z = -2.134$, $p = .033$) than ENG. No significant differences were established between the two learner groups with respect to the use of the PPROG in the four aspectual classes.

Interestingly, no statistically relevant difference was established between CATENGS and ENG regarding the rate of PPROG in accomplishments ($U = 60$, $z = -1.445$, $p = .149$), even though the latter produce no tokens of such pairing. On the other

hand, a significant difference was established between CATENGT and ENG with respect to the same pairing. We believe this is due to the fact that only 2 Catalan L1 English L2 students produce PPROG accomplishments (1 and 2 tokens respectively), one of whom at a rather low rate (between 10-20% of the total accomplishment predicates). In the CATENGT group, 3 of the four subjects who produce PPROG accomplishments display higher rates of use of this form with accomplishments (2 subjects encode between 20 and 30% of the total accomplishments in the PPROG and the remaining subject, between 40 and 50%).

7.3.2.5 Main points regarding the distribution of the PPROG form

The distribution of the PPROG is sensitive to the [- punctual] and [- telic] features both in English L1 and English L2. However, durativity seems to outweigh atelicity in the use of the PPROG by CATENGS and CATENGT, given that these groups also use the PPROG with durative telic predicates (accomplishments). English native speakers seem to be much more rigid with respect to the distribution of the PPROG, pairing it almost exclusively with durative atelic predicates (activities).

Though predominantly used with [+ dynamic] predicates, the PPROG was observed to pair marginally with [- dynamic] predicates (states) in the narratives of CATENGS and CATENGT. No tokens of such coalition were found in English L1.

7.4 Conclusion

7.4.1 The impact of the inherent predicate semantics on the distribution of tense-aspect morphology in advanced English L2

As discussed in chapter 2, the advanced EFLs are expected to make a productive use of tense-aspect morphology in English L2, *i.e.*, tense-aspect forms are used within all the predicate classes, in both prototypical and more marked coalitions. Nevertheless, certain coalitions are believed to remain strong even at very high levels of proficiency, namely the affiliation between the progressive and activities in oral narrative tasks (Robinson 1995a). The purpose of the analysis presented in the current chapter was to see to what extent the distributional patterns identified in the narratives

of the different groups of learners matched the ones in the English L1 *Frog* stories in our corpus and how they fit in with the predictions made in previous studies for advanced EFLs and earlier stages of L2 development.

Picture book narratives can favour the use of the non-progressive PRES for a more commentary rather than descriptive effect. We wanted to see to what extent the *Frog* story was characterised by the use of the non-progressive PRES as a default form, even in less prototypical coalitions like the one with activity predicates, in our English L1 narratives and whether the advanced EFLs in our study produced such coalitions and relaxed, for instance, the initial progressive/activities pairing. Moreover, the progressive form was also expected to spread across aspectual classes as an effect of the task. The *Frog* story can equally be told from a “within” perspective, as a collection of scenes ongoing at the time of the narrative act. In this case, unprototypical coalitions such as the one between the progressive form and achievements were expected to arise, with a “slow motion” effect on the story.

Our analysis has focused on four verb forms: the simple present (PRES), the present progressive (PROG), the simple past (PAST), and the past progressive (PPROG). Given that the data available for other verb forms, such as the present perfect or the past perfect, is scarce in our corpus, we have decided not to analyse these forms with respect to the Aspect Hypothesis (but they will be referred to with respect to the Discourse Hypothesis in chapter 8). We have looked at the distribution of the PRES and PROG forms in the oral narratives of ENG, FRENGS and FRENGT only, given that it is these groups who generally produce present-based narratives. The distribution of the PAST and PPROG forms has been discussed with respect to CATENGs and CATENGt only, who narrate mostly in the past. Even though the English L1 data provides more information regarding the distribution of the PRES and PROG forms, the distributional patterns of PAST and PPROG in English L1 have been presented for comparative purposes, in need of additional evidence.

The PRES form has been shown to typically pair with [- dynamic] and [+ telic] predicates both in English L1 and English L2 *Frog* stories. The two groups of French L1 learners make nativelike coalitions between the PRES and states, for which the PRES is a default form when the narrative is present-based, and between PRES and accomplishments and achievements. Unlike Andersen (1989, 1991) and Bardovi-Harlig

(2000), no separate patterns were identified for PRES accomplishments and achievements in our corpus (neither in English L1 nor in English L2). At a closer look, the native speakers and the French L1 professors in our corpus make a more flexible use of the PRES form, using it in atypical coalitions, namely PRES/activities, more frequently than the French L1 students. The PRES is more frequently used with this class of predicates by ENG than by FRENGS, whereas FRENGT behave natively. Nevertheless, high intra-group dispersion in FRENGT has not allowed us to validate this trend as a robust proficiency-related effect.

The distribution of the PROG form is strongly skewed towards [- punctual] and [- telic] predicates both in English L1 and English L2 narratives. Durativity seems to outweigh atelicity in the use of the PROG by ENG and FRENGS, given that these groups use the PROG not only with durative atelic predicates (activities) but also with durative telic predicates (accomplishments). On the other hand, the skewing of the PROG towards activities decreases in the narratives of FRENGT and ENG, mainly due to higher competition from the PRES in this aspectual class in these two groups. The PROG is marginally used with states both in English L1 and English L2, generally with position predicates such as *sit*, *stand*, and *lie*. The French L1 English L2 professors produce 9 tokens of PROG states (4.31% of the total states tokens), whereas both ENG and FRENGS produce 3 tokens each (2.06% and 2.08% respectively). In spite of the strong distributional bias towards activities, both learner groups make a productive use of the PROG in English L2, pairing it with less prototypical aspectual classes such as achievements (9 tokens of PROG achievements in each of the two groups).

The distribution of the PAST form is sensitive to the [+/- telic] semantic division, *i.e.*, the PAST typically pairs with [+ telic] predicates (achievements and accomplishments) and is less frequently used with dynamic [- telic] predicates (activities), both in English L1 and advanced English L2 narratives. Moreover, the PAST also strongly coalesces with states in past narratives. In the oral narratives of CATENGs, the PAST acts as a default form for all the aspectual classes except activities, being homogeneously spread across states, accomplishments and achievements. With CATENGT, the PAST is the dominant form only with states, whereas competition from the PPROG and the PPERF is stronger in accomplishments and achievements (in past-based narratives), resulting in lower rates of PAST in these

two classes than in states. While the data available for the PAST in English L1 are scarce, given that the majority of ENG narrate in the present, it seems that the PAST is homogeneously used within states, accomplishments and achievements.

As already mentioned, the [+ punctual] feature, which forms part of the PAST prototype in English (Andersen and Shirai 1994), only marginally influences the distribution of the PAST form in our English L1 and English L2 data: PAST achievements strongly outnumber PAST activities, but are only marginally more numerous than PAST states and PAST accomplishments in ENG and CATENGT. No statistically significant difference was established between the PAST in accomplishments and achievements with CATENGS. The rates of PAST in English L1 and English L2 narratives are balanced out in achievements and accomplishments, which seems to indicate that, with the adult native speakers and the advanced EFLLs in our study, the [+ telic] semantic feature outweighs the [+ punctual] one in the distributional patterns of the PAST. The inter-group analysis established a higher contrast between the distributional patterns of the PAST in ENG and CATENGS than between ENG and CATENGT. Once again, the two learner groups were not found to be different enough to claim the existence of a proficiency-related effect.

Similar to what was observed with the PROG, the PPROG form typically pairs with [- punctual] and [-telic] predicates, both in English L1 and English L2. The PPROG is the form with the most biased distribution in our English L1 data – it pairs exclusively (but for one token) with durative atelic predicates (activities). CATENGS and CATENGT are more flexible than ENG, and also use the PPROG with durative telic predicates (accomplishments). Moreover, both CATENGS and CATENGT marginally use the PPROG with states, while this coalition was not observed in English L1. PPROG activities have been seen to be marginally more frequent in English L2 (both groups) than in English L1, mainly because of the choice of temporal anchorage. No statistically significant differences have been found between the two learner groups with respect to the distribution of the PPROG.

7.4.2 Outcomes of the present study and contribution to the already existing research on the Aspect Hypothesis

Our study has provided further evidence in support of the Distributional Bias Hypothesis in English L1, using adult data. To our knowledge, only Robinson (1995b) explicitly tests the Distributional Bias Hypothesis on adult English native speakers. Moreover, his study deals mainly with the distribution of the simple past and the progressive forms and only briefly touches upon the distribution of the simple present form. The present study covers the distribution of the PRES form, along with the other traditionally analysed forms.

Based on the data from the twelve oral *Frog* stories in our corpus, we have noticed that there is a certain polarisation in the distribution of tense-aspect morphology in English L1 with respect to the lexical class of the predicates: the PROG and PPROG forms are mainly used with activities, whereas the non-progressive forms (the PRES or the PAST) are rather uniformly distributed across the remaining aspectual classes (states, accomplishments and achievements) and are also common within the class of activities. In line with Robinson (1995b), the PRES and the PAST pattern similarly both in accomplishments and achievements in our corpus (86.55% and 92.67% respectively), and encode 59.38% of activities. This seems to indicate that the non-progressive forms are “desensitised” to the semantic alignment with the aspectual class of the predicate, and that the English native speakers use them across aspectual classes, in both prototypical and less prototypical coalitions.

A certain degree of directionality can be detected in the distribution of the progressive (both the PROG and the PPROG) in activity predicates in English L1: it is not the aspectual class of activities which attracts the progressive, but rather the progressive form which specialises in one aspectual class, particularly in the case of the PPROG. The verb form/predicate type coalitions analysed in the present chapter can be seen as two-poled – if the predicate pole is the dominant one, a particular class of predicates would be predominantly used with a specific verb form; if the form pole is dominant, a verb form may be consistently used with a specific aspectual class, but other forms may be dominant in the aspectual class as a whole. Coalitions in the early stages of L1 acquisition have been shown to be predicate-driven, whereas adult use of

tense-aspect morphology is expected to be more form-driven. As already discussed, the distribution of the progressive forms (both the PROG and the PPROG) in our English L1 corpus is clearly skewed towards activities. Nevertheless, at the level of the entire class of activities, the non-progressive forms (the PRES and the PAST) dominate the class of activities (token count) (Figure 7.20). This indicates that the progressive form/activities coalition in adult English L1 is form-driven rather than predicate-driven, *i.e.*, the progressive forms are highly specialised in their distribution in English L1, while activity predicates on the whole are not strictly bound to the progressive but can be encoded in other verb forms, presumably in response to the discourse function these predicates fulfil in the narrative (see chapter 8 for a detailed discussion).

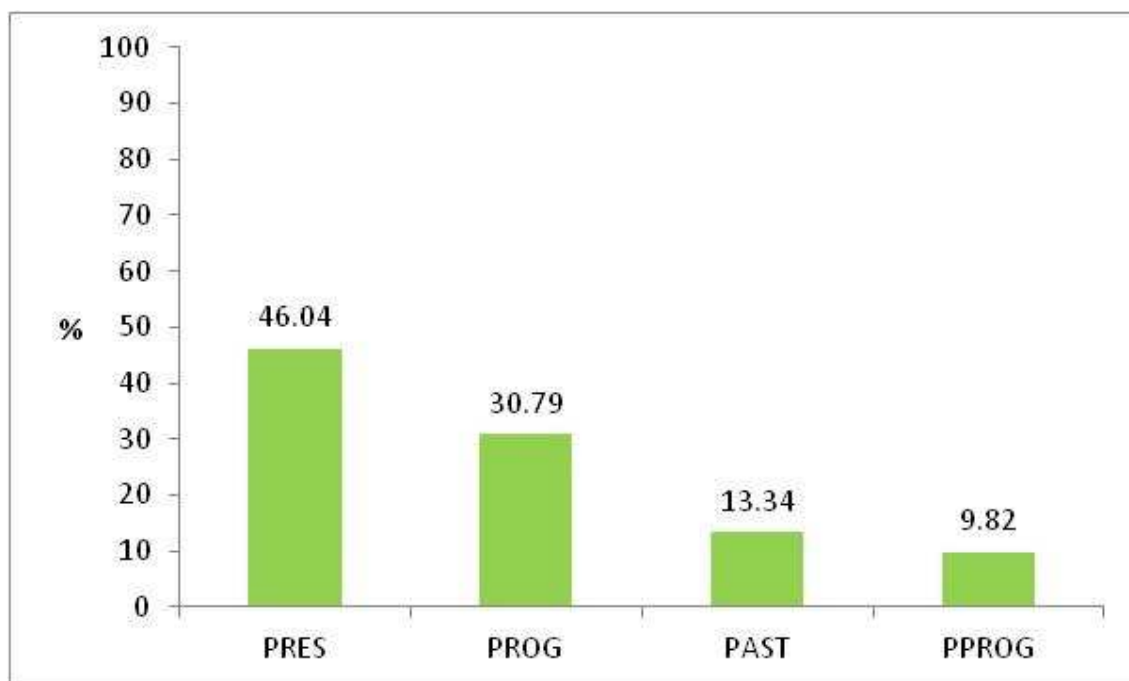


Figure 7.20. Distribution of verb morphology within activities (Tokens) - ENG

No statistically robust differences have been identified between the learner groups with respect to the distributional patterns of any of the four tense-aspect forms, whether French L1 or Catalan L1. It seems that, on the whole, the learners in our study are not distinguishable solely on the grounds of the distribution of tense-aspect forms with respect to the inherent semantics of the predicates. However, in spite of the lack of statistically robust differences, the two learner populations are not identical. When compared to the ENG group, the professors produce nativelike patterns for all four verb

forms (except for PAST states in CATENGT which are robustly more numerous than PAST states in ENG). The students, on the other hand, robustly diverge from the native speakers with respect to the distributional pattern of certain verb forms (*e.g.*, the PRES with activities and accomplishments for FRENGS and the PAST with all the aspectual classes for CATENGS). We believe that, while not sufficiently different to represent separate learning stages, in our study the students are further away than the professors from the English L1 distributional patterns of tense-aspect morphology with respect to the aspectual class of the predicates. Nevertheless, the Aspect Hypothesis does not seem to discriminate enough at advanced levels, and other parameters, such as the discourse function of tense-aspect morphology, need to be looked into.

The directionality of the predicate/form coalitions seems to shed additional light on the fine differences existing between the two learner populations in our study. As already discussed for English L1, the direction of the coalitions has different outcomes. While at the lower stages of L2 learning, the predicate pole is dominant, *i.e.*, certain predicate types predominantly carry a particular inflection, the more advanced learners would be expected to behave more natively, and make a form-driven rather than a predicate-driven use of verb morphology. A case in point is the use of the progressive, which has been shown to specialise with activities in adult English L1, while activities as a class are predominantly encoded in non-progressive forms. In what follows, we shall scrutinise the distribution of the progressive/ non-progressive forms in activities in the four learner groups to determine the directionality of these coalitions.

The two French L1 learner groups behave differently with respect to the direction of the coalition between the progressive forms and activity predicates. While the distribution of the progressive forms (the PROG and the PPROG) is robustly skewed towards activities in the narratives of FRENGS and FRENGT, FRENGT predominantly encode activities, as a class, in non-progressive forms (the PRES and the PAST) (54.28% of all activities tokens are encoded in the PRES and the PAST *vs.* 47.51% of tokens in the PROG and the PPROG). This distribution is shown in Figure 7.21 below.

In FRENGS oral production, activity predicates are dominated by the progressive forms (55.03% of the tokens are encoded in the PROG and the PPROG), the non-progressive forms accounting for 44.08% of the tokens in this category (Figure

7.22 below). While the French L1 English L2 professors in our corpus make a clear form-driven use of the progressive, the French L1 students seem to be at an inflection point between making a flexible use of verb morphology and preserving a systematic semantic coherence between the verb form and the aspectual class of the predicate. The difference between FRENGS and FRENGT is located in the area of the coalition between the PRES and activities, which is significantly more common in the production of the French L1 professors than in that of the French L1 students (see section 7.2.1.4).

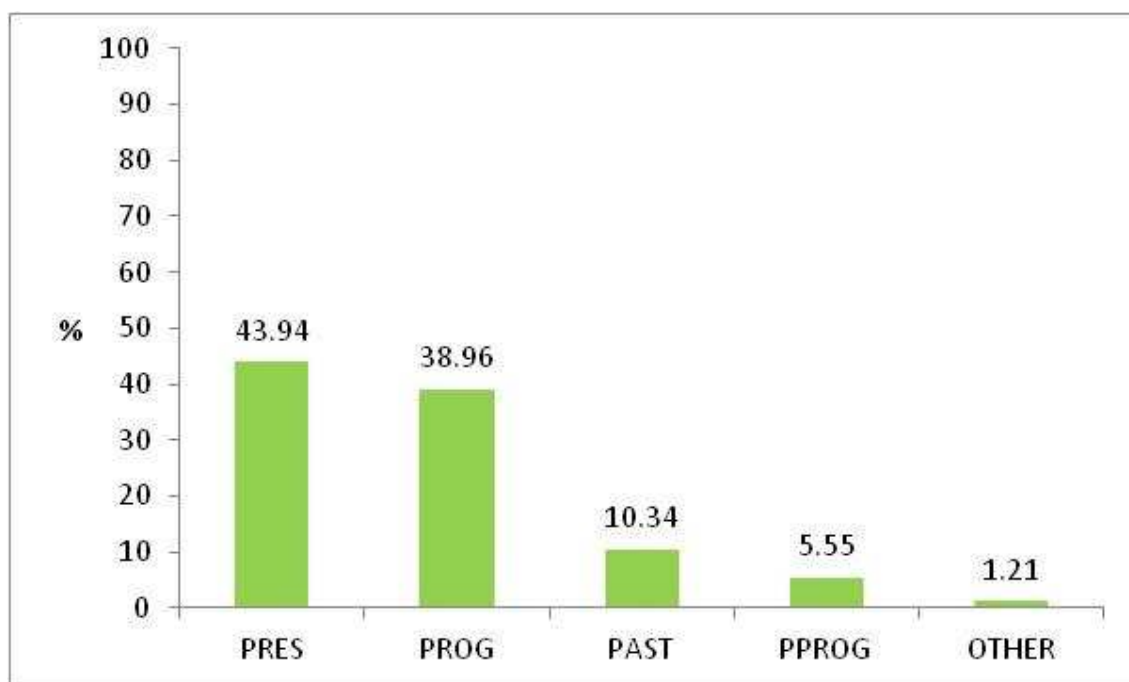


Figure 7.21. Distribution of verb morphology within activities (Tokens) - FRENGT

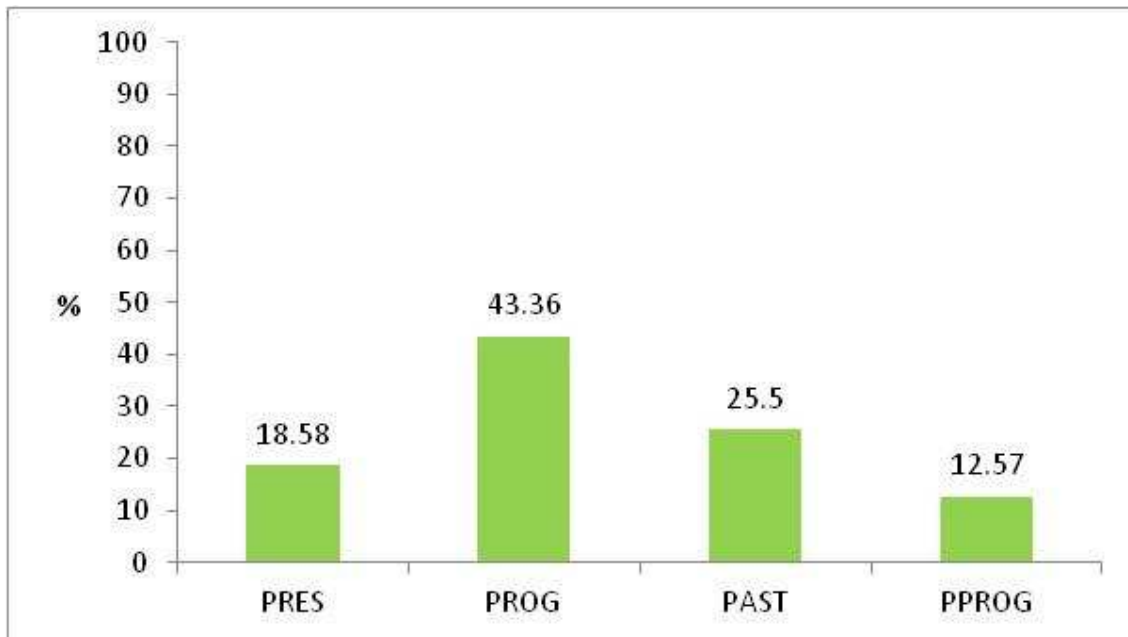


Figure 7.22. Distribution of verb morphology within activities (Tokens) - FRENGS

The directionality of the coalition between the progressive/non-progressive forms and activities is quite homogeneous between the Catalan L1 English L2 groups. CATENGS encode 53.86% of the activity tokens in non-progressive forms (the PRES and the PAST) and 43.22% of the tokens in the progressive (the PROG and the PPROG), which seems to indicate that the distribution of the progressive in the oral narratives of this group is form-driven rather than predicate-driven in the sense that, while the progressive strongly coalesces with activities, activities as a class are not dominated by this form (Figure 7.23 below).

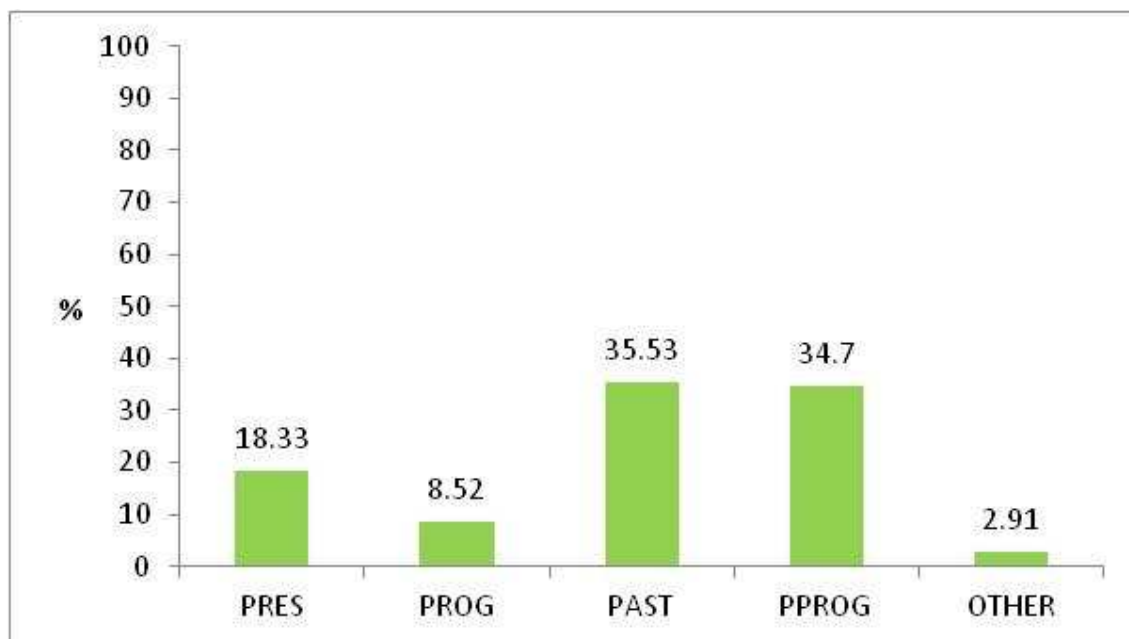


Figure 7.23. Distribution of verb morphology within activities (Tokens) - CATENGs

The distribution of verb forms in activities in the oral narratives of CATENGT (Figure 7.24 below) is more balanced in overall terms than with CATENGs - the Catalan L1 English L2 professors in our corpus encode 49.13% of the activity tokens in non-progressive forms (the PRES and the PAST) and 49.46% of the tokens in the progressive (the PROG and the PPROG), mainly because the Catalan L1 professors produce more PRES activities than CATENGs (4 professors produce present-based narratives, as opposed to 3 students). Nevertheless, no statistically robust differences were established between CATENGs and CATENGT with respect to the rates of the PPROG in activities. The relaxation of the prototypical coalition between the progressive form and activities seems to set in place earlier with the Catalan L1 English L2 groups than with the French L1 English L2 groups. A possible explanation for this finding comes from the distributional patterns of verb morphology in activities in the learners' L1s, as will be discussed hereafter.

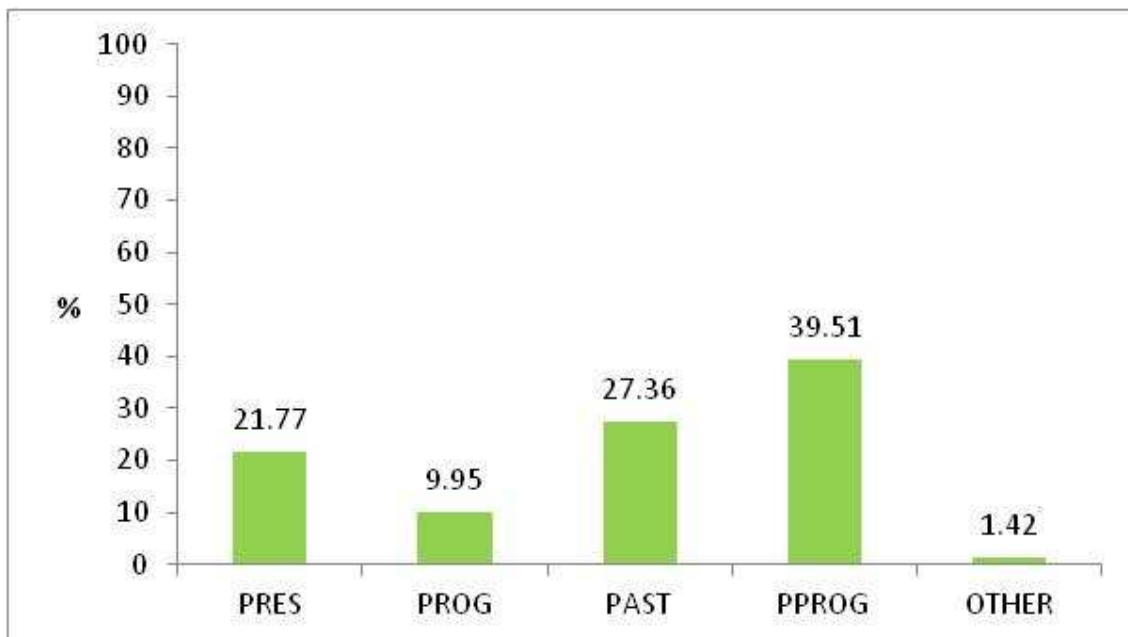


Figure 7.24. Distribution of verb morphology within activities (Tokens) - CATENGT

A look at the French L1 and Catalan L1 data in our corpus tells us that the different groups of learners do not have the same starting point when narrating in English L2. As already discussed in chapter 2, the L2 learners' task is double in that they not only have to fine-tune their hypotheses about the coalitions informing the distribution of target language morphology but also free themselves of the prototypical choices they make in their mother tongue. The fact that source and target languages in our study grammaticalise the progressive aspect, though not to the same degree (see chapter 3) is expected to interfere with the hypotheses of use concerning the distribution of the progressive in English L2. The discussion here will focus on the distribution of tense-aspect morphology in activities in Catalan L1 and French L1, in the hope to detect possible similarities between the distribution of the progressive form in the learners' mother tongues and the patterns identified in English L2 in our corpus.

As can be seen from Figure 7.25 below, activity predicates in French L1 are mainly encoded in the *présent* form (65.23% of the total number of activity tokens) and only marginally in the progressive periphrasis *en train de* or the *imparfait* (6.99% and 11.67% respectively).

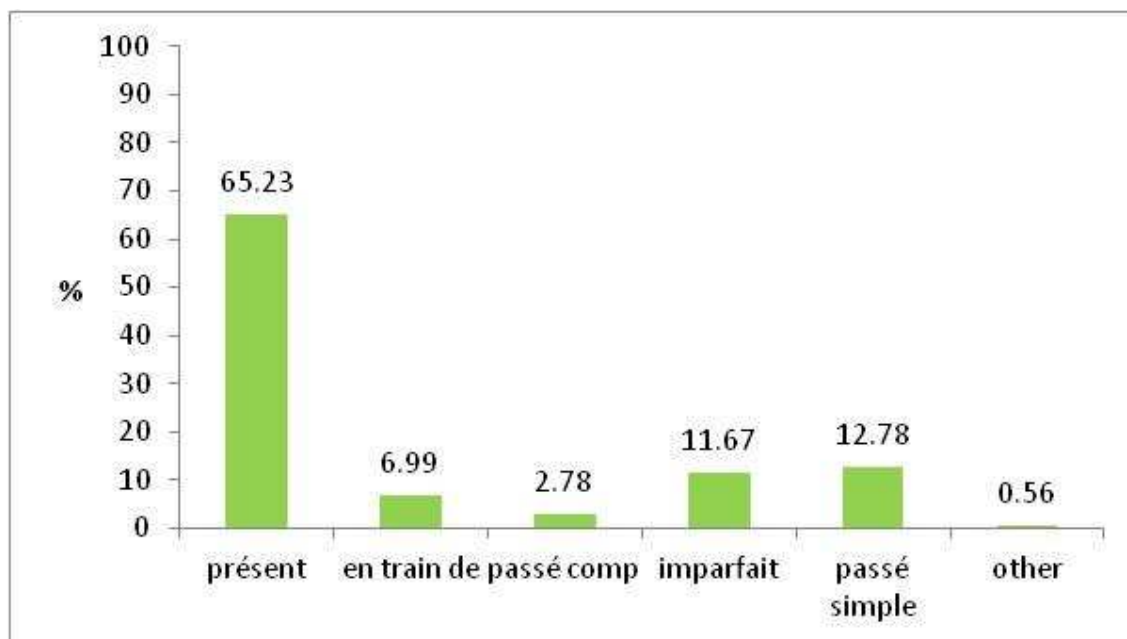


Figure 7.25. Distribution of verb morphology within activities (Tokens) – French L1

While the progressive periphrasis *en train de* is only marginally used within activities, this aspectual class being dominated by the *présent* in French L1, as a form, *en train de* is highly specialised with this type of predicates. *En train de* is exclusively used with activity predicates in our French L1 corpus, which seems to be fertile ground for positive transfer in English L2. With this in mind, the distributional patterns of progressive/non-progressive forms in activities in FRENDS and FRENGLT point at an interesting developmental route in the advanced stages of English L2 with French L1 EFLs. When the degree of grammaticalisation of the progressive is radically different in source and target languages, *i.e.*, when the progressive form is not systematically contrasted with the non-progressive form as is the case with French, the coalition between activities and the progressive form remains strong until very proficient stages of English L2 learning, when the distribution of morphology in this aspectual class eventually becomes more flexible and the activities as a class are dominated by the non-progressive form (the PRES and the PAST).¹²

As can be seen in Figure 7.26 below, activities in Catalan L1 present two distinct

¹² In French, the overall contrast between perfectivity and imperfectivity is formalised in the past by the opposition between *passé composé* and *imparfait* and is certainly exploited by FRENDS and FRENGLT irrespective of the temporal anchorage of the narrative in English L2. Nevertheless, we believe that the hypotheses on the use of the PROG form in present-anchored contexts seem to be based more on the target than on the source language in the case of the less proficient group.

patterns: in the present, they are mainly encoded in the *present* form (39.81% of the total tokens) and only marginally in the progressive form (13.43% of the tokens); in the past, the pattern is reversed, imperfective forms (the *imperfet* and the past progressive) outnumbering the *passat perfet perifràstic* (28.18% and 17.65% respectively). The distribution of tense-aspect morphology in activities in Catalan L1 is characterised by a more systematic contrast between progressive and non-progressive/perfective forms than in French L1.

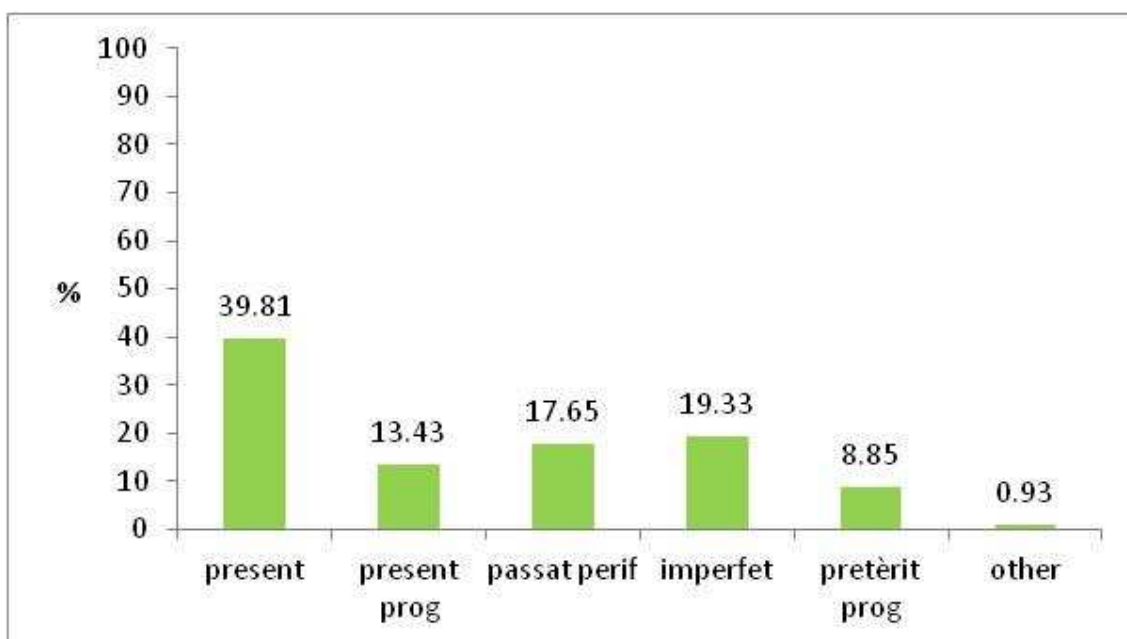


Figure 7.26. Distribution of verb morphology within activities (Tokens) – Catalan L1

As opposed to their French L1 English L2 counterparts, the Catalan L1 EFLLs in our corpus can be said to find it easier to relax the *congruence principle* in the distribution of tense-aspect morphology in activities in English L2. It seems that when the distance between the degree of grammaticalisation of the progressive aspect is shorter between source and target languages, as is the case with Catalan and English, the relaxation of the coalition between the progressive form and activities in English L2 occurs more quickly than when source and target languages grammaticalise the progressive to very different degrees.

In our study, the French L1 learners, whose L1 does not grammaticalise the progressive, tend to remain strongly attached to the prototypical coalition of the progressive form with activities even at advanced stages of L2 learning. Advanced learners whose L1 grammaticalises the progressive, namely the Catalan L1 groups,

seem to make a more productive use of tense-aspect morphology with activities and relax the prototypical pairing progressive/activities sooner than the former.

In the present chapter we have explored the influence of the inherent semantic properties of the predicates on the use of tense-aspect morphology in English L1 and English L2. In the following chapter, tense-aspect morphology will be analysed with respect to the narrative moves and the function the predicates play in the construction of the temporal reference in the *Frog* story.

Chapter 8: The Discourse Hypothesis in Advanced English L2

While chapter 7 dealt with the relation between tense-aspect morphology and the inherent semantic properties of the predicates (the Aspect Hypothesis, from now on the AH), the present chapter deals with the relation between verb morphology and the narrative moves (the Discourse Hypothesis, from now on the DH). This relation will be analysed in the oral narratives produced by the four groups of advanced EFLs: two groups of French L1 learners (FRENGS and FRENGT) and two groups of Catalan L1 learners (CATENGS and CATENGT).¹ The patterns will be compared with those found in the oral production of twelve English L1 speakers (ENG).

As discussed in Chapter 2, the DH states that L2 learners in post-basic stages attend to certain narrative organisational principles, such as grounding, and make a grounding-sensitive use of tense-aspect morphology.² In English L2, for instance, less proficient learners have been shown to use higher rates of simple past to encode foreground information than background material, and higher rates of progressive to encode background material rather than foreground information (Bardovi-Harlig 1992, 2000). This dichotomy appears to gradually wear off at higher proficiency levels and in oral film narratives, particularly with respect to the simple past, whose distribution becomes more homogeneous with respect to foreground and background, whereas the progressive strengthens as a background marker. Similar to what happens in English L1, learners are expected to eventually use tense-aspect morphology to convey their own, subjective perspective on the material to be narrated, liberated from the prototypical coalitions in the early stages of L2 learning, and to encode the array of temporal relations underlying the plot of the story.

The analysis presented here was carried out with respect to the same four tense-aspect forms discussed in chapter 7, namely the present (from now on PRES), the present progressive (from now on PROG), the simple past (from now on PAST) and the past progressive (from now on PPROG). However, the discussion of the DH will marginally touch on the two perfect forms, the present perfect (from now on PERF) and

¹ See learner profiles in chapter 6 (Research Methodology).

² This does not mean that, at pre-basic stages, learners do not attempt to structure their narratives in terms of grounding, but they often rely on linguistic means other than tense-aspect morphology. See discussion in Chapter 3, section 3.3.2.

the past perfect (from now on PPERF), given their contribution to the temporal organisation of our narratives.

As discussed in chapters 4 and 5, the narrative structure of the *Frog* stories in our corpus was not analysed in terms of foreground and background but in terms of moves, *i.e.*, forward, sideways and backward moves. The narrative moves were established on the basis of pragmatic, syntactic and semantic criteria, trying to rely only minimally on the verb forms. This was done mainly to minimise the circularity inherent in determining the role played by tense-aspect morphology in encoding temporal relations in narrative discourse if the same verb form has been used as a criterion for categorising these relations. While this was feasible for forward and sideways moves, backward moves were more closely tied to a particular verb form which had to be taken into account, namely the (present/past) perfect.³ Table 8.1 below summarizes and illustrates the typology of narrative moves in our English L1 and English L2 corpora (see Chapter 5 for a detailed discussion).

The purpose of the analysis presented in this chapter is to examine how advanced EFLs use tense-aspect morphology to encode temporal relations in oral *Frog* stories. Namely, we are interested to see what kind of verb form/narrative move coalitions underlie the use of tense-aspect morphology in English L2 narratives and to what extent these coalitions match the ones observed in English L1. We expect the non-progressive forms (the PRES in present-based narratives and the PAST in past-based narratives) to be more homogeneously used in forward and sideways moves than the progressive forms (the PROG and the PPROG), which are believed to remain skewed towards sideways moves. A certain task effect is expected, in the sense that the *Frog* story can also be dealt with as if it were a collection of ongoing scenes, resulting in the use of the progressive both in forward and sideways moves. In the line of Ayoun and Salaberry (2008), we would also like to look for possible mother tongue transfer effects in advanced English L2, particularly with respect to the perfect forms PERF and PPERF, which are assumed to be used with greater frequency by French and Catalan L1 learners on account of their morphological similarity with the *passé composé* in French and the *perfet* in Catalan.

³ Note, however, that the narrative material encoded in the perfect does not constitute a proper backward move (see discussion in chapter 5, section 5.3.2).

FORWARD MOVES	SIDEWAYS MOVES	BACKWARD MOVES
<p>FORWARD Example (1) a. uh Tim continued looking for uh the frog. b. and he went to another tree. c. he climbed the tree. d. and looked inside the hideout again. (Cat L1 Eng L2, T9)</p>	<p>FINITE Example (5) a. a gopher appeared. b. while the dog was playing with the bees. c. and ### <he> [] the bees and its house fell down of the tree. d. while the boy was looking for the frog inside another tree. (Cat L1 Eng L2, S2)</p>	<p>BACKWARD Example (7) a. # um # <he> [] the little boy is still looking for the frog now <n> [] in a tree. FORWARD b. the little boy climbed <n> [] in the tree. BACKWARD c. and we notice there is a hole in the tree #. BACKGROUND d. and and the little dog is still with his bees ##. SIDEWAYS (Fr L1 Eng L2, S4)</p>
<p>Indirect forward moves: 1. SIDEWAYS FORWARD (temporal progression in a parallel plot) Example (2) a. and meanwhile the very naughty dog # uh was shaking the tree. SIDEWAYS b. so that the beehive and all the bees fell down +... SIDEWAYS-FORWARD (Cat L1 Eng L2, T9)</p>	<p>NON-FINITE Example (6) a. at some point the little dog ran to its beehive. FORWARD b. and started to play with the bees. FORWARD c. flying in the air. SIDEWAYS d. and the little boy found out a hole. SIDEWAYS e. and tried to find track <o> [] of the frog. SIDEWAYS-FORWARD (Fr L1 Eng L2, T10)</p>	<p>BACKWARD RT-MAINTENANCE Example (8) a. early the next morning the – both discover FORWARD b. that the frog has escaped. BACKWARD RT-MAINTENANCE (Eng L1, E7)</p>
<p>Prospective forward moves: FORWARD RT-MAINTENANCE Example (4) a. the boy { sticks his - oh } - is looking down a hole FORWARD b. to see FORWARD/RT-MAINTENANCE c. if the frog is in the hole (-) SIDEWAYS d. and the dog is intrigued by this beehive. (Eng L1, E2)</p>	<p>BACKWARD RT-SHIFT Example (9) a. now the beehive has been knocked down out of the tree by the dog – BACKWARD/RT-SHIFT b. and the bees are intrigued – with the dog. SIDEWAYS c. while the boy is sitting in a tree. SIDEWAYS (Eng L1, E2)</p>	<p>BACKWARD RT-SHIFT Example (9) a. now the beehive has been knocked down out of the tree by the dog – BACKWARD/RT-SHIFT b. and the bees are intrigued – with the dog. SIDEWAYS c. while the boy is sitting in a tree. SIDEWAYS (Eng L1, E2)</p>

Table 8.1. Narrative moves typology in English L1 and English L2 *Frog* stories

The chapter is structured in three parts. In section 8.1, we overview the distribution of the narrative moves in oral *Frog* stories in English L1 and English L2 and establish possible similarities between the learners' mother tongue and the selection of the temporal information in their English L2 production. In section 8.2, we analyse the distributional patterns of tense-aspect morphology in relation to the different move types, in English L1 and English L2. Finally, in section 8.3, we look at the interplay between semantic and discourse factors in the distribution of verb forms by combining the aspect and discourse analyses.

8.1 Narrative moves in the *Frog* story in English L1 and English L2

8.1.1 Move Choice in English L1 and English L2

The analysis of moves presented here will initially take into account a wider range of tokens than those analysed in chapter 7 for the AH. This range includes verb periphrases of the type *try (to)*, *decide (to)*, *start (to/Ving)*, *keep (Ving)*, *continue (Ving)*, etc., and non-finite verb tokens (infinitives and gerunds), which can encode narrative moves (see chapter 5 for discussion and Table 8.1 above). This will allow us to analyse a larger part of the corpus and obtain a more accurate picture of how the temporal reference is encoded in English L1 and English L2 oral *Frog* stories. The following material was not categorised in terms of moves and was not included in the analysis, on account of the fact that it does not contribute to the plot as such: background material (e.g., scene setting descriptions, evaluations of the characters' actions and other (meta-) narrative digressions), direct and indirect speech, deontic and epistemic modality and negative clauses. Table 8.2 below presents the overall figures for forward (from now on FWD), sideways (from now on SIDE) and backwards (from now on BACK) in the test groups (FRENGS and FRENGT for French L1 English L2; CATENGS and CATENGT for Catalan L1 English L2) and in the control group (ENG).⁴

⁴ Note that FWD moves also include those moves which were labelled as SIDEWAYS FORWARD and BACKWARD FORWARD given that they encode temporal progression in a parallel or retrospective plot.

Group	Forward Moves	Sideways Moves	Backward Moves	Total Moves
FRENGS	319	212	46	577
FRENGT	383	322	77	782
CATENGs	309	120	21	450
CATENGT	396	237	23	656
ENG	351	256	48	655
TOTAL	1758	1147	215	3120

Table 8.2. Narrative moves in English L1 and English L2 (raw count)

Table 8.3 presents the proportion of moves containing finite predicates, periphrastic constructions, and non-finite verb forms in English L1 and English L2. Figures are presented as raw numbers and as percentages out of the total number of moves produced by each group. The discussion of the DH will be carried out only in relation to those moves encoded by finite predicates (see section 8.2 in this chapter), which correspond to the predicate tokens analysed in relation to the AH in chapter 7.⁵

Groups	Finite Moves	%	Periphrastic Moves	%	Non-finite Moves	%	Total Moves
FRENGS	496	86.0	35	6.1	46	8.0	577
FRENGT	656	83.9	27	3.5	99	12.7	782
CATENGs	379	84.2	41	9.1	30	6.7	450
CATENGT	537	81.9	48	7.3	71	10.8	656
ENG	556	84.9	32	4.9	67	10.2	655
TOTAL	2624	84.1	183	5.9	313	10.0	3120

Table 8.3. Rates of finite, periphrastic and non-finite moves in English L1 and English L2

The box-plot in Figure 8.1 below gives us an overview of the distribution of moves in each of the five groups under study here and the degree of variation in these groups – the boxes represent the middle range of values produced by each group and the whiskers indicate the maximum and minimum values in the groups.⁶ One of the specificities of working with the *Frog* story is that, in spite of being exposed to the same eliciting material (a picture book with 24 pictures), different individuals can be more or less prolific narrators. The total number of moves of a very prolific narrator in one

5 The total number of finite moves is slightly smaller than that of the tokens in chapter 7 (Table 7.1), because some of the predicates analysed in the AH do not constitute proper narrative moves. This is the case of theme re-instantiation statements of the type “so he continues his search with his friend the dog” (Fr L1 Eng L2, T7) which were not included in the DH analysis but were analysed in terms of the AH. The difference between the total finite moves and the total tokens is, nevertheless, minimal.

6 The numbered circles in the box-plot represent “outliers” with respect to the rest of the groups. The presence of outliers indicates that the population we sampled from is not normally distributed.

group can alter the overall number of moves produced by this group. Consequently, as discussed in chapter 6 (Research Methodology), intra-group variability of the total number of moves needs to be carefully controlled by means of non-parametric tests. The box-plot allows for an overview of the dispersion of values within the five groups in our study.

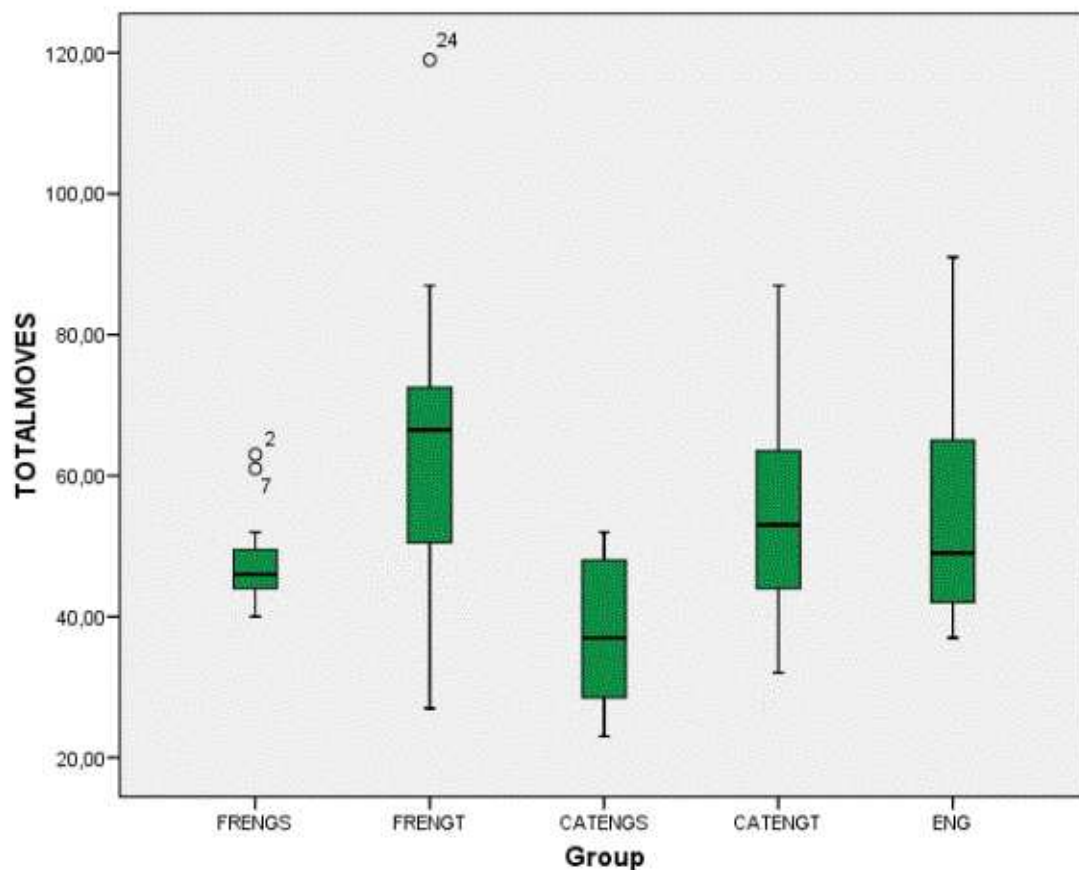


Figure 8.1. Distribution of total number of moves in FRENGS, FRENGT, CATENGS, CATENGT and ENG (raw count)

A series of inter-group Mann-Whitney U tests established that no significant difference exists between FRENGS and ENG in terms of the total number of moves produced ($U = 56$, $z = -.925$, $p = .355$), nor between FRENGT and ENG ($U = 45$, $z = -1.560$, $p = .119$). A statistically robust difference was established between the two French L1 learner groups, FRENGT producing significantly more moves than FRENGS ($U = 30.5$, $z = -2.398$, $p = .016$). With respect to the Catalan mother tongue groups, ENG are robustly more prolific than CATENGS ($U = 30.5$, $z = -2.397$, $p = .017$), whereas no significant difference exists between CATENGT and ENG ($U = 68.5$, $z = -.202$, $p =$

.840). A statistically significant difference was established between CATENGS and CATENGT with respect to the total number of moves produced ($U = 23$, $z = -2.832$, $p = .005$).

These findings show that the total number of moves is not so much an indicator of nativelikeness but of L2 proficiency. In our study, the total number of moves distinguishes between the learner groups, irrespective of their mother tongue, and can be said to match with proficiency levels: FRENGT and CATENGT produce, on the whole, more narrative moves than FRENKS and CATENKS respectively. Nevertheless, no differences were established on the basis of this parameter between FRENKS and ENG, which means that, even if they are less prolific than the French L1 professors, the French L1 students in our corpus are still nativelike with respect to the total amount of moves produced.

It is also important to underline that, while the overall amount of narrative moves produced is related to L2 proficiency in that more proficient learners can “find their words” more easily in an online task than less proficient ones and, hence, are more likely to produce long, elaborate narratives, productivity in L2 is also conditioned by other factors not related to L2 proficiency, such as a speaker’s willingness to tell the story at a given time (Bardovi-Harlig 2000:292).⁷ The choice to encode events in a narrative in more or less detail seems to already set in place at intermediate stages of L2 learning (Noyau *et al.* 2005).

Following Noyau *et al.* (2005), we believe that the temporal partitioning of the scenes into narrative moves in our L2 narratives is conditioned by at least two factors: on the one hand, by the learners’ mastery of the range of linguistic devices available in the target language to encode event structures which are spanned by complex temporal relations (*e.g.*, verbal lexicon, tense-aspect morphology, subordinating conjunctions, among others); on the other hand, by certain information selection patterns which draw on the availability of specific grammaticalised devices in the learners’ source language. According to Noyau *et al.*, linguistic choices and overall discourse organisation in L2 reflect a series of conceptual options which are language-specific and seem to remain

⁷ According to Bardovi-Harlig (2000), longitudinal studies in which individual learners are measured against their own production at different moments in time are the best way to study change in narrative structure and length. In cross-sectional studies, we suggest that the total number of moves can be an indicator of L2 proficiency when intra-group variation is controlled by means of non-parametric tests.

under the influence of the learners' L1 even at very advanced stages of L2 learning. The relation between linguistic means (namely, tense-aspect morphology) and narrative moves will be discussed later on in this chapter (section 8.2). For the time being, we would like to take a closer look at the distribution of narrative moves in the learner groups with respect to both target and source languages.

8.1.2 Move Distribution in L2 narratives: A Comparison with Source Language Patterns

Figure 8.2 shows the weight of the different types of moves (FWD, SIDE, and BACK) in the English L2 narratives of FRENGS and FRENGT. For comparison purposes, we have included the distribution of the moves in English L1 (ENG) and French L1 (FRE) narratives.

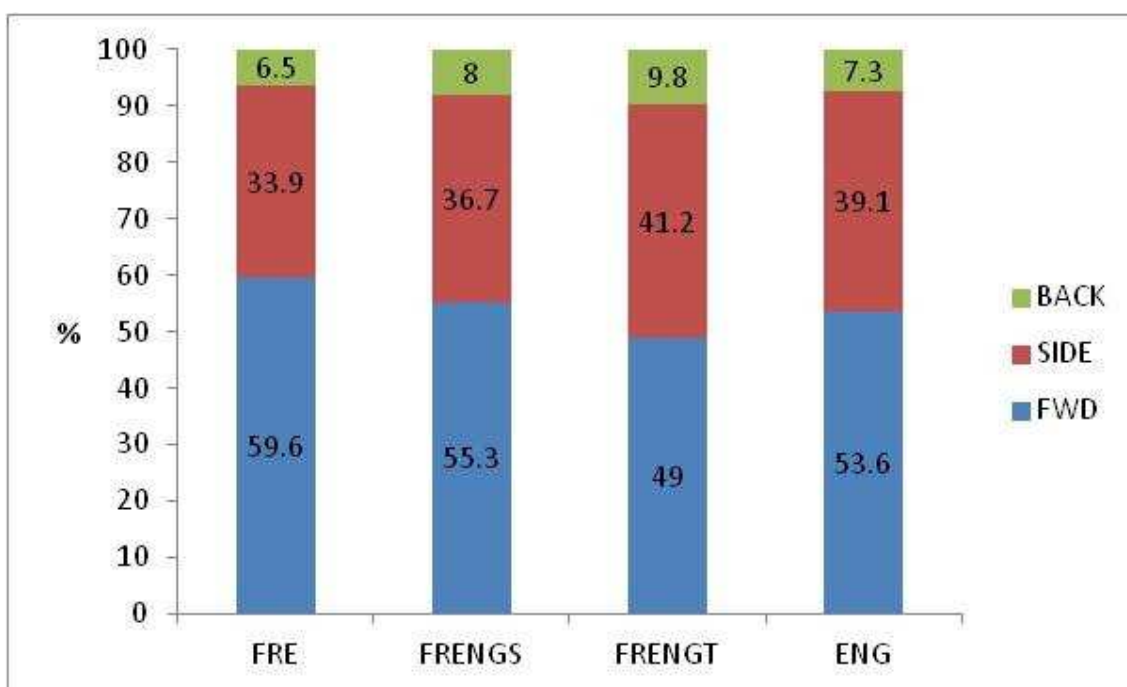


Figure 8.2. Distribution of FWD, SIDE and BACK moves in FRE, FRENGS, FRENGT and ENG

Looking first at the control groups, the comparison between FRE and ENG reveals some interesting patterns with respect to this particular mother tongue/target language combination. A marginally significant difference was established with respect to the FWD moves, which are slightly more numerous in French L1 than in English L1

(59.6% vs. 53.6%; $U = 42$, $z = -1.732$, $p = .083$).⁸ This dominance of the FWD moves is not present in the production of the learner groups. FRENGS and FRENGT produce relatively fewer FWD moves than the French L1 group ($U = 42$, $z = -1.734$, $p = .083$ for FRENGS vs. FRE and $U = 33$, $z = -2.252$, $p = .024$ for FRENGT vs. FRE; 55.3% and 49% vs. 59.6%) and, additionally, FRENGT produce marginally more SIDE moves than FRE ($U = 39$; $z = -1.905$, $p = .057$, 41.2% vs. 33.9%). No statistically significant differences were established between the two learner groups and the English native speakers in our corpus, nor between the two learner groups with regard to the proportion of FWD, SIDE and BACK moves. While French L1 narratives seem to be characterised by a preference for FWD moves and, hence, a high degree of linearity (also observed by Noyau *et al.* (2005) in film retellings), it seems that, in English L2, the French speakers in our corpus produce less linearly elaborated narratives and opt, especially in the case of the most proficient learners, for including synchronous material by means of SIDE moves.

Figure 8.3 below shows the distribution of the different types of moves (FWD, SIDE, and BACK) in the English L2 narratives of CATENGs and CATENGt. For comparison purposes, we have included the distribution of the moves in English L1 (ENG) and Catalan mother tongue (CAT) narratives.

The comparison between the Catalan mother tongue and English L1 control groups established two areas of statistically robust differences: Catalan native speakers encode more FWD moves than the English native speakers (66.5% vs. 53.6%; $U = 18$, $z = -3.118$, $p = .002$), whereas the latter produce more SIDE moves than their Catalan counterparts (39.1% vs. 26.6%, $U = 10$, $z = -3.581$, $p = .000$). The less proficient Catalan learners of English stay closer to the source language model than their French L1 counterparts. No significant differences were established between CATENGs and CAT with respect to the proportion of the different move types in the overall number of moves produced. Note, nevertheless, that CATENGs produce significantly fewer narrative moves than CAT in terms of the overall number of moves ($U = 34$, $z = -2.195$, $p = .028$; see Table 8.2 above for raw counts).

⁸ Given the limited size of the sample used in this study, p values between .051 and .100 were interpreted as marginally significant (see chapter 6 Research Methodology).

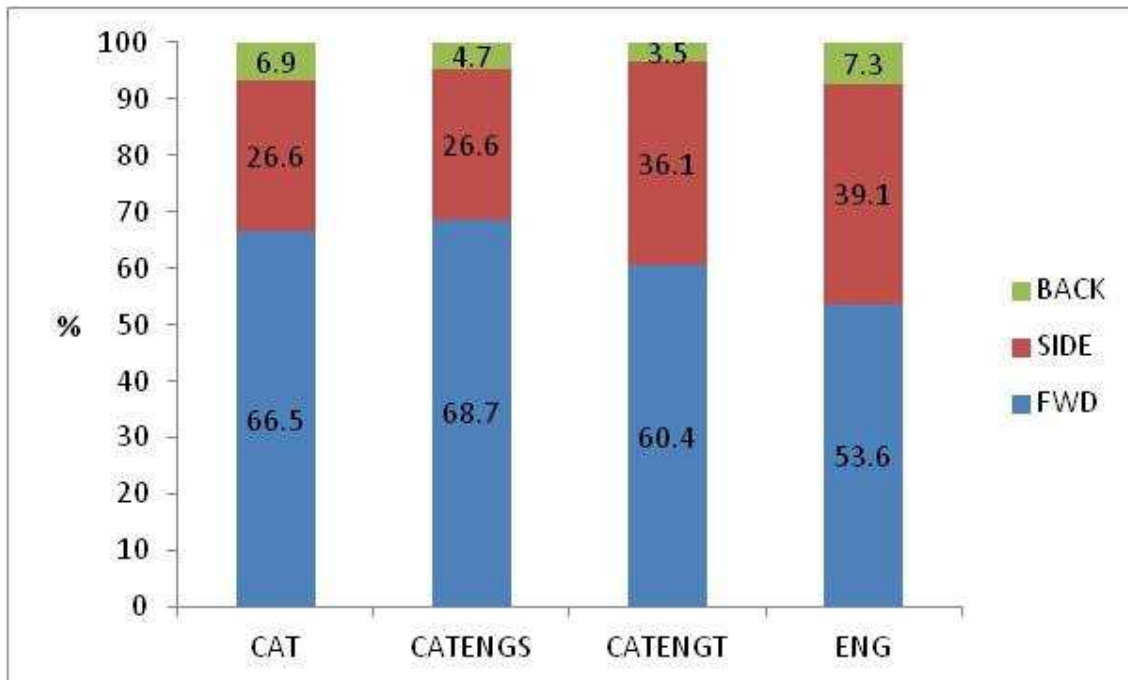


Figure 8.3. Distribution of FWD, SIDE and BACK moves in CAT, CATENGS, CATENGT and ENG

The Catalan professors produce marginally more SIDE moves than CAT (36.1% vs. 26.6%, $U = 43.5$, $z = -1.646$, $p = .100$), which points at a shift from a linear account, typical of Catalan native speakers, to a more encompassing or lateral approach, similar to the one identified among ENG. CATENGT also produce robustly fewer BACK moves than the Catalan L1 control group ($U = 3$, $z = -2.080$, $p = .038$).

When compared with the English L1 control group, findings confirm that the less proficient group of Catalan learners of English is closer to the linear mode characteristic of the Catalan L1 narratives: CATENGS produce robustly more FWD moves (68.7% vs. 53.6%; $U = 16$; $z = -3.233$, $p = .001$) and fewer SIDE moves than ENG (26.6% vs. 39.1%; $U = 20$, $z = -3.003$, $p = .003$). No statistically significant differences were established between CATENGT and ENG, except for BACK moves which are marginally more abundant in English L1 narratives ($U = 39.5$, $z = -1.880$, $p = .060$). Interestingly, the two learner groups significantly differ with respect to the amount of SIDE moves produced: CATENGT produce more SIDE moves than CATENGS (36.1% vs. 26.6%; $U = 36$, $z = -2.078$, $p = .038$), which seems to indicate that the two groups of learners operate under different narrative modes with respect to the expression of temporality, with the students driven by a linear vision of the events in

the picture book, also dominant among Catalan L1 speakers, whereas the professors have adopted a more lateral approach, encoding also SIDE moves, similar to what was observed among ENG.

It seems, therefore, that the overall number of narrative moves is not a language specific feature – the English, French and Catalan native speakers in our corpus produce similar narratives in terms of the total number of moves produced. The overall number of narrative moves is, nevertheless, a parameter which distinguishes between the different groups of advanced learners of English in our corpus, with the most advanced groups (FRENGT and CATENGT) producing robustly more narrative moves than the less proficient ones (FRENGS and CATENGS). This indicates that command of the target language conditions the overall degree of elaboration of a narrative. Nevertheless, one should bear in mind that temporal elaboration in L2 (just like in L1) is also subjected to non-linguistic factors, such as the speaker's readiness to carry out the task at a given time. In cross-sectional studies like ours, hard statistical tests are needed to compensate for such individual differences.

What seems to be language specific is the selection of the information to be included in the narrative: French and Catalan native speakers encode consistently more FWD moves than the English native speakers in our corpus, resulting in highly linear narratives, whereas the English native speakers adopt a more encompassing narrative focus, incorporating significantly more SIDE moves than their Catalan counterparts (ENG also produce more SIDE moves than FRE in percentages, but the difference is not big enough to be statistically relevant). Learners of English with French and Catalan mother tongues will have to develop this “lateral” vision on the narrative material and convey it by means of linguistic devices in the target language. As we have seen, this process of conceptual “recast” does not seem to be synchronous with the mastery of the formal aspects of the target language. The narratives produced by CATENGS, for instance, robustly differ from those of the English native speakers in their predilection for linearity and plot-advancing events, and it is only CATENGT who include SIDE moves in a nativelike proportion. The French learners, on the other hand, seem to have found it easier to do away with the mother tongue “lens” in the organisation of their narratives in English L2 - no statistically robust differences were established between

any of the groups and ENG.

The distance between source and mother tongue seems to be bigger between English and Catalan than between English and French with respect to the amount of FWD and SIDE moves produced (see percentages and statistical values in the discussion above). This, we believe, is also at least in part triggered by the choice of temporal anchor in the French and Catalan L1 *Frog* stories. As already mentioned, French native speakers generally narrate in the present (like the English native speakers), whereas their Catalan counterparts narrate, by and large, in the past. The temporal disconnection from the moment of speech imposed by the choice of the past tense seems to favour a stricter narrative mode in Catalan L1. As can be seen in examples (1) and (2) below, SIDE moves in Catalan L1 past-based narratives are doubly marked by means of an imperfective or progressive past form and a temporal conjunction or adverbial, clearly introducing a hierarchy among the different elements of the scene.

- | | | |
|-----|---|----------|
| (1) | a. i el Pol mentres # um # <u>mirava</u> en un forat.
“and Pol while look-IMPERF in a hole” | SIDEWAYS |
| | b. si trobava el seu gosset.
“if he find-IPVF his Little dog” | (-) |
| | c. resulta que li va sortir una rata.
“a rat come-PFV out” | FORWARD |
| | d. i li va queixalar el nas.
“and bite-PVF his nose” | FORWARD |
| | e. i mentres el <u>queixalava</u> .
“and while it bite-IPVF him” | SIDEWAYS |
| | f. el Dick ni se’n va enterar.
“Dick didn’t even notice” | (-) |
| | g. seguia jugant amb les abelles #.
“continue-IPFV playing with the bees”
(Cat L1, C1) | SIDEWAYS |
| (2) | a. van mirar dintre <d’un> d’un forat.
“they look-PFV in a hole” | FORWARD |
| | b. i d’aquest forat va sortir un talp.
“and out of this hole come-PFV a mole” | FORWARD |

c. el gos també **mentrestant** estava jugant <amb el> amb un rusc d'abelles.

SIDEWAYS

“the dog also meanwhile was playing with a beehive”

d. que hi havia per allà.

BACKGROUND

“that was around there”

(Cat L1, C9)

In French, the choice of the *présent* introduces a deictic dimension which brings together the “now” of the scenes in the picture book and the “now” of the narrative act, making the passage from narrative to description more flexible and, consequently, increasing the propensity to encode the scenes in more horizontal detail. SIDE moves are often expressed by means of defining relative clauses (example (3)), in the context of the locative periphrasis *il y a* (example (4)) or by means of constructions which indicate a widening of the visual scope (*e.g.*, *quant à*) (example (5)):

- | | | |
|-----|--|------------------------|
| (3) | a. et le chien <u>www</u> fait tomber la ruche.
“and the dog makes the beehive fall” | FORWARD |
| | b. qui <u>cherche</u> la grenouille.
“which looks for the frog”
(Fr L1, F8) | SIDEWAYS |
| (4) | a. il y a les abeilles.
“there are the bees” | SIDEWAYS |
| | b. qui <u>courent</u> après le chien.
“which run after the dog” | FORWARD |
| | c. il y a le hibou.
“there is the owl” | SIDEWAYS |
| | d. qui <u>court</u> <après> après Paul.
“which runs after Paul”
(Fr L1, F3) | SIDEWAYS |
| (5) | a. le petit garçon voit un trou # de taupe.
“the little boy sees the hole of a mole” | FORWARD |
| | b. et appelle la grenouille.
“and calls the frog” | FORWARD |
| | c. pour voir.
“to see” | FORWARD/RT-MAINTENANCE |

d. si elle n'est pas par hasard dans ce trou là.	(-)
“if she isn't by any chance in that hole”	
e. quant au chien il <u>regarde</u> <dans un> dans une ruche.	SIDEWAYS
“on the other hand, the dog looks in a beehive”	
f. suspendue dans un arbre.	BACKGROUND
“hanging from a tree”	
g. pour voir.	SIDEWAYS-FORWARD/RT-MAINTENANCE
“to see”	
h. si la grenouille ne serait pas là.	(-)
“if the frog is not there”	
(French L1, F5)	

These patterns will be discussed in more detail in chapter 9, where we try to gauge the influence of the learners' mother tongue on the expression of simultaneity in English L2. We turn now to the analysis of the distribution of tense-aspect morphology in relation to the different types of narrative moves in English L2. Section 8.2 will focus on the distribution of the PRES, PROG, PAST and PPROG in FWD, SIDE and BACK moves in English L1 and English L2. As announced in the introduction, the discussion will also marginally deal with two other forms, namely the PERF and the PPERF in BACK moves, given their contribution to the construction of the temporal reference in the *Frog* stories in our corpus.

8.2 Distribution of Tense-Aspect Morphology in FWD, SIDE and BACK Moves

8.2.1 General results

In this section, we look at the distribution of the predicate tokens within the three types of narrative moves (FWD, SIDE and BACK) produced by ENG and by the four learner groups (FRENGS, FRENGT, CATENGS and CATENGT). Following Bardovi-Harlig (2000), raw figures were converted into percentages using a within-category approach (see chapter 6 Research Methodology). This allowed us to control for unbalanced rates of narrative moves in the narrative. The narrative as a type of discourse favours FWD moves, which have a plot-advancing function, at the expense of

the other move types. The within-category analysis is not sensitive to this type of distributional skewing.

Table 8.4 below contains two types of information: the number of PRES, PROG, PAST, PPROG and PERF/PPERF tokens observed in each narrative move class and the group means calculated for each verb form by means of the within-category approach (indicated by the downward arrow). Group means were preferred to direct conversion of the tokens into percentages in order to control for excessive weight of some individuals in the groups (indicated by the broken arrow).⁹ The distribution of the tense-aspect forms within each narrative move will be discussed in sections 8.2.2 to 8.2.4.

In the following sections we are going to discuss the distribution of tense-aspect morphology in each of the three types of narrative moves in English L2 and English L1. The distribution of the verb forms will be analysed first at group level, looking for intra-group trends, and then in the light of the inter-group comparison in order to establish distributional patterns across proficiency levels and with respect to the English native speakers.

⁹ A detailed account of how the group means were obtained is given in Appendix 5.

Group	Form	Narrative Move Type					
		FWD		SIDE		BACK	
		% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens
FRENGS n=12	PRES	47.68	126	27.93	49	0	0
	PROG	10.34	26	30.93	57	0	0
	PAST	41.73	124	29.96	51	53.47	25
	PPROG	0.25	1	11.18	18	0	0
	PERF/PPERF	0	0	0	0	46.53	21
			(100)	(277)	(100)	(175)	(100)
FRENGT n=12	PRES	68.81	219	56.5	119	0	0
	PROG	14.15	38	27.76	69	0	0
	PAST	16.08	75	12.84	53	18.53	16
	PPROG	0	0	2.91	8	2.78	1
	PERF/PPERF	0.95	3	0	0	78.69	55
			(100)	(335)	(100)	(249)	(100)
CATENG n=12	PRES	25.1	60	15.94	18	0	0
	PROG	2.16	4	9.3	7	0	0
	PAST	70.51	188	44.45	44	37.78	8
	PPROG	2.22	6	30.31	31	0	0
	PERF/PPERF	0	0	0	0	62.22	13
			(100)	(258)	(100)	(100)	(100)
CATENG n=12	PRES	33.25	91	26.5	26	0	0
	PROG	0.69	2	4.99	8	0	0
	PAST	62.44	228	44.78	95	4.44	2
	PPROG	2.87	9	23.74	55	9.26	2
	PERF/PPERF	0.75	2	0	0	86.3	17
			(100)	(332)	(100)	(184)	(100)
ENG n=12	PRES	75.06	238	56.15	112	0	0
	PROG	5.51	17	22.22	50	0	0
	PAST	18.67	59	16.66	27	63.42	28
	PPROG	0.76	2	4.98	9	5.37	3
	PERF/PPERF	0	0	0	0	31.21	11
			(100)	(316)	(100)	(198)	(100)

Table 8.4. Distribution of tense-aspect forms within narrative moves by group (group means)

8.2.2 Tense-aspect Morphology in FWD Moves

8.2.2.1 English L1 Narratives (ENG)

As discussed in chapter 7, the English L1 narratives in our corpus are mostly present-based. FWD moves are, consequently, dominated by the PRES (75.06%, 238 tokens), followed by the PAST (18.67%, 59 tokens), the PROG (5.51%, 7 tokens) and the PPROG (0.76%, 2 tokens). A Wilcoxon signed rank test was used to contrast rates of PRES, PROG, PAST and PPROG in FWD moves in the narratives of ENG (Muñoz and Gilabert 2011).¹⁰ The results obtained are presented in Table 8.5 (significant values underlined) and the overall distribution of tense-aspect morphology in FWD by ENG is illustrated in Figure 8.4 below.

	PROGFWD -PRESFWD	PASTFWD - PRESFWD	PPROGFWD - PRESFWD	PASTFWD - PROGFWD	PPROGFWD - PROGFWD	PPROGFWD - PASTFWD
Z	-2.805(a)	-1.807(a)	-2.847(a)	-.051(a)	-1.955(a)	-1.826(a)
Asymp. Sig. (2-tailed)	<u>.005</u>	<u>.071</u>	<u>.004</u>	.959	<u>.051</u>	<u>.068</u>

a Based on positive ranks.

b Wilcoxon Signed Ranks Test

c Wilcoxon Signed Ranks Test

Table 8.5. Differences between tense-aspect morphology rates in FWD moves (Tokens) - ENG

FWD moves are dominated by the PRES in English L1 narratives. As can be seen in Table 8.5 above, statistically robust differences were established between the PRES and the progressive forms (both PROG and PPROG) in FWD moves in our English L1 corpus. In spite of the discrepancy in percentage rates and tokens (238 PRES tokens vs. 59 PAST tokens), there is only a marginally significant difference between rates of PRES and PAST in FWD moves in our English L1 narratives. This can be explained by the fact that, while the group mean for the PAST is lower than that for the PRES because only three out of the twelve subjects tell their stories in the past, the rate of PAST in FWD moves with these three subjects is comparable to that of PRES in the

¹⁰ All the non-parametric tests in this chapter were run on the percentage rates established within each narrative move class (see Table 8.4 in section 8.2.1). Raw figures were not used in the calculations because they do not have the same weight from one individual to another in the same group (see discussion in footnote 6, chapter 7).

remaining present-based narratives. In any case, the non-progressive forms on the whole and the PRES in particular clearly dominate the contexts of plot-advancing narrative material in the English L1 production.

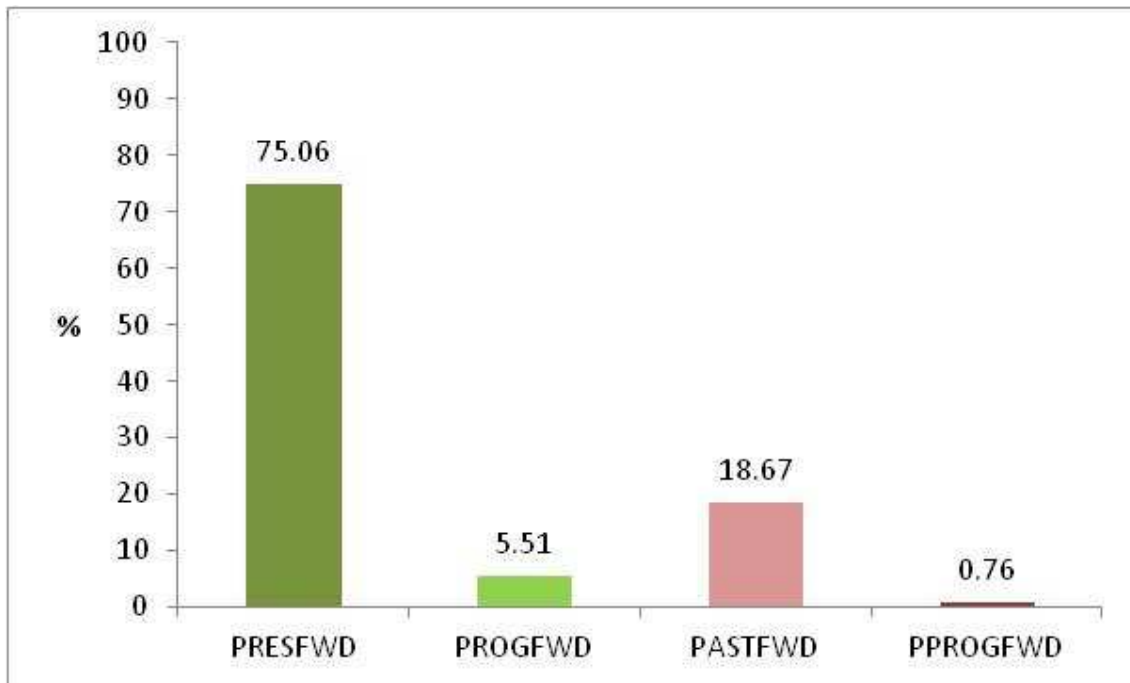


Figure 8.4. Distribution of verb morphology in FWD moves (Tokens) – ENG

While a certain task effect was expected to favour the use of the progressive forms (PROG and PPROG) in FWD moves, these are only marginally used in plot-advancing contexts. Interestingly, a statistically significant difference was established between the PROG and the PPROG in FWD moves (17 PROG tokens vs. 2 PPROG tokens), which seems to indicate that the choice of the past as a narrative tense checks the use of the past progressive form in RT-shift contexts in oral English L1 picture book stories. Given the scarce number of past-based narratives in our ENG data, more data would be needed to corroborate this statement about English L1.

8.2.2.2 English L2 Narratives

8.2.2.2.1 The French L1 English L2 Groups

While the present tense is the dominant choice among the French L1 professors (ten out of the twelve subjects narrate in the present), this tendency is less clear in the French L1 students' group (for five out of twelve subjects, the past is the dominant narrative tense). Consequently, in the narratives of FRENGS, FWD moves are encoded mainly in the PRES (47.68%, 126 tokens) and the PAST (41.73%, 124 tokens). The progressive forms are only marginally used with plot-advancing material (10.34%, 26 tokens for the PROG and 0.25%, 1 token for the PPROG). The results of the Wilcoxon signed ranks test are presented in Table 8.6 (significant values underlined) and the overall distribution of the tense-aspect morphology in FWD by FRENGS is shown in Figure 8.5 below.

	PROGFWD - PRESFWD	PASTFWD - PRESFWD	PPROGFWD - PRESFWD	PASTFWD - PROGFWD	PPROGFWD - PROGFWD	PPROGFWD - PASTFWD
Z	-2.527(a)	-.079(b)	-2.527(a)	-1.381(b)	-2.201(a)	-2.384(a)
Asymp. Sig. (2-tailed)	<u>.012</u>	.937	<u>.012</u>	.167	<u>.028</u>	<u>.017</u>

Table 8.6. Differences between tense-aspect morphology rates in FWD moves (Tokens) – FRENGS

Non-progressive forms dominate the FWD moves in the narratives of the French L1 students in English L2. As can be seen in Table 8.6, statistically robust differences were established between the PRES and the PROG and between the PAST and the PPROG in FWD moves. As predicted by the DH, the progressive forms are only marginally used in plot-advancing contexts – FRENGS opt for the non-progressive form both in present and past-based narratives. A statistically significant difference was established between the PROG and the PPROG in FWD moves, which seems to indicate that, similar to what was observed in English L1, the choice of the past as a narrative tense checks the use of the past progressive form in RT-shift contexts in oral English L2 picture book stories produced by FRENGS.

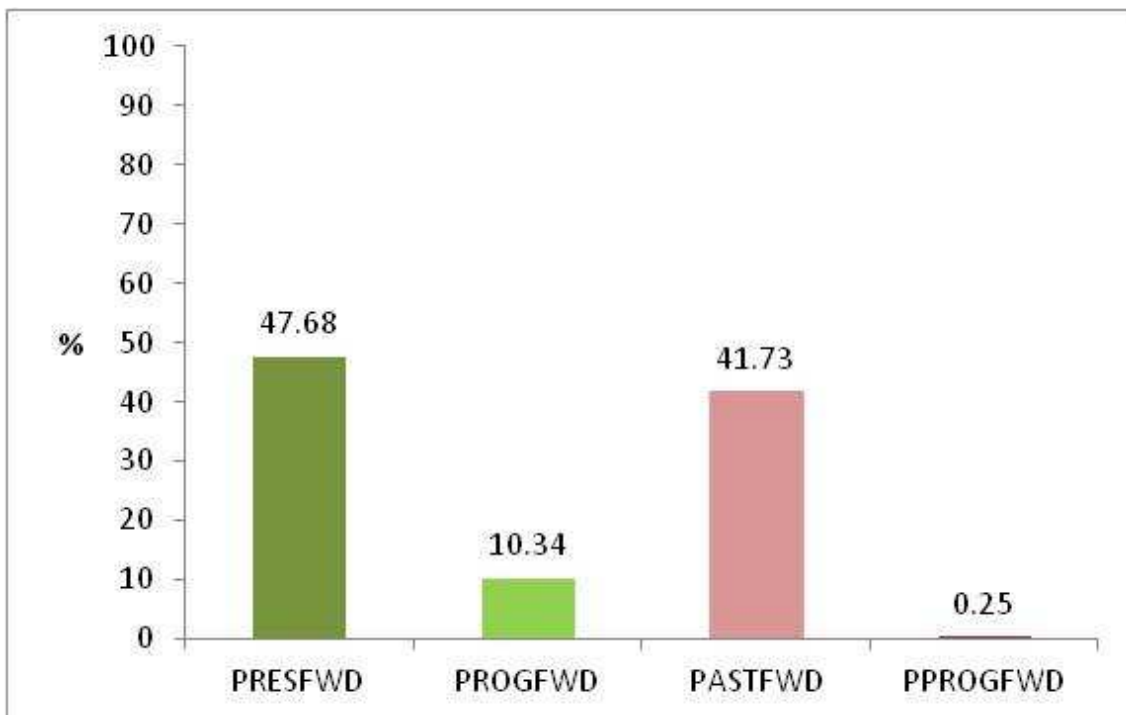


Figure 8.5. Distribution of verb morphology in FWD moves (Tokens) – FRENCS

In the French L1 professors’ group, the PRES clearly dominates the expression of the FWD moves (68.81%, 219 tokens), followed by the PAST (16.08%, 75 tokens) and the PROG (14.15%, 38 tokens). No occurrences of the PPROG were found in plot-advancing contexts produced by FRENGT.¹¹ The results of the Wilcoxon signed ranks test are presented in Table 8.7 (statistically significant values underlined) and the overall distribution of the tense-aspect morphology in FWD by FRENGT is shown in Figure 8.6 below.

	PROGFWD - PRESFWD	PASTFWD - PRESFWD	PPROGFWD - PRESFWD	PASTFWD - PROGFWD	PPROGFWD - PROGFWD	PPROGFWD - PASTFWD
Z	-2.746(a)	-2.118(a)	-3.059(a)	-1.177(a)	-2.668(a)	-2.201(a)
Asymp. Sig. (2-tailed)	<u>.006</u>	<u>.034</u>	<u>.002</u>	.239	<u>.008</u>	<u>.028</u>

Table 8.7. Differences between tense-aspect morphology rates in FWD moves (Tokens) – FRENGT

¹¹ The French professors in our study produced 3 PERF tokens in backward-forward moves (0.95% of the total FWD moves). This coalition will be dealt with in section 8.2.4.2.1, this chapter, where the PERF is discussed in more detail.

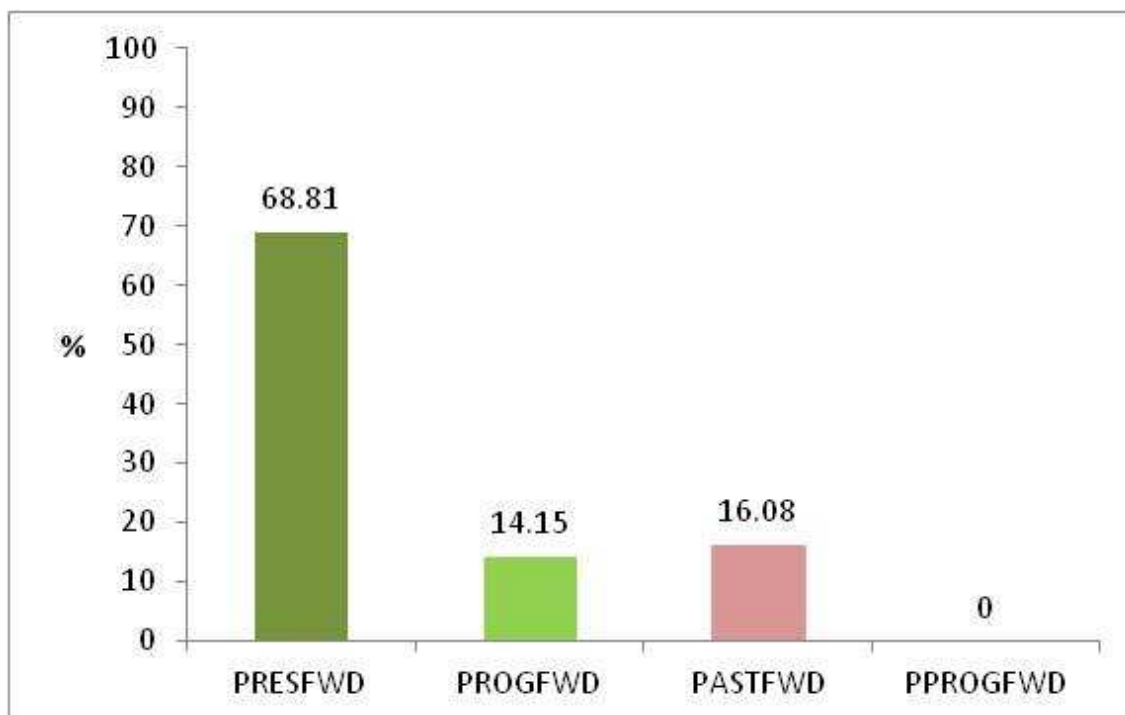


Figure 8.6. Distribution of verb morphology in FWD moves (Tokens) – FREN GT

Statistically significant differences were established between the PRES and the PAST and between the PRES and the PROG. FREN GT narrate mainly in the present (only two out of the twelve French L1 professors produce past-based narratives) and consistently encode plot-advancing material in the non-progressive PRES form. No statistically significant difference was established between the PROG and the PAST in FWD moves given the limited presence of these two forms in such contexts.

8.2.2.2.2 Inter-group comparison

Repeated Mann-Whitney U tests detected no significant differences between the two learner groups and ENG, nor between FRENGS and FREN GT with respect to the use of the PRES, the PROG, the PAST and the PPROG in FWD moves. A clear tendency was established among both native speakers and learners to encode FWD moves by means of non-progressive forms. The PRES is the dominant form in the English L1 narratives and in the English L2 production of the French professors, whereas stronger competition from the PAST was observed in the production of FRENGS, who are less homogeneous in terms of the choice of temporal anchor in

their narratives. Even so, our findings indicate that there is a strong coalition between FWD moves and non-progressive verb forms both in English L1 and English L2 oral *Frog* stories, pointing at a certain degree of specialisation of verb morphology in relation to the narrative context.

As we were saying in the introduction to this chapter, a certain task effect was expected in the use of the progressive, particularly the PROG, in FWD moves. The presence of the PROG in FWD moves is perfectly justified if the narrator chooses to present the pictures as unfolding at the very time of the narrative act. While no statistically significant differences were established in the inter-group analysis, we would like to note here that rates of PROG in FWD contexts are, on the whole, higher with the two learner groups (10.34% of the total FWD moves, *i.e.*, 26 tokens for FRENGS; 14.15%, *i.e.*, 38 tokens for FRENGT) than with the English native speakers in our corpus (5.51%, *i.e.*, 17 tokens for ENG). The distribution of the PROG in FWD moves in the three groups is presented in the box-plot in Figure 8.7.

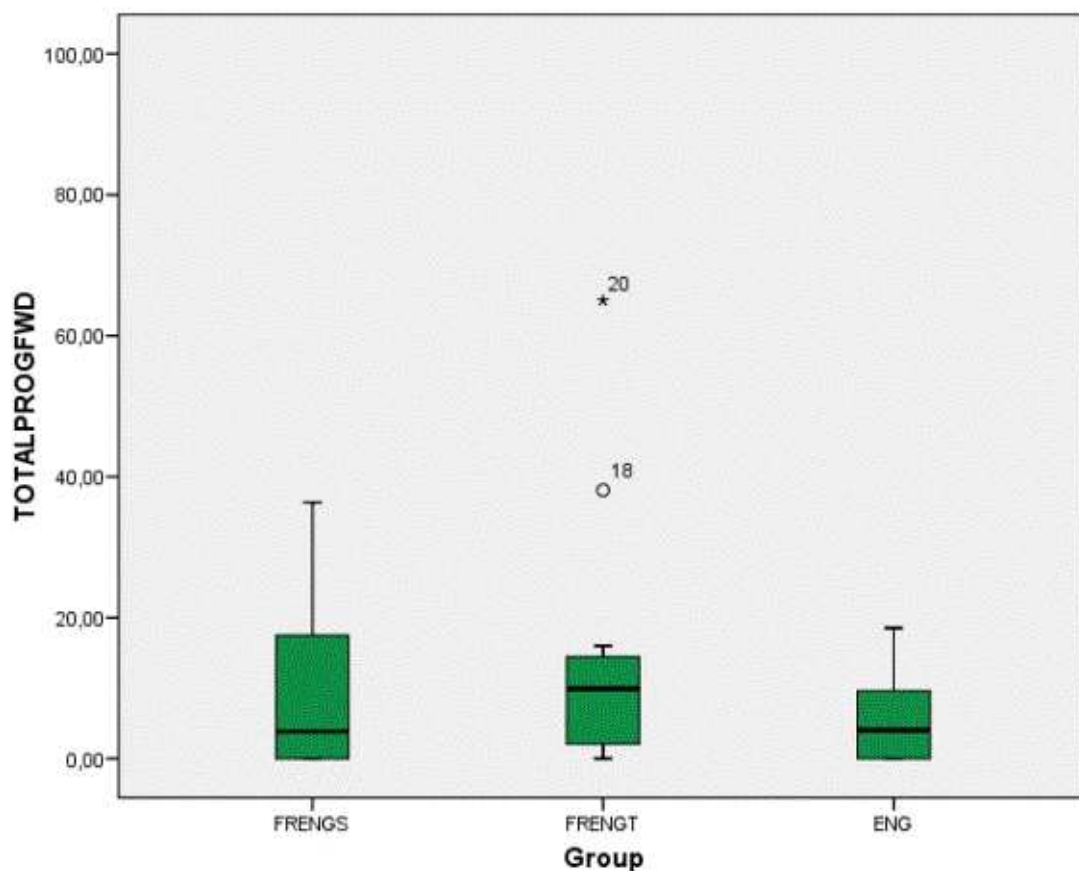


Figure 8.7. Distribution of the PROG in FWD moves (tokens) – FRENGS, FRENGT and ENG

While more data would be necessary to corroborate our findings, it seems that the French learners of English in our study are more prone to an aspectualised presentation of events in RT-shift contexts than the English native speakers. The use of the PROG in FWD moves can be said to create a “tension” between the semantics of the verb form (which is intrinsically unbounded) and its plot-advancing function. Certain passages are difficult to interpret as sequenced without knowing the picture book because the transition from an ongoing event to another ongoing event is not marked by an explicit RT-shift adverbial, as is the case in example (6). (6a) and (6b) were interpreted as sequenced on the basis of the picture book where the boy is depicted as holding onto a branch once at the top of the rock. This “tension” increases when the PROG is used in FWD moves with inherently [+ punctual] predicates, namely achievements. When the PROG is used in FWD moves, it is generally anchored by the deictic adverb *now* or “false” equivalents like *actually*, or by other deictic expressions with reference to the location of the character in the visual field of the narrator (examples (7) to (9) below).

- | | | |
|-----|---|------------------|
| (6) | a. now <u>he's climbing</u> over a rock. | FORWARD |
| | b. and <u>he's holding</u> onto a sort of branch. | FORWARD |
| | c. and <u>calling</u> for his frog. | SIDEWAYS |
| | (Fr L1 Eng L2, S6) | |
| (7) | a. now the little dog is <u>jumping</u> at a beehive. | FORWARD |
| | b. and playing with the bees. | SIDEWAYS |
| | c. whereas the little dog is looking inside a little hole in the ground. | SIDEWAYS |
| | (Fr L1 Eng L2, S6) | |
| (8) | a. and so the owl is actually taking <its> [/] <its> [/] well <it s flying> [/] yeah <u>it's flying away</u> . | FORWARD |
| | b. surprising the boy. | SIDEWAYS |
| | c. and exactly at the same time <the> [/] the bees are <getting> [/] getting so annoyed at the dog. | SIDEWAYS |
| | d. that they are running after him. | SIDEWAYS-FORWARD |
| | e. chasing him. | SIDEWAYS |
| | (Fr L1 Eng L2, T6) | |

- (9) a. the stag lets the little boy fall down the cliff. FORWARD
 - b. and the silly puppy along.
 - c. **now** that is frightening. BACKGROUND
 - d. he's falling. FORWARD
- (Fr L1 Eng L2, T2)

This point will be dealt with in more detail in section 8.3 and in chapter 9. For the time being, we would like to underline that this deictic linkage was also observed in French L1 (section 8.1.2 above). When the PROG is used in FWD moves, the narrative reads as a succession of *now* points unified by the external point of view of the narrator. The narrative as such seems to lose cohesion and become a collection of juxtaposed situations seen as ongoing at successive RTs.

8.2.2.2.3 The Catalan L1 English L2 Groups

The Catalan learners of English in our corpus produce mainly past-based narratives. In the narratives of CATENGS, FWD moves are strongly dominated by the non-progressive forms, namely the PAST (70.51%, 188 tokens), followed by the PRES (25.10%, 60 tokens). The progressive forms are only marginally used with plot-advancing material (2.16%, 4 tokens for PROG and 2.22%, 6 tokens for PPROG). The results of the Wilcoxon signed ranks test are presented in Table 8.8 (statistically significant values underlined) and the overall distribution of the tense-aspect morphology in FWD moves with CATENGS is illustrated in Figure 8.8 below.

	PROGFWD - PRESFWD	PASTFWD - PRESFWD	PPROGFWD - PRESFWD	PASTFWD - PROGFWD	PPROGFWD - PROGFWD	PPROGFWD - PASTFWD
Z	-2.366(a)	-1.693(b)	-1.955(a)	-2.762(b)	-.674(b)	-2.810(a)
Asymp. Sig. (2-tailed)	<u>.018</u>	<u>.090</u>	<u>.051</u>	<u>.006</u>	.500	<u>.005</u>

- a Based on positive ranks.
- b Based on negative ranks.
- c Wilcoxon Signed Ranks Test

Table 8.8. Differences between tense-aspect morphology rates in FWD moves (Tokens) – CATENGS

In spite of the discrepancy in percentage rates and tokens, there is only a marginally significant difference between rates of PAST and PRES in FWD moves in

the narratives of CATENGs (60 PRES tokens *vs.* 188 PAST tokens). This can be explained by the fact that, while the group mean for PRES is low because only three out of the twelve subjects narrate in the present, the rate of PRES in FWD moves with these three subjects is comparable to that of the PAST in the remaining past-based narratives. Rates of PAST in FWD moves are significantly bigger than those of the PROG and the PPROG. Note that, unlike their French counterparts, CATENGs rely very marginally on the PROG (2.16%; 4 tokens) to encode FWD moves, even though this coalition was expected to occur in picture book narratives like the *Frog* story. Once again, the choice of the past as a narrative tense seems to strongly limit the use of the PPROG in RT-shift contexts with this group of learners (only 6 PPROG tokens in FWD moves were observed in our CATENGs corpus). When the PPROG is used in FWD moves, it exclusively encodes durative predicates (mainly activities), as illustrated in example (10):

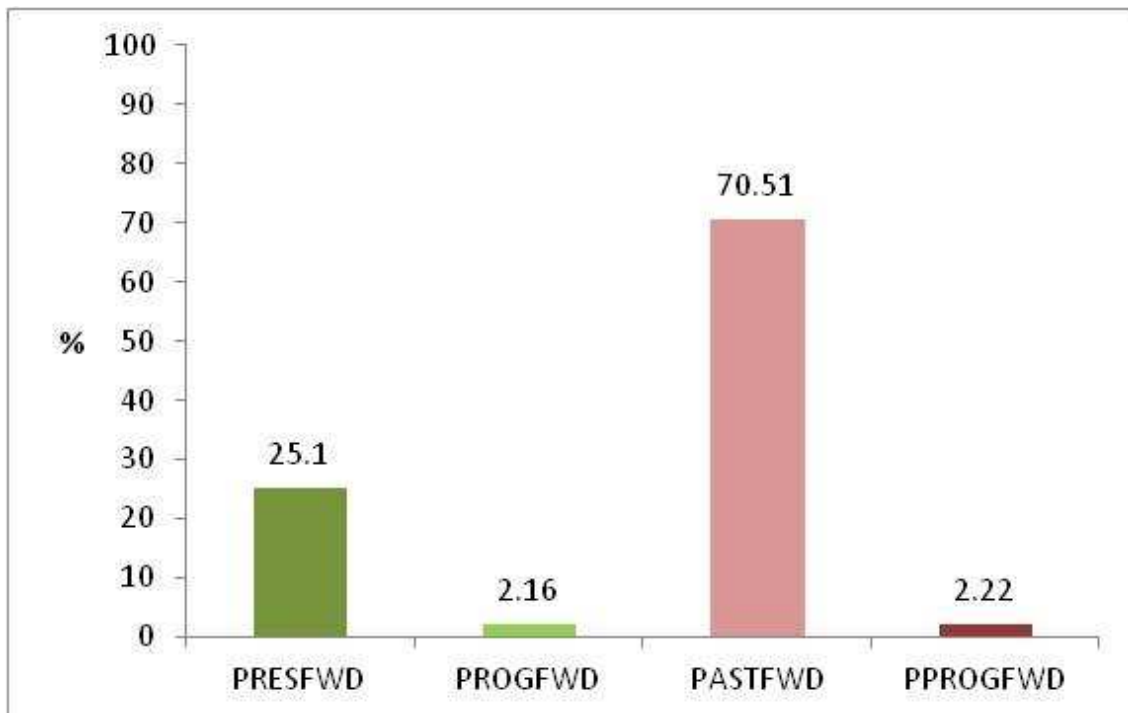


Figure 8.8. Distribution of verb morphology in FWD moves (Tokens) – CATENGs

- (10) a. and **still** the dog was playing with the bees. FORWARD
 b. and the bees started getting mad at the dog. SIDEWAYS
 c. and meanwhile the boy was looking for the frog in some tree holes. SIDEWAYS
 (Cat L1 Eng L2, S8)

There is a strong coalition between non-progressive verb forms and FWD moves in the oral narratives of CATENGT. Plot-advancing material is almost exclusively encoded in the PAST (62.44%, 228 tokens) and the PRES (33.25%, 91 tokens). Only 0.69% (2 tokens) of the FWD moves is encoded in the PROG and 2.87% (9 tokens) in the PPROG.¹² The results of the Wilcoxon signed ranks test are presented in Table 8.9 (statistically significant values underlined) and the overall distribution of the tense-aspect morphology in FWD by CATENGT is shown in Figure 8.9.

	PROGFWD - PRESFWD	PASTFWD - PRESFWD	PPROGFWD - PRESFWD	PASTFWD - PROGFWD	PPROGFWD - PROGFWD	PPROGFWD - PASTFWD
Z	-2371(a)	-.709(b)	-1.008(a)	-2.601(b)	-1.363(b)	-2.668(a)
Asymp. Sig. (2-tailed)	<u>.018</u>	.478	.314	<u>.009</u>	.173	<u>.008</u>

- a Based on positive ranks.
- b Based on negative ranks.
- c Wilcoxon Signed Ranks Test

Table 8.9. Differences between tense-aspect morphology rates in FWD moves (Tokens) – CATENGT

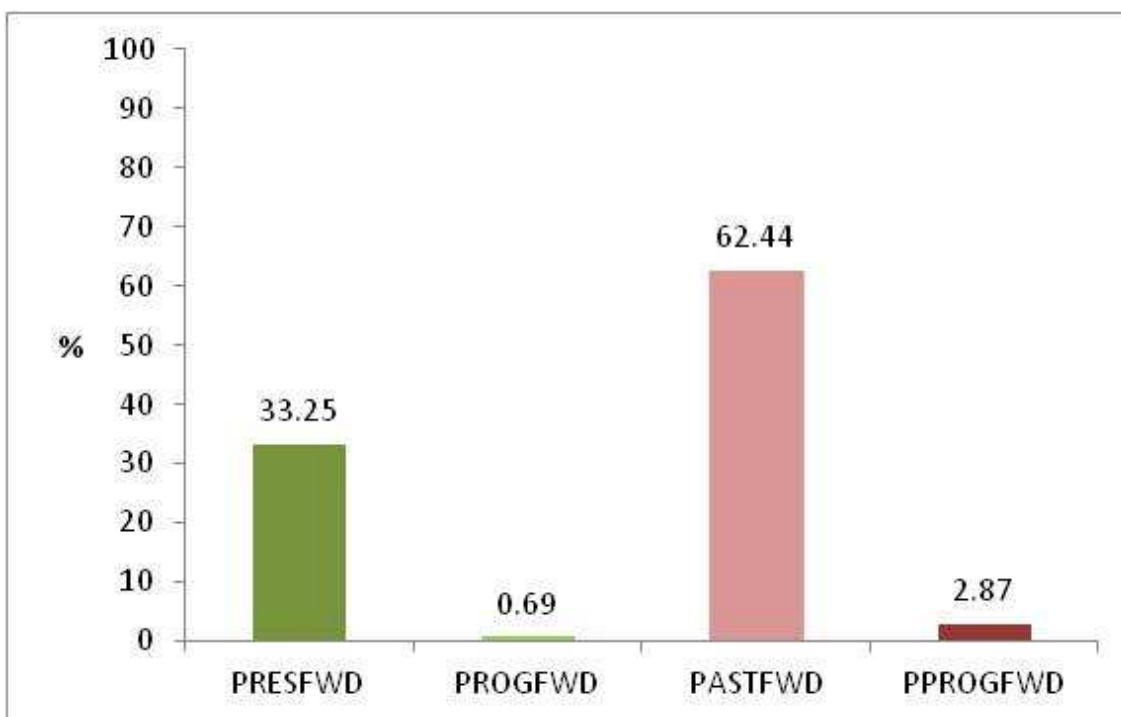


Figure 8.9. Distribution of verb morphology in FWD moves (Tokens) – CATENGT

Once again, despite the discrepancy in the percentage rates, no statistically

¹² The Catalan professors in our study produced two PPERF tokens in FWD moves (0.75% of the total FWD moves). This coalition will be dealt with in section 8.2.4.2.3, this chapter, where the PPERF is discussed in more detail.

significant difference was established between PAST and PRES in FWD for CATENGT - while the group mean for the PRES is lower than that of the PAST because only four out of the twelve subjects narrate in the present, the rate of the PRES in FWD moves with these four subjects is comparable to that of the PAST in FWD moves in the remaining past-based narratives. As can be seen in Table 8.9, non-progressive forms robustly dominate FWD moves with CATENGT, in line with the predictions of the DH. Similar to CATENGS, when the PPROG is used in FWD moves, it exclusively encodes durative predicates (activities and accomplishments).

8.2.2.2.4 Inter-group comparison

Repeated Mann-Whitney U tests established significant differences between the two Catalan learner groups and ENG with respect to the use of the PAST in FWD moves. Both groups of learners use robustly more PAST in plot-advancing contexts than the English native speakers in our corpus ($U = 28.5$, $z = -2.613$, $p = .009$ for CATENGS and $U = 38$, $z = -2.066$, $p = .039$ for CATENGT). This is a direct consequence of the choice of temporal anchor in the two populations: Catalan learners of English narrate mainly in the past, whereas English native speakers anchor their stories in the present. No significant differences were established between CATENGS and CATENGT with respect to the distribution of tense-aspect morphology in FWD moves.

An interesting area of dissimilarity between the Catalan learners of English and the English native speakers in our study is the use of the progressive form, particularly the PROG, in FWD moves. While the PROG is relatively scarce in RT-shift contexts in English L1 production, it is nevertheless robustly more abundant than in the narratives of CATENGS ($U = 38$, $z = -2.192$, $p = .028$) and CATENGT ($U = 30$, $z = -2.788$, $p = .005$). The English native speakers in our sample appear to be more likely¹³ to give an aspectualised account of plot-advancing material than the Catalan learners in English L2. A closer look at the data tells us, though, that this is not exactly so. The Catalan learners in our corpus rely on other types of aspectualisation devices, such as the use of inceptive and continuative periphrases with *start* and *continue*, as illustrated in

¹³ The PROG represents only 5.51% of the total FWD moves in English L1 narratives (17 tokens), the non-progressive form PRES being the dominant choice of the native speakers in this type of contexts.

examples (11) and (12) (these periphrases were not included in the token figures used in the analysis in this chapter). We shall come back to this point in more detail in chapter 9.

- | | | |
|------|---|----------|
| (11) | a. so they <u>started to shout</u> all around the forest. | FORWARD |
| | b. <froggy> [!] <where are you> [?]. | (-) |
| | c. meanwhile doggy was playing with the butterflies. | SIDEWAYS |
| | (Cat L1 Eng L2, S6) | |
| (12) | a. a:nd up he goes to a # big rock whatever a big stone. | FORWARD |
| | b. and he <u>continues shouting</u> and shouting. | FORWARD |
| | c. and looking for the frog. | SIDEWAYS |
| | (Cat L1 Eng L2, T6) | |

8.2.2.3 Main points regarding the distribution of tense-aspect morphology in FWD moves in English L1 and English L2

FWD moves are robustly dominated by the non-progressive forms both in English L1 and English L2. The distribution of tense-aspect morphology in both native speaker and advanced learner production appears to be clearly skewed with respect to the type of narrative material to be encoded. Plot-advancing material, for instance, is generally encoded in the PRES or the PAST, depending on the choice of narrative tense. No proficiency related differences were established between the learner groups, irrespective of their mother tongue, with regard to the use of tense-aspect morphology in FWD moves.

In line with the DH, the progressive forms PROG and PPROG are only marginally used in FWD moves both in English L1 and English L2. The unbounded quality of the progressive, whether past or present, makes it an unlikely candidate for plot-advancing contexts both in native speaker and learner narratives. The choice of the past tense as a temporal anchor seems to strongly restrict the use of the PPROG in FWD moves and, when used in such contexts, it exclusively coalesces with durative predicates (activities and accomplishments). The picture book format, which was expected to trigger a higher use of the PROG in plot-advancing contexts, appears to have a weak effect on the use of this form in such contexts both in native speaker and

learner narratives. Nonetheless, the French L1 learners of English in our study are more prone to a deictic type of narrative linkage than the English native speakers and, consequently, to a relatively more abundant use of the PROG in FWD moves than ENG. While the semantic characteristics of the predicate seem to play a role - the PROG is mainly paired with durative predicates in FWD moves both in English L1 and English L2, the French learners of English in our study extend the progressive form to other types of predicates in RT-shift contexts to a greater extent than the English native speakers (see section 8.3, this chapter). The Catalan learners, on the other hand, scarcely use the progressive form, whether past or present, in RT-shift contexts, opting for other strategies of aspectualisation, such as the use of inceptive or continuative periphrases (see chapter 9).

8.2.3 Tense-aspect morphology in SIDE moves

8.2.3.1 English L1 Narratives (ENG)

SIDE moves in English L1 narratives are dominated by the PRES (56.15%, 112 tokens), followed by the PROG (22.22%, 50 tokens), the PAST (16.66%, 27 tokens) and only marginally by the PPROG (4.98%, 9 tokens). In native speaker discourse, the PRES has a wide scope, encompassing both RT-shift and RT-maintenance contexts, even though at a lower rate in the latter due to competition from the PROG. Table 8.10 presents the results of the Wilcoxon signed ranks test for tense-aspect morphology in SIDE moves (statistically significant values underlined), while the overall distribution of verb forms in SIDE in English L1 production is shown in Figure 8.10 below.

	PROGSIDE - PRESSIDE	PASTSIDE - PRESSIDE	PPROGSIDE - PRESSIDE	PASTSIDE - PROGSIDE	PPROGSIDE - PROGSIDE	PPROGSIDE - PASTSIDE
Z	-2.703(a)	-1.491(a)	-2.824(a)	-.867(a)	-2.090(a)	-1.214(a)
Asymp. Sig. (2-tailed)	<u>.007</u>	.136	<u>.005</u>	.386	<u>.037</u>	.225

a Based on positive ranks.

b Wilcoxon Signed Ranks Test

Table 8.10. Differences between tense-aspect morphology rates in SIDE moves (Tokens) – ENG

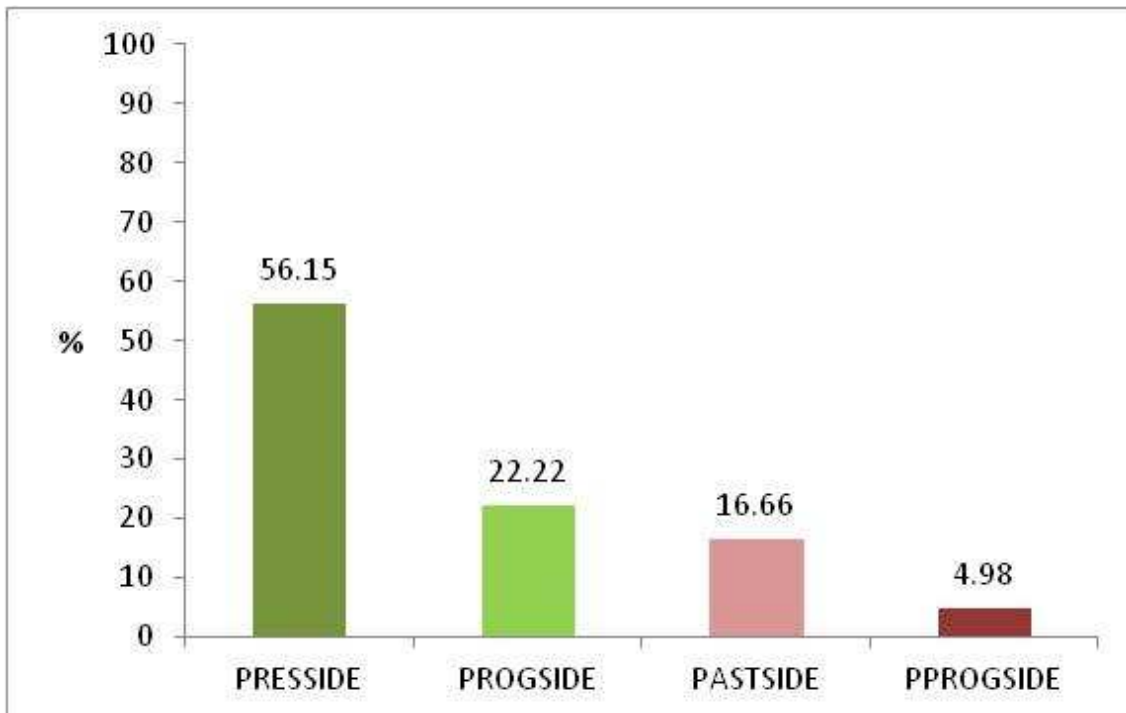


Figure 8.10. Distribution of verb morphology in SIDE moves (Tokens) – ENG

As shown in Table 8.10 above, statistically robust differences were established between the PRES and the progressive forms (both the PROG and the PPROG) in SIDE contexts. Despite the discrepancy in percentage rates and token raw figures (112 PRES tokens vs. 27 PAST tokens), there is no statistically significant difference between PRES and PAST in RT-maintenance contexts. A possible explanation for this is the fact that, while, on the whole, the PAST is less frequent than the PRES in SIDE moves, in past-based narratives the rate of PAST in SIDE moves is comparable to that of PRES in SIDE moves in present-based narratives. Note that the robust use of the non-progressive forms in SIDE moves is, at least in part, attributable to the type of predicates used in this context. SIDE moves often contain state predicates which strongly attract the non-progressive form. We need to look at the distribution of PRES with other predicates, particularly activities, to be able to distinguish between discourse factors and inherent semantic factors in the use of PRES in SIDE moves. This will be done in section 8.3, this chapter.

Only 9 tokens of PPROG were identified in SIDE moves in the ENG production, which seems to indicate that, in past-based narratives, PAST functions as a default form and is used both in RT-shift and RT-maintenance contexts. As discussed in chapter 3

(section 3.2), the English simple past can have both a bounded and an unbounded reading, depending on the inherent semantics of the predicate it encodes and other contextual factors. This makes the PAST a very “flexible” form, not specialised with respect to the different types of RT relations in narrative discourse, as illustrated in example (13) below.¹⁴ Note, nevertheless, that past morphology is scarce in our English L1 corpus and, consequently, all observations need to be corroborated with more data.

- (13) a. ! oops ! an owl flew out of the hole in the tree - FORWARD
 b. and knocked him down out of the tree - FORWARD
 c. and the bees chased the dog . SIDEWAYS
 (Eng L1, E9)

8.2.3.2 English L2 Narratives

8.2.3.2.1 The French L1 English L2 Groups

There is no clearly dominant verb form in SIDE moves in the narratives of FRENGS. The French L1 students encode SIDE moves by means of the PRES (27.93%, 49 tokens), the PROG (30.93%, 57 tokens) and the PAST (29.96%, 51 tokens) and only marginally by means of the PPROG (11.18%, 18 tokens). Table 8.11 presents the results of the Wilcoxon signed ranks test for tense-aspect morphology in SIDE moves (statistically significant values underlined), while the overall distribution of verb forms in SIDE in the narratives of FRENGS is shown in Figure 8.11 below.

	PROGSIDE - PRESSIDE	PASTSIDE - PRESSIDE	PPROGSIDE - PRESSIDE	PASTSIDE - PROGSIDE	PPROGSIDE - PROGSIDE	PPROGSIDE - PASTSIDE
Z	-.560(a)	-.235(a)	-1.468(b)	-.039(a)	-1.569(b)	-2.366(b)
Asymp. Sig. (2-tailed)	.575	.814	.142	.969	.117	.018

- a Based on negative ranks.
 b Based on positive ranks.
 c Wilcoxon Signed Ranks Test

Table 8.11. Differences between tense-aspect morphology rates in SIDE moves (Tokens) – FRENGS

¹⁴ It is also true that SIDE contexts are generally dominated by stative predicates and, as in the case of PRES, these predicates exclusively pair with PAST. Coalitions of the type activity predicates/PAST are more revealing with respect to a discourse motivated use of tense-aspect morphology. This will be discussed in more detail in section 8.3.

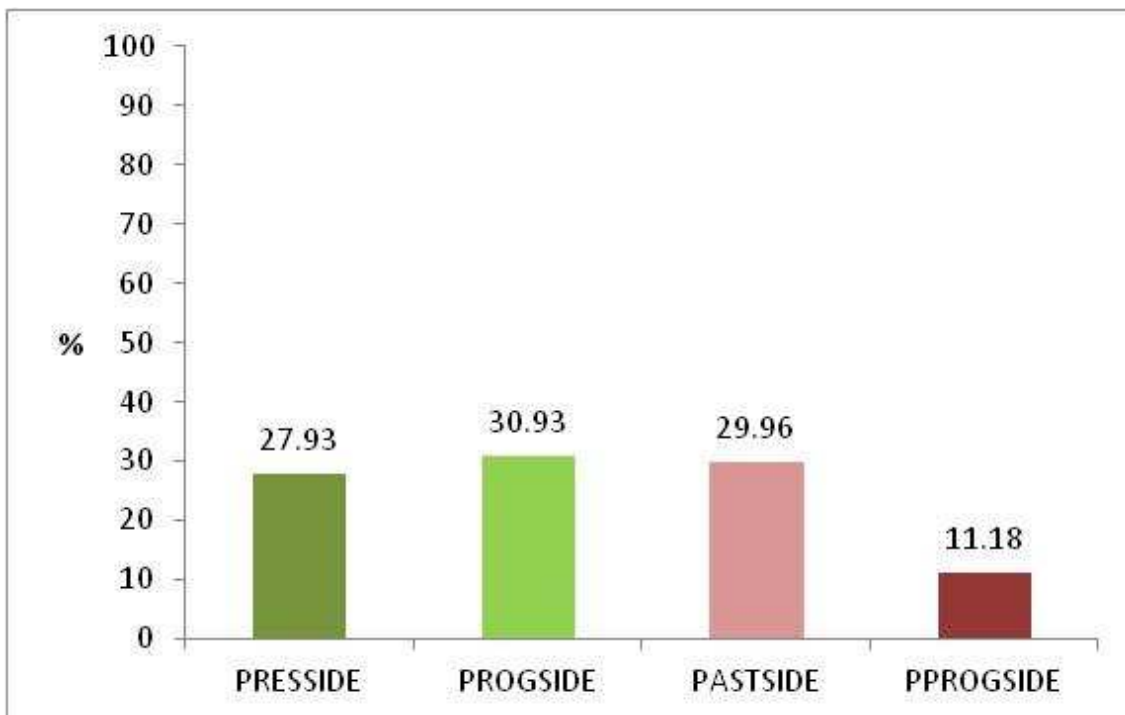


Figure 8.11. Distribution of verb morphology in SIDE moves (Tokens) – FRENCS

No statistically significant differences were established between the PRES, the PAST and the PROG in RT-maintenance contexts with this group of learners. SIDE moves are encoded at similar rates in the PRES and the PROG (49 PRES tokens *vs.* 57 PROG tokens), which seems to indicate that this particular group of learners is characterised by a more balanced use of aspectually marked and aspectually unmarked verb forms in RT-maintenance contexts in present-based *Frog* stories, unlike ENG, who seem to use the PRES as a default form both in FWD and SIDE moves. The PPROG is robustly less frequent than the PAST (18 tokens *vs.* 51 tokens), meaning that, in past-based narratives, FRENCS tend to encode SIDE moves by means of the non-progressive PAST, at least in part because SIDE moves contain numerous stative predicates.

In the narratives of FRENGT, SIDE moves are dominated by the PRES (56.50%, 119 tokens), followed by the PROG (27.76%, 69 tokens), the PAST (12.84%, 53 tokens) and are only marginally encoded by means of the PPROG (2.91%, 8 tokens). Table 8.12 below presents the results of the Wilcoxon signed ranks test for tense-aspect morphology in SIDE moves (statistically significant values underlined) in the narratives

of FRENGT and the overall distribution of verb forms in SIDE moves is shown in Figure 8.12.

	PROGSIDE -PRESSIDE	PASTSIDE - PRESSIDE	PPROGSIDE - PRESSIDE	PASTSIDE - PROGSIDE	PPROGSIDE - PROGSIDE	PPROGSIDE - PASTSIDE
Z	-1.988(a)	-1.804(a)	-2.824(a)	-1.569(a)	-2.824(a)	-1.095(a)
Asymp. Sig. (2-tailed)	<u>.047</u>	<u>.071</u>	<u>.005</u>	.117	<u>.005</u>	.273

a Based on positive ranks.

b Wilcoxon Signed Ranks Test

Table 8.12. Differences between tense-aspect morphology rates in SIDE moves (Tokens) – FRENGT

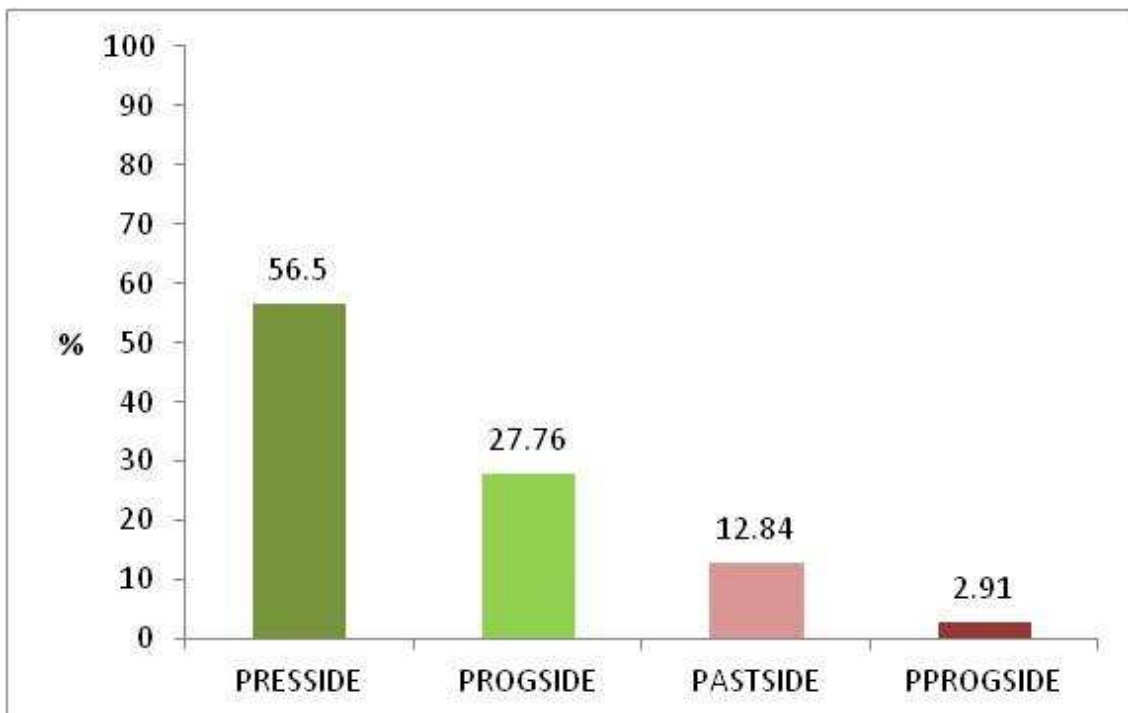


Figure 8.12. Distribution of verb morphology in SIDE moves (Tokens) – FRENGT

As can be seen in Table 8.12 above, a statistically significant difference was established between the PRES and the PROG in SIDE moves in the narratives of FRENGT. The French professors opt for the non-progressive present simple form when encoding narrative material in RT-maintenance contexts. Similar to what was observed with ENG, the PRES appears to function as a default form in the narratives of FRENGT and is used both in RT-shift and RT-maintenance contexts, though at lower rates in the latter, mainly due to competition from the PROG. Interestingly, while the dominant presence of the PRES in SIDE is, in part, a direct result of the fact that these contexts contain numerous states, the French professors are more prone than the French students

to use the PRES with other, less prototypical predicates such as activities. This non-prototypical coalition seems to constitute a qualitative parameter to distinguish between learners in the advanced stages of L2 learning (see section 8.3.1).

In spite of the difference in percentage and token rates (119 PRES tokens *vs.* 53 PAST tokens), the PRES is only marginally more frequent in SIDE moves than the PAST. Once again, we believe this is due to the fact that, while, on the whole, the PAST is less frequent than the PRES in SIDE moves, in past-based narratives the rate of PAST in SIDE moves is comparable to that of PRES in SIDE moves in present-based narratives.

Given the overall low frequency of the PAST and the PPROG in the production of FRENGT, no statistically robust difference was established between the PAST and the PPROG in SIDE moves with FRENGT. However, the French professors produce only 8 tokens of PPROG, as opposed to 53 of PAST, meaning that in past-based narratives, these learners use the non-progressive PAST rather than the PPROG in SIDE contexts, similar to what was observed with ENG.

8.2.3.2.2 Inter-group comparison

Repeated Mann-Whitney U tests established a statistically significant difference between FRENGS and ENG ($U = 33.5$, $z = -2.240$, $p = .006$) and between FRENGS and FRENGT ($U = 34$, $z = -2.211$, $p = .025$) with respect to the use of the PRES in SIDE moves. This seems to indicate that the native speakers and the most proficient French L1 English L2 group in our study use the PRES as a default form in their present-based narratives, minimising the role of the progressive in distinguishing between RT-shift and RT-maintenance contexts. Interestingly, the difference between these two groups and FRENGS seems to come from the coalition between the PRES and activity predicates in SIDE moves. We shall come back to this in section 8.3.1. No other statistically robust differences were established between FRENGS, FRENGT and ENG.

The PROG is not the dominant choice for SIDE moves in English L1, nor in English L2 with FRENGT, principally because RT-maintenance contexts contain numerous state predicates which do not readily pair with the PROG. Activity predicates in SIDE contexts are encoded in the PROG (or the PPROG), particularly in the

narratives of FRENGS. Nevertheless, as already discussed, competition from the PRES is strong in the case of activity predicates in the narratives of ENG and FRENGT, which means that the native speakers and the most proficient French L1 learners make a more non-prototypical use of tense-aspect morphology in SIDE moves, whereas FRENGS seem to be still quite sensitive to the coalition between the PROG and activity predicates in such contexts.

8.2.3.2.3 Catalan L1 English L2

As mentioned in section 8.1.2, CATENGS produce robustly fewer SIDE moves than both the English native speakers and the Catalan professors in our corpus. With this group, SIDE moves are predominantly encoded in the PAST (44.45%, 44 tokens) followed by the PPROG (30.31%, 31 tokens) and to a smaller extent by means of the PRES (15.94%, 18 tokens) and the PROG (9.30%, 7 tokens). Table 8.13 presents the results of the Wilcoxon signed ranks test for tense-aspect morphology in SIDE moves in the narratives of CATENGS (statistically significant values underlined) and the overall distribution of verb forms is shown in Figure 8.13 below.

	PROGSIDE - PRESSIDE	PASTSIDE - TOTALPRESSIDE	PPROGSIDE - PRESSIDE	PASTSIDE - PROGSIDE	PPROGSIDE - PROGSIDE	PPROGSIDE - PASTSIDE
Z	-1.069(a)	-1.494(b)	-.756(b)	-2.237(b)	-1.514(b)	-1.245(a)
Asymp. Sig. (2- tailed)	.,285	.135	.449	<u>.025</u>	.130	.213

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 8.13. Differences between tense-aspect morphology rates in SIDE moves (Tokens) – CATENGS

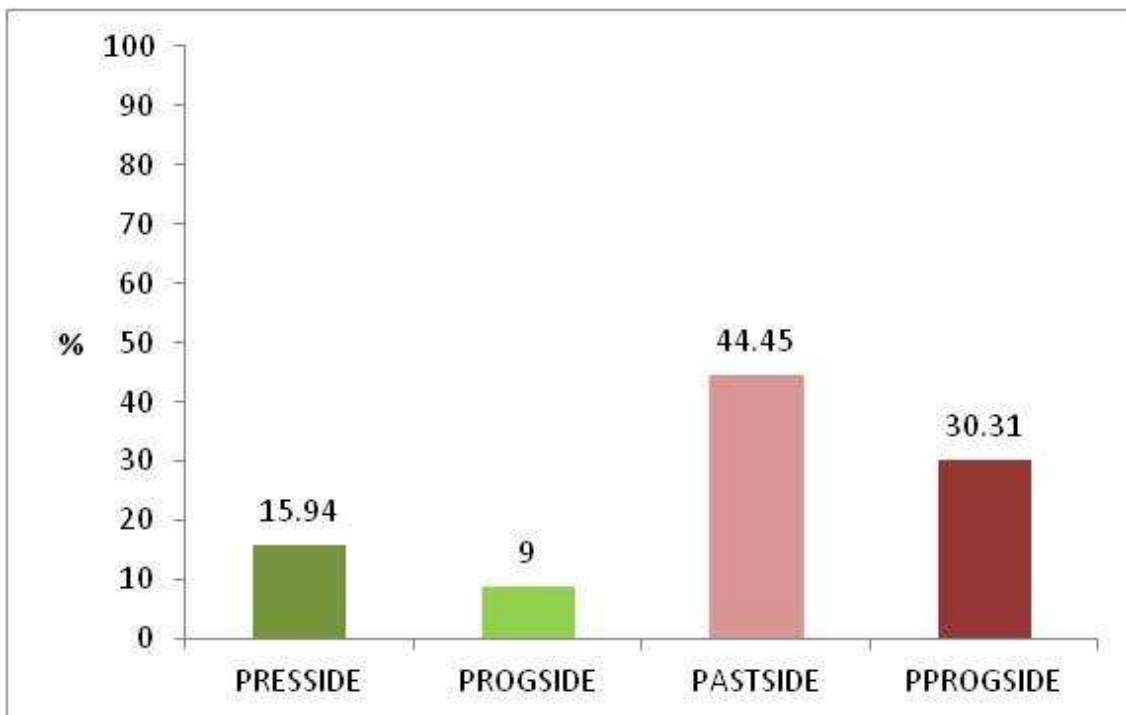


Figure 8.13. Distribution of verb morphology in SIDE moves (Tokens) – CATENGs

No statistically significant difference was established between the PAST and the PPROG, the dominant verb forms in SIDE with CATENGs, which seems to indicate that this particular group of learners is at breakeven between an aspectually marked account of SIDE material by means of the progressive form and a more aspectually neutral account of this material by means of the non-progressive past form (examples (14) and (15) below). At a closer look, we observe that SIDE moves in the production of CATENGs are dominated by state and activity predicates, and the distribution of past morphology is strongly polarised in relation to these two predicate classes: the PAST is used with states and the PPROG with activities. While the spread of the PPROG on states is very unlikely due to the distributional restrictions of this class of predicates with the progressive, the PAST was expected to pair with dynamic predicates more consistently in advanced L2 production. We shall come back to this point in more detail in section 8.3.2.

- (14) a. and that hole was an <owl> [/] owl house or something. BACKGROUND
 b. and the owl scared the boy. FORWARD
 c. and **meanwhile** the bees were running after the dog. SIDEWAYS
 (Cat L1 Eng L2, S8)

- (15) a. then the bees began to follow the dog. FORWARD
 b. the boy fell down of the tree. SIDEWAYS
 c. because from inside the hole appeared an owl. BACKWARD
 (Cat L1 Eng L2, S2)

With CATENGT, SIDE moves are predominantly encoded by means of the PAST (44.78%, 98 tokens) and to a smaller extent by the PRES (26.50%, 26 tokens) and the PPROG (23.74%, 55 tokens).¹⁵ The PROG is only marginally used in this type of contexts (4.99%, 2 tokens). Table 8.14 presents the results of the Wilcoxon signed ranks test for tense-aspect morphology in SIDE moves in the narratives of CATENGT (statistically significant values underlined) and the overall distribution of verb forms is shown in Figure 8.14 below.

	PROGSIDE – PRESSIDE	PASTSIDE - PRESSIDE	PPROGSIDE - PRESSIDE	PASTSIDE – PROGSIDE	PPROGSIDE - PROGSIDE	PPROGSIDE - PASTSIDE
Z	-2.023(a)	-.549(b)	-.235(a)	-2.497(b)	-1.956(b)	-2.090(a)
Asymp. Sig. (2- tailed)	<u>.043</u>	.583	.814	<u>.013</u>	<u>.050</u>	<u>.037</u>

a Based on positive ranks.

b Based on negative ranks.

c Wilcoxon Signed Ranks Test

Table 8.14. Differences between tense-aspect morphology rates in SIDE moves (Tokens) – CATENGT

As can be seen in Table 8.14 above, a statistically robust difference was established between the PAST and the PPROG in SIDE moves in the *Frog* stories of the Catalan L1 professors in our corpus. This seems to indicate that, in the past-based narratives produced by this group of learners (most CATENGT tell the story in the past), SIDE moves are predominantly encoded by means of the aspectually unmarked PAST form, as opposed to the marked PPROG. Once again, note that this dominance is in great part due to the fact that SIDE contexts contain state predicates, which cannot be encoded in the progressive form. Nevertheless, the spread of the PAST across aspectual classes with CATENGT is somewhat wider than with CATENGS, proof of greater

¹⁵ There is an apparent contradiction between the number of tokens of PRES and PPROG in CATENGT and the percentage rates that these tokens represent from the overall number of SIDE moves. Even though the Catalan professors produce more tokens of PPROG than of PRES, the latter weigh slightly more than the former. This is because our analysis was carried out with percentages instead of raw numbers. PPROG tokens are in competition with PAST in past-based narratives and, hence, weigh less than PRES in present-based narratives, which is almost the only form used in SIDE moves in this type of narratives (except for 2 PROG tokens).

propensity to produce non-prototypical pairings in the more proficient group (see section 8.3.2).

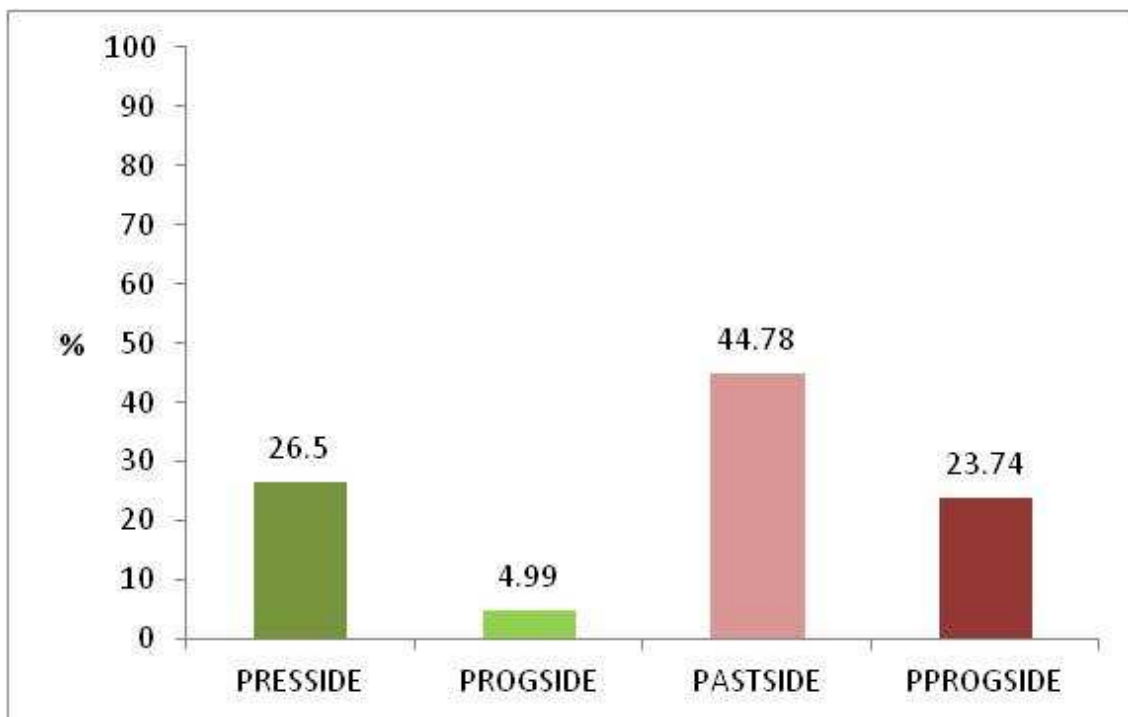


Figure 8.14. Distribution of verb morphology in SIDE moves (Tokens) – CATENGT

8.2.3.2.4 Inter-group comparison

No statistically significant differences were established between CATENGS and CATENGT with respect to the use of tense-aspect morphology in SIDE moves. A finer analysis, which looks at the distribution of verb morphology in relation to both the aspectual class of the predicate and its narrative context, needs to be carried out to distinguish between the two groups. The differences between CATENGS and ENG, on the one hand, and between CATENGT and ENG, on the other, arise from the different choice of temporal anchor in the production of these groups. ENG produce robustly more PRES and PROG than CATENGS in SIDE moves ($U = 29$, $z = -2.611$, $p = .009$ and $U = 39$, $z = -2.003$, $p = .045$ respectively), whereas CATENGS produce more PAST and PPROG than ENG in SIDE moves ($U = 41.5$, $z = -1.829$, $p = .067$ and $U = 30.5$, $z = -12.487$, $p = .013$).

Robust differences were established between CATENGT and ENG with respect to the distribution of the progressive forms – CATENGT produce significantly more

PPROG forms than ENG ($U = 28.5$, $z = -2.60$, $p = .009$), whereas ENG produce significantly more PROG than CATENGT ($U = 31$, $z = -2.580$, $p = .010$). With respect to the distribution of the PAST, the difference between CATENGT and ENG is only marginally significant ($U = 43.5$, $z = -1.708$, $p = .088$).

8.2.3.3 Main points regarding the distribution of tense-aspect morphology in SIDE moves in English L1 and English L2

On the basis of the data presented so far, the English native speakers and the more proficient groups of learners in our study (FRENGT and CATENGT) strongly rely on non-progressive forms (either PRES or PAST) to encode SIDE moves in their narratives, whereas the less advanced groups (FRENGS and CATENGS) make use of both the progressive and non-progressive forms. On the basis of data from picture book based narratives, a route can be said to exist, taking learners from an aspectualised rendering of SIDE moves to an aspectually neutral presentation of the information by means of the non-progressive PRES or PAST at the most proficient stages. This seems to be attributable to the fact that the non-progressive forms have greater potential to spread across different predicate classes and move types than the progressive in English, which is strongly marked with states. Moreover, the PRES and the PAST can have both a bounded and an unbounded reading in English, depending on the inherent semantic properties of the predicate and other contextual factors (chapter 3).

It is, nevertheless, necessary to establish to what extent the English native speakers and the more advanced learners in our study make a “flexible” use of the non-progressive forms in SIDE moves. As it stands now, this flexibility may be a mere effect of the great amount of state predicates used in SIDE moves. States are typically to be found in RT-maintenance contexts and strongly pair with the PRES or the PAST. Consequently, the high rates of non-progressive forms in SIDE moves may simply be the direct consequence of high rates of states in such contexts. In order to establish to what extent the use of verb morphology is “liberated” from the predicate type one needs to look at the distribution of tense-aspect forms across aspectual classes in the different types of narrative moves. This three-fold analysis will be carried out in section 8.3.

8.2.4 Tense-aspect morphology in BACK moves

As discussed in the introduction to this chapter, not all verb forms can encode BACK moves. The analysis in this section will deal with the distribution of the PAST, the PPROG and the two perfect forms (PERF and PPERF) in contexts which establish a retrospective temporal relation with respect to the current RT of the scene.

8.2.4.1 English L1 Narratives (ENG)

In our English L1 narratives, BACK moves are dominated by the PAST (63.42%, 28 tokens) followed by the PERF (31.21%, 11 tokens) and only marginally encoded by means of the PPROG (5.37%, 3 tokens) (Figure 8.15 below). As discussed in chapter 5, the contribution of the verb form to the temporal interpretation of the narrative material is different with the PAST and the PERF: while BACK moves encoded in the PAST introduce an anterior RT which disrupts the progression of the narrative, those encoded in the PERF maintain the current RT, establishing an interval of temporal overlap between two otherwise chronologically ordered situations.¹⁶ The PERF can also occur in the context of an RT-shift adverbial, generally at the beginning of a scene. The entire scene converges in a unifying RT interval in which the resultant state of the event in the present perfect overlaps with the other elements in the scene (see examples and discussion in chapter 5, section 5.3.2).

The use of the PERF is closely related to the picture book format of the narrative and to the “frozen” presentation of the events making up a scene, which does not always allow the narrator to see the intermediary stages preceding a certain outcome. As can be seen in Table 8.15 below, no statistically significant difference was established between the PAST and the PERF, English native speakers using both forms in a similar proportion when encoding BACK moves (statistically significant values underlined). Statistically robust differences exist between the PAST and the PPROG and between the PERF and the PPROG given the limited use of the PPROG in English L1 narratives.

¹⁶ This is not necessarily the intention of the speaker but a characteristic of the forms *per se*.

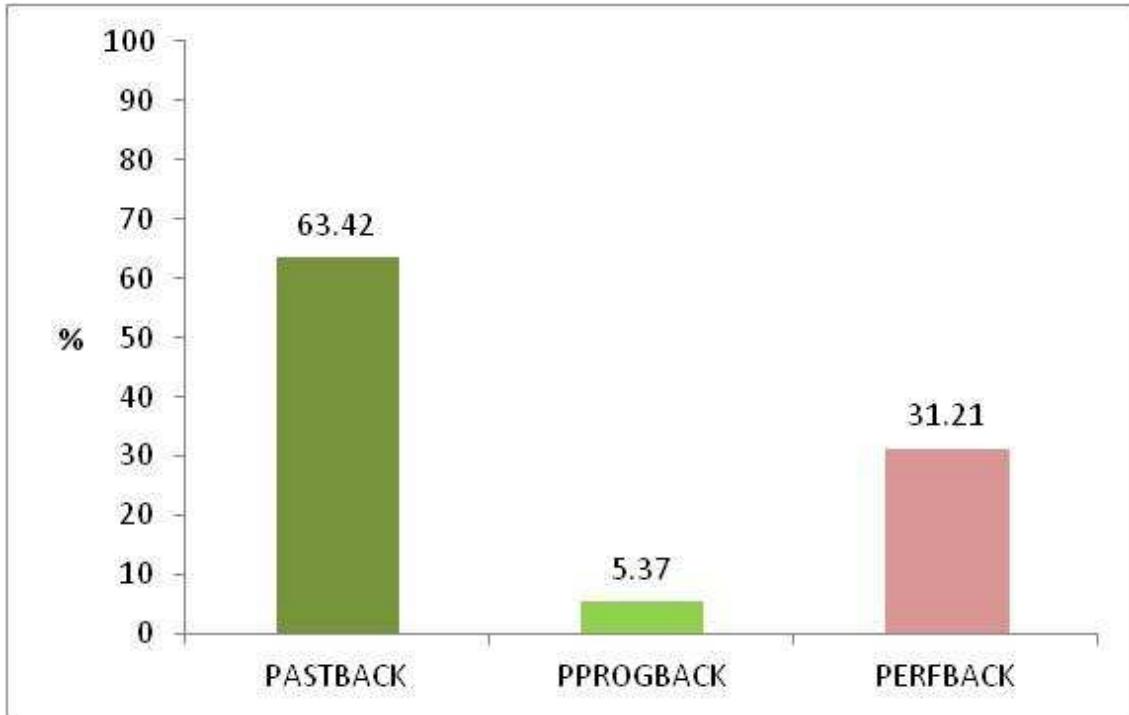


Figure 8.15. Distribution of verb morphology in BACK moves (Tokens) – ENG

	PPROGBACK - PASTBACK	PERFBACK - PASTBACK	PERFBACK - PPROGBACK
Z	-2.675(a)	-1.257(a)	-1.781(b)
Asymp. Sig. (2-tailed)	<u>.007</u>	.209	<u>.075</u>

- a Based on positive ranks.
- b Based on negative ranks.
- c Wilcoxon Signed Ranks Test

Table 8.15. Differences between tense-aspect morphology rates in BACK moves (Tokens) – ENG

Figure 8.16 below presents the distribution of the PERF with an RT-maintenance reading and in RT-shift contexts in English L1. ENG use the PERF both at the onset of a scene, in the context of an RT-shift adverbial (example (16)), and in an “intra-scene” position, with an RT-maintenance interpretation with respect to the previously introduced event. In this position, the PERF competes with the PAST (examples (17) and (18)).

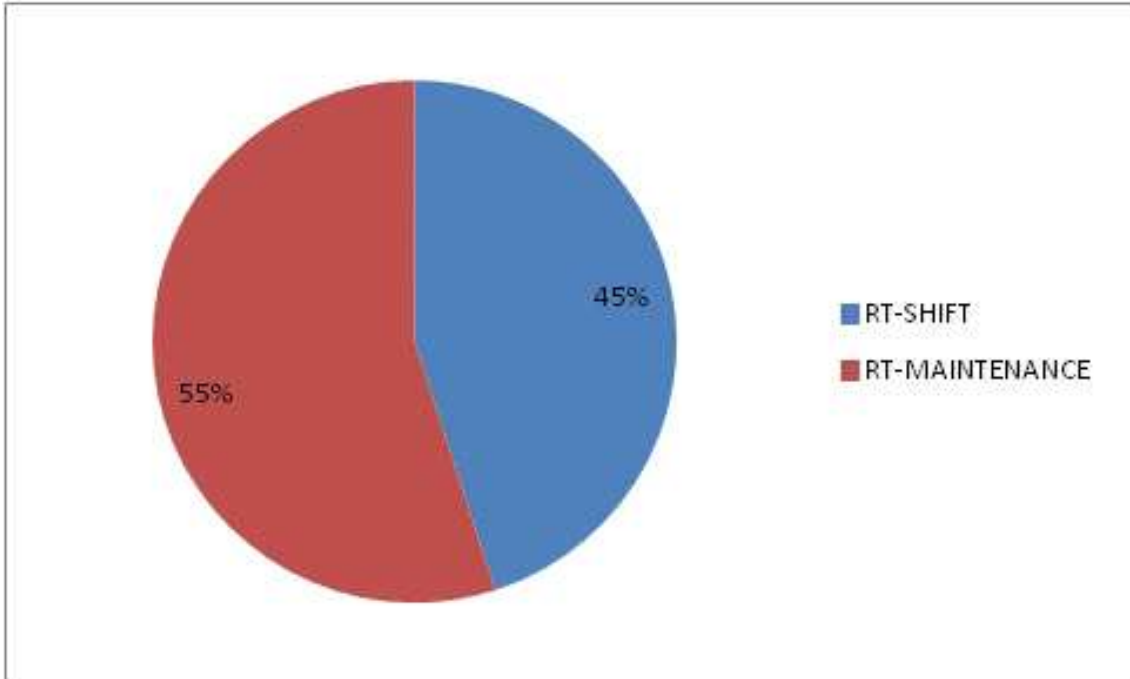


Figure 8.16. Narrative function of the PERF in English L1 narratives

- (16) a. **now** the boy has been picked up by some antlered beast ... BACKWARD/RT-SHIFT
 b. { looks like a deer - }
 c. and the deer is running to a cliff / SIDEWAYS
 d. and - the dog is barking at the deer SIDEWAYS
 (Eng L1, E2)
- (17) a. the boy tumbles down from the branch FORWARD
 b. **because** of an owl who's popped from a hole BACKWARD/RT-MAINTENANCE
 c. and the dog runs howling by SIDEWAYS/SIDEWAYS
 d. with this swarm of bees chasing him. SIDEWAYS
 (Eng L1, E6)
- (18) a. and then the bees start chasing the dog FORWARD
 b. and the boy falls off the tree SIDEWAYS
 c. **because** the owl came out of the hollow part ... BACKWARD
 (Eng L1, E12)

8.2.4.2 English L2 Narratives

8.2.4.2.1 The French L1 English L2 Groups

As can be seen in Figure 8.17 below, there is no clearly dominant verb form in the expression of BACK moves in the narratives of FRENGS. The French L1 students use the PAST and the perfect forms (both PERF and PPERF)¹⁷ in similar proportion (53.47%, 25 tokens and 46.53%, 21 tokens respectively) in this type of contexts. Unlike in English L1, the PPROG is not used in contexts of RT-backshift. The Wilcoxon signed ranks test established no statistically robust difference between the PAST and the perfect forms (the PERF and the PPERF) in BACK moves with FRENGS (see Table 8.16 below, statistically significant differences underlined).

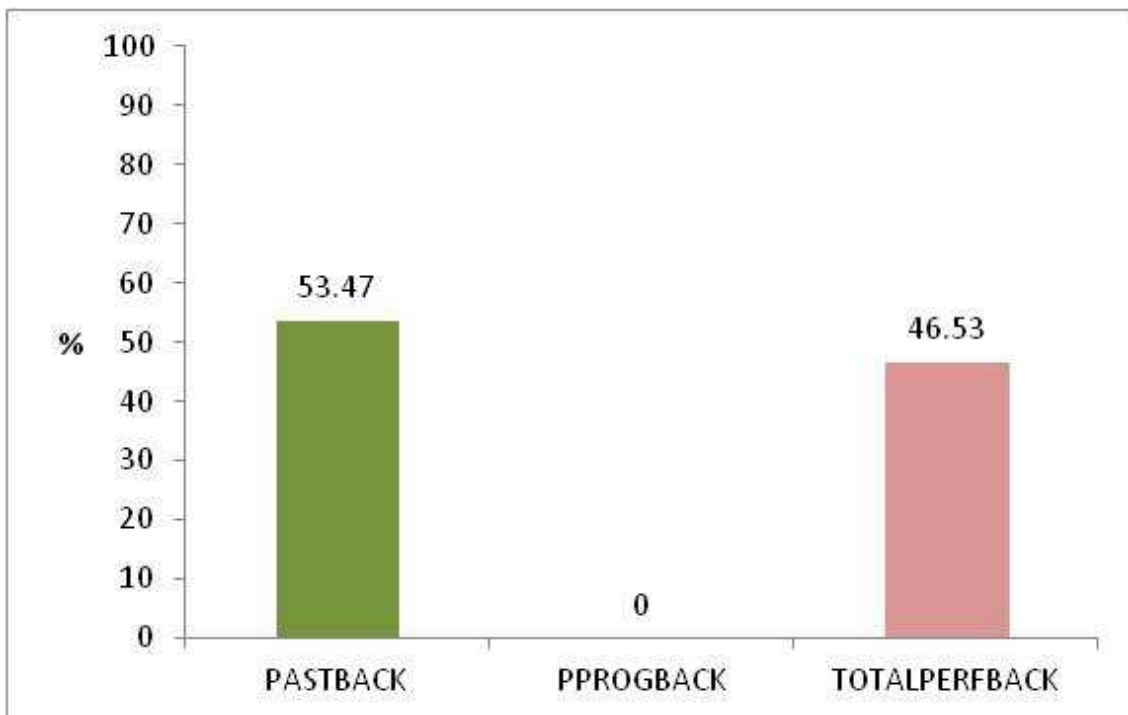


Figure 8.17. Distribution of verb morphology in BACK moves (Tokens) – FRENGS

¹⁷ TOTALPERFBACK includes both PERF and PPERF figures for more reliable statistical results.

	PPROGBACK - PASTBACK	TOTALPERFBACK - PASTBACK	TOTALPERFBACK -PPROGBACK
Z	-2.552(a)	-.186(a)	-2.552(b)
Asymp. Sig. (2-tailed)	<u>.011</u>	.853	<u>.011</u>

a Based on positive ranks.
 b Based on negative ranks.
 c Wilcoxon Signed Ranks Test

Table 8.16. Differences between tense-aspect morphology rates in BACK moves (Tokens) – FRENGS

With respect to the narrative function, the perfect forms are predominantly used with an RT-maintenance reading and more marginally in contexts of RT-shift (see Figure 8.18) in the narratives of FRENGS. With this group of learners, the PERF form is used both in scene onset and “intra-scene” positions in the narrative, as illustrated in example (19) below. The PPERF is exclusively found in “intra-scene” positions. Its interpretation is ambiguous between a current relevance value (RT-maintenance) and a purely anterior value (example (20)).

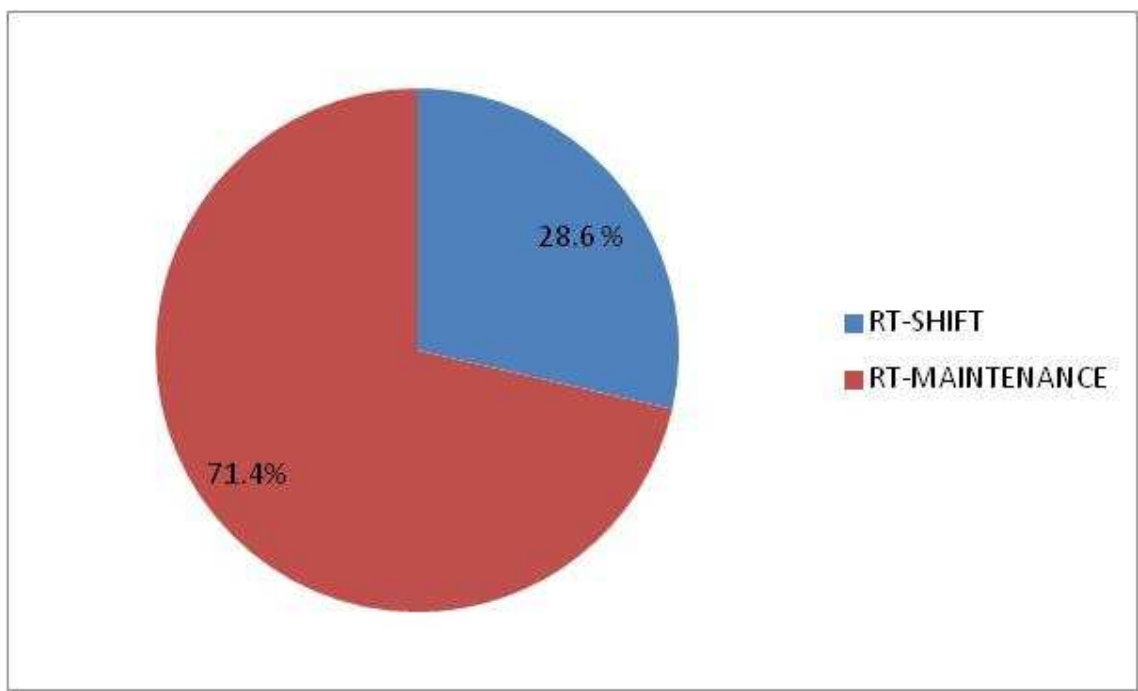


Figure 8.18. Narrative function of the perfect forms in English L2 narratives - FRENGS

- (19) a. **now** oh <the dog has> [//] yes the beehive has falle(d) to the ground probably because of the dog. BACKWARD / RT-SHIFT
- b. and **now** the bees are mad at him. FORWARD
- c. and the little boy uh # has climbed on a tree. BACKWARD/RT-MAINTENANCE
- (Fr L1 Eng L2, S6)

- (20) a. uh when the boy and the dog woke up. FORWARD
 b. they realized. FORWARD
 c. that the frog had gone #. BACKWARD/(?)RT-MAINTENANCE
 (Fr L1 Eng L2, S1)

BACK moves are dominated by perfect forms (PERF and PPERF)¹⁸ in the narratives of the French L1 professors (78.69%; 55 tokens), and only marginally encoded by the PAST (18.53%; 16 tokens) and PPROG (2.78%; 1 token) (Figure 8.19 below). The dominance of the perfect forms was corroborated by means of the Wilcoxon signed ranks test, which established a statistically significant difference between the former and the PAST and the PPROG in BACK moves (Table 8.17, significant values underlined).

	PPROGBACK - PASTBACK	TOTALPERFBACK - PASTBACK	TOTALPERFBACK - PPROGBACK
Z	-1.521(a)	-2.767(b)	-3.083(b)
Asymp. Sig. (2-tailed)	.128	<u>.006</u>	<u>.002</u>

- a Based on positive ranks.
 b Based on negative ranks.
 c Wilcoxon Signed Ranks Test

Table 8.17. Differences between tense-aspect morphology rates in BACK moves (Tokens) – FREN GT

As illustrated in Figure 8.20 below, with the French L1 professors, the PERF is predominantly used with an RT-maintenance value in the narratives of FREN GT, meaning that it often occupies “intra-scene” positions. In this position and with some of the speakers, the PERF widens its range of narrative functions to encode plot-advancing material in a “flashback” sequence¹⁹ (example (47) in chapter 5, repeated here below as (21)). The PPERF, on the other hand, is exclusively used in “intra-scene” positions given its need for a previously specified temporal anchor.

¹⁸ TOTALPERFBACK includes both PERF and PPERF figures for more reliable statistical results.

¹⁹ 3 tokens of PERF with plot-advancing function in the French professors’ narratives. They were categorised under FWD moves (see Table 8.3, section 8.2.1 above). The percentages in Figure 8.21 are calculated on the total number of PERF tokens (58 in all) produced by FREN GT, irrespective of the narrative context.

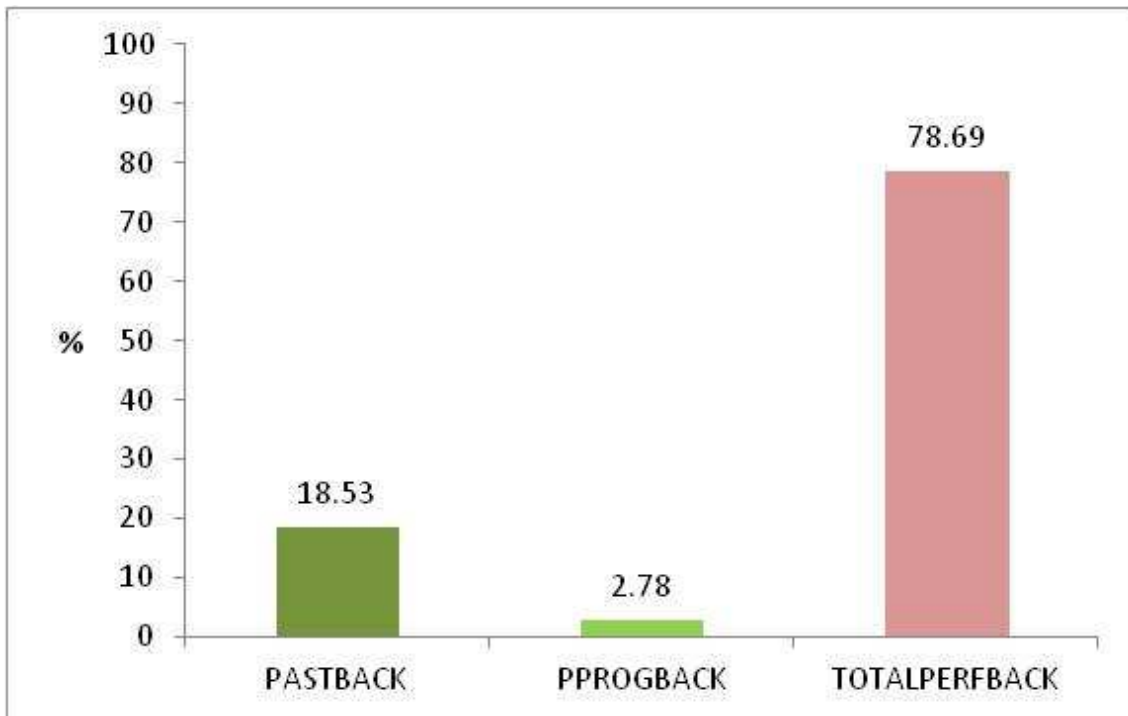


Figure 8.19. Distribution of verb morphology in BACK moves (Tokens) – FRENGT

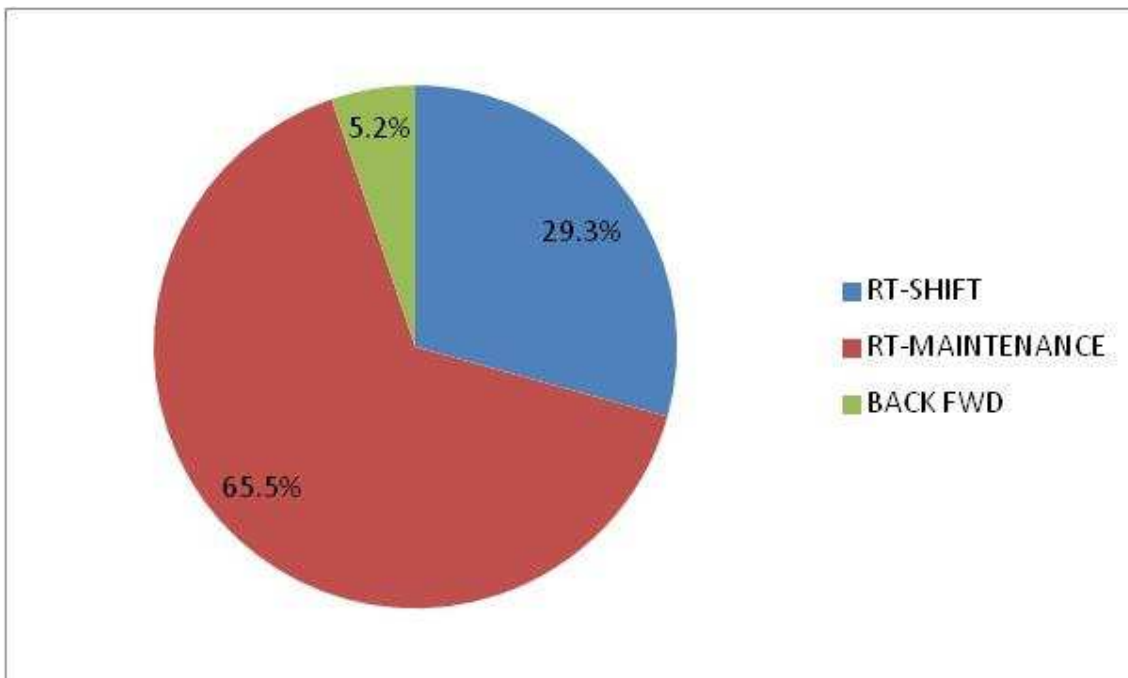


Figure 8.20. Narrative function of the perfect forms in English L2 narratives - FRENGT

- (21) a. things are calming down a little bit. BACKGROUND
 b. the dog is sniffing <around> [/] around a big boulder. FORWARD
 c. onto which <the> [/] the boy has climbed. BACKWARD/RT-MAINTENANCE
 d. <to> [/] to get on top of things a little bit. FORWARD/RT-MAINTENANCE
 e. <and to > [/] and to call for the frog <at> [/] at a broader distance.
 FORWARD/RT-MAINTENANCE
 f. <and> [/] and the boy <has> [/] has tried to find balance. BACKWARD-FORWARD
 g. by grasping what looks like a branch. SIDEWAYS
 (Fr L1 Eng L2, T9)

As discussed in chapter 5, in English L1, the use of the PERF is not normally considered acceptable in sequences of sentences which are temporally ordered, simply because the current relevance of this form checks the possibility of RT-shift from one perfect predicate to the other. The update of RT in narrative discourse requires that each newly introduced event be anchored with respect to a definite temporal interval, established anaphorically by the previously introduced events or re-instantiated by means of temporal adverbials (among which the deictic *now*). Given its semantics, the English present perfect on its own cannot establish such a definite temporal interval and, consequently, it cannot encode temporally sequenced events (Michaelis 1994).

8.2.4.2.2 Inter-group comparison

As expected, repeated Mann-Whitney U tests established a statistically robust difference between FRENGT and ENG ($U = 25$, $z = -2.770$, $p = .006$) with respect to the use of perfect forms in BACK moves. No such difference was established between FRENGS and ENG with respect to the perfect forms, which are used at similar rates by these two groups. The English native speakers, on the other hand, produce robustly more PAST forms in BACK moves than FRENGT ($U = 35$, $z = -2.197$, $p = .028$).

The differences between the two learner groups are only marginally relevant, with the French L1 students producing marginally more PAST in BACK moves than the professors ($U = 41$, $z = -1.862$, $p = .063$) and the latter producing marginally more perfect forms than the former in the same contexts ($U = 43.5$, $z = -1.694$, $p = .090$). This indicates that the more proficient group tends to rely relatively more on the perfect forms (both the PERF and the PPERF) than on the PAST when encoding BACK

information in the *Frog* story. Given the proficiency level in the target language of FRENGT, we think that the possibility of L1 transfer on the basis of the mere formal similarity between the English PERF and the French *passé composé* is remote. Rather, we believe that this group is highly sensitive to the resultative quality of the PERF and strongly associates it with telic predicates, irrespective of the type of narrative contexts in which these predicates are inserted. A closer look at the distribution of verb forms in the different aspectual classes (see Table 7.2, chapter 7, section 7.1.2) tells us that the French professors encode a higher percentage of accomplishments and achievements in perfect forms²⁰ than both FRENGS and ENG. As we see it, their use of the PERF is an indication of higher command of the target language than FRENGS, who opt for the “safer” PAST.

Nevertheless, the choice of the perfect form by FRENGT fails to be nativelike. As discussed in sections 8.2.4.1 and 8.2.4.2.1 above, the difference between the native speakers and FRENGT with respect to the distribution of tense-aspect morphology in BACK moves is triggered mainly by the different narrative functions attributed to the perfect forms. With FRENGT, the PERF undergoes an extension of its functional scope to encode a full sequence of plot-advancing elements, which is not proper of the PERF in English L1.

8.2.4.2.3 The Catalan L1 English L2 Groups

As can be seen in Figure 8.21 below, BACK moves appear to be dominated by the perfect forms, mainly the PPERF, given the choice of temporal anchor in the narratives of CATENGs. The Catalan L1 students use perfect forms in 62.22% (13 tokens) of the total BACK moves and the PAST in 34% (8 tokens). Nevertheless, the Wilcoxon signed ranks test established no statistically robust difference between the PAST and the perfect forms (PERF and PPERF) in BACK moves with CATENGs (Table 8.18, significant values underlined). With respect to its narrative function, all but one of the perfect forms in the narratives of CATENGs are used exclusively in “intra-scene” positions, particularly in the case of the PPERF which requires a previously established temporal anchor (example (22) below). Note, nevertheless, that, unlike the

²⁰ Categorized as *other* in Table 7.2, section 7.1.2 (chapter 7).

PERF, the PPERF is ambiguous between an RT-maintenance reading and a purely anterior value. The only instance of a perfect form in an RT-shift context with CATENGS is illustrated in example (23) below.

	PPROGBACK - PASTBACK	TOTALPERFBACK - PASTBACK	TOTALPERFBACK - PPROGBACK
Z	-2.032(a)	-.857(b)	-2.410(b)
Asymp. Sig. (2-tailed)	<u>.042</u>	.392	<u>.016</u>

a. Based on positive ranks
 b. Based on negative ranks.

Table 8.18. Differences between tense-aspect morphology rates in BACK moves (Tokens) – CATENGS

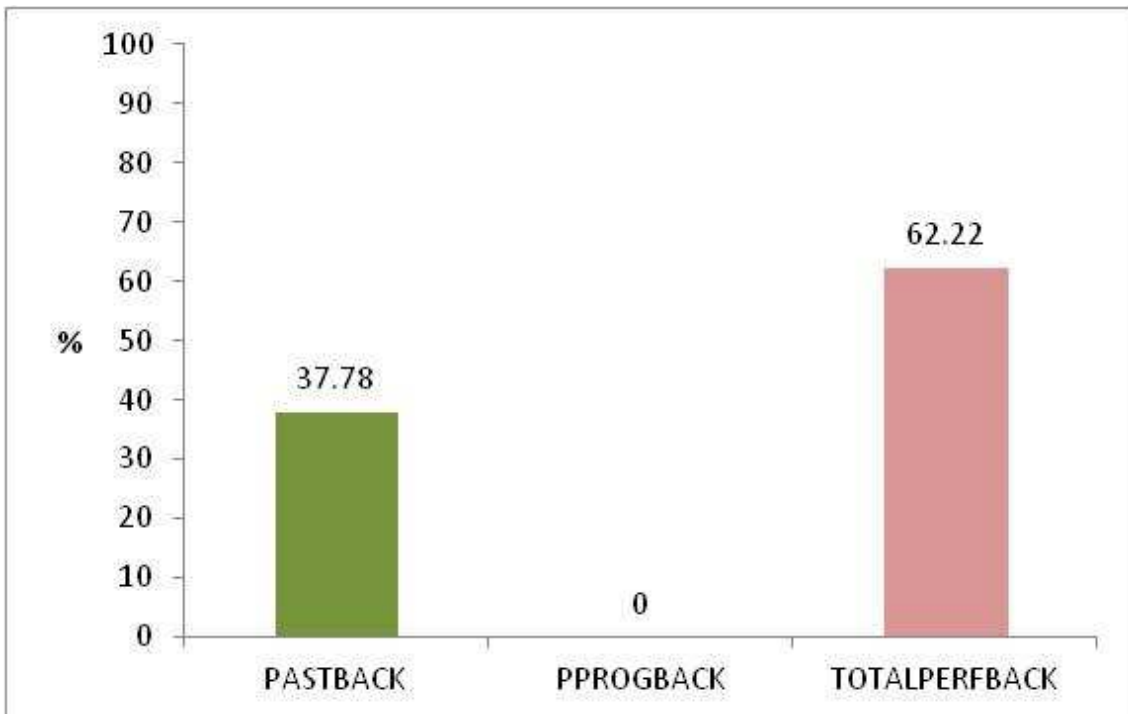


Figure 8.21. Distribution of verb morphology in BACK moves (Tokens) – CATENGS

- (22) a. and then they continued looking for the frog. FORWARD / FORESTALLING
 b. which had escaped. BACKWARD/(?) RT-MAINTENANCE
 c. and they were shouting +"/. SIDEWAYS
 d. +" <frog> [!] <frog> [!] <where are you> [?]. (-)
 (Cat L1 Eng L2, S2)

- (23) a. and **next** well <he s> [/] he's been followed by the owl. BACKWARD/RT-SHIFT
 b. but still he doesn't give up. (-)
 c. and he's trying to call out his frog in and outside in the forest. SIDEWAYS
 (Cat L1 Eng L2, S12)

In the narratives of CATENGT, BACK moves are by and large encoded using the perfect forms PERF and PPERF (86.30%, 17 tokens) and are only marginally encoded in the PAST (4.44%, 2 tokens) and the PPROG (9.26%, 2 tokens)²¹ (see Figure 8.22). The dominance of the perfect forms was corroborated by means of the Wilcoxon signed ranks test, which established a statistically significant difference between the total perfect forms and the PAST and the PPROG respectively in BACK moves (Table 8.19, significant values underlined).

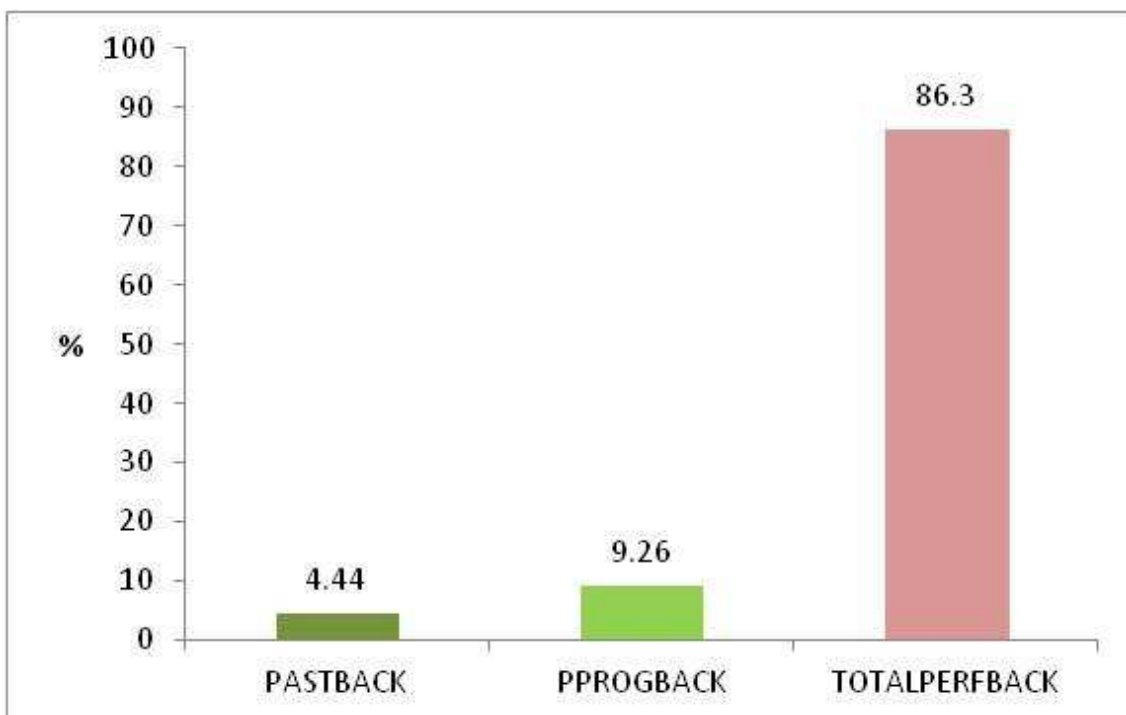


Figure 8.22. Distribution of verb morphology in BACK moves (Tokens) – CATENGT

	PPROGBACK - PASTBACK	TOTALPERFBACK - PASTBACK	TOTALPERFBACK - PPROGBACK
Z	-.535(a)	-2.751(a)	-2.636(a)
Asymp. Sig. (2-tailed)	.593	<u>.006</u>	<u>.008</u>

a Based on negative ranks.
 b Wilcoxon Signed Ranks Test

Table 8.19. Differences between tense-aspect morphology rates in BACK moves (Tokens) – CATENGT

As with the French L1 professors, the PPERF, the main perfect form in the

²¹ In spite of the fact that CATENGT produce the same number of PAST and PPROG tokens, the weight of these tokens is different with respect to the total number of BACK moves produced by the individuals who produce them. This is why we chose to work with percentages rather than with raw figures when dealing with our narrative corpus.

production of CATENGT, is used in a wider variety of narrative contexts than in the narratives of CATENGS (see Figure 8.23). Two of the twelve professors produce PPERF forms with a plot-advancing function as illustrated in example (24).²² Unlike the PERF, the PPERF can refer to a definite time, which makes it acceptable in sequences of chronologically ordered events. Events in (24 c) and (24 d) refer to a clearly delimited period of time (the previous night) and are both bounded to the right due to the telic quality of the predicates.

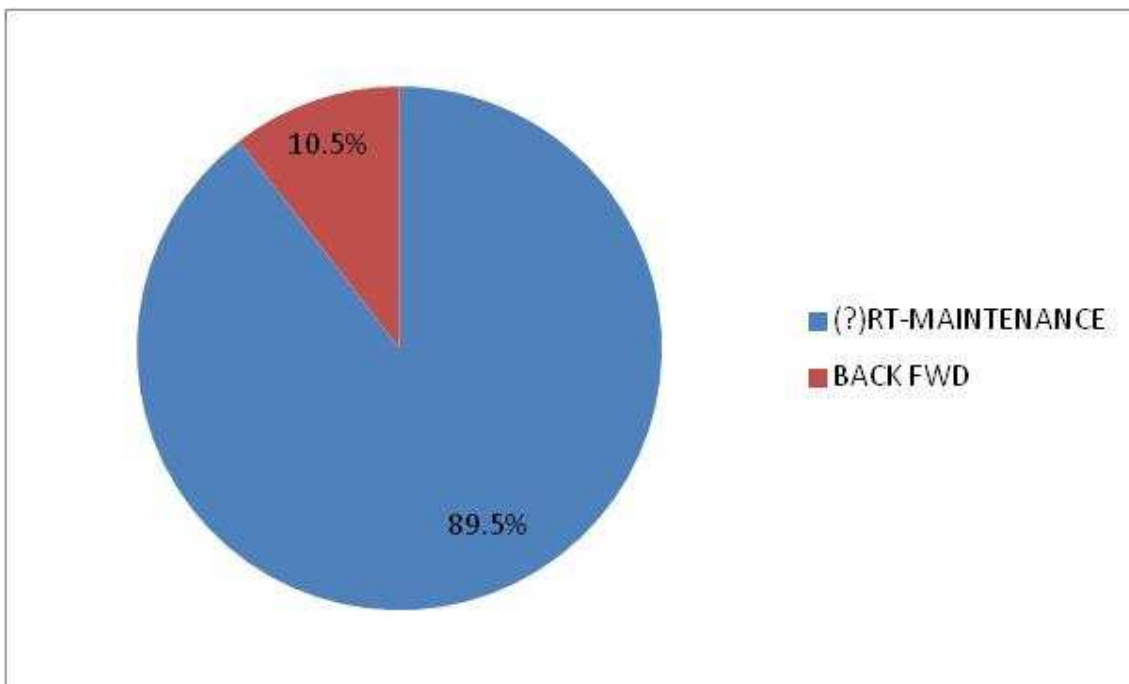


Figure 8.23. Narrative function of the perfect forms in English L2 narratives - CATENGT

- | | | |
|------|--|------------------|
| (24) | a. in the morning Peep woke up. | FORWARD |
| | b. and realised with dismay. | FORWARD |
| | c. that his little frog <u>had taken</u> a decision. | BACKWARD |
| | d. and <u>abandoned</u> him completely. | BACKWARD-FORWARD |
| | (Cat L1 Eng L2, T2) | |

²² They were categorised under FWD moves (see Table 8.3, section 8.2.1 above). The percentages in Figure 8.24 are calculated on the total number of PPERF tokens (19 in all) produced by CATENGT, irrespective of the narrative context.

8.2.4.2.4 Inter-group comparison

No statistically significant differences were established between CATENGS and CATENGT with respect to the distribution of verb forms in BACK moves. As already discussed in section 8.1.2, both learner groups produce a limited amount of BACK moves in their English L2 narratives. This is, at least in part, conditioned by the fact that only one verb form (the PPERF) is available in past-based narratives to encode temporal anteriority. Even though no quantitative differences seem to exist between the two groups, we showed in section 8.2.4.2.3 that qualitative differences related to the widening of the functional scope of PPERF distinguish the professors from the students.

With respect to the English native speakers, ENG were found to produce marginally more PAST and PPROG tokens in BACK moves than CATENGS ($U = 43.5$, $z = -1.717$, $p = .086$ and $U = 54$, $z = -1.809$, $p = .070$ respectively), whereas the Catalan professors produce relatively more perfect forms in BACK contexts than ENG ($U = 40.5$, $z = -1.906$, $p = .057$). This is once again the result of the restrictions imposed on the choice of form by the temporal anchor of the narratives of both CATENGS and CATENGT.²³ The English native speakers in our corpus produce, on the whole, more BACK moves than the Catalan professors, given the wider range of forms available for this type of information in present-based narratives (the PAST and the PERF).

8.2.4.3 Main points regarding the distribution of tense-aspect morphology in BACK moves in English L1 and English L2

BACK moves represent a very small proportion of the total moves encoded both in English L1 and English L2. The range of tense-aspect forms is wider in present-based narratives than in past-based ones, given that in the former BACK moves can be encoded both by the PAST and the PERF, while in the latter there is only one specialised form, the PPERF.

An interesting finding from sections 8.2.4.1 and 8.2.4.2 is the fact that higher proficiency learners tend to use perfect forms in BACK moves to a bigger extent than

²³ It is important to bear in mind that the English L1 narratives in our corpus were produced by speakers of American English, a variety known for the limited use of the PERF.

ENG. Several factors seem to come into play: the temporal anchorage of the narrative (the PPERF is a default form for BACK moves in past-based narratives, the dominant choice for CATENGT), the semantic properties of the predicates (the PERF strongly coalesces with telic predicates, particularly in the narratives of FRENGT) and the narrative function (the (P)PERF encodes FWD moves in retrospective passages with the most proficient groups in our corpus, a function not identified in English L1).

As already mentioned, the possibility of transfer from L1 on the basis of mere morphophonemic similarity between the PERF and *passé composé* or between the PPERF and *pretèrit plusquamperfet* is remote given the degree of target language proficiency of FRENGT and CATENGT. Rather, we believe these learners are now involved in the difficult process of charting the semantico-functional territory of perfect forms in the target language. This process is somewhat more straightforward for CATENGT given the inherent temporal ambiguity of the PPERF between a definite and an indefinite temporal value. In the case of FRENGT, the PERF is occasionally used in temporally sequenced sentences with a plot-advancing function which it does not generally fulfil in English L1.

8.3 Aspect or Discourse Hypothesis: Where do the advanced learners stand?

Our analysis of the two distributional hypotheses concerning tense-aspect morphology in English L1 and advanced English L2, namely the Aspect and the Discourse Hypotheses (chapter 7 and chapter 8 so far) indicates that both semantic and discourse-functional factors underlie the use of verb forms in both native speaker and learner narrative discourse. This comes as no surprise given the natural affinity between certain classes of predicates and certain narrative contexts - telic predicates tend to be used in plot-advancing contexts, whereas atelic predicates often encode sideways material (Housen 1997; Bardovi-Harlig 1998, 2000). This means that, for instance, one cannot tell whether a non-progressive form used with an achievement predicate in FWD moves responds to the semantic properties of the predicate or to its function in discourse. In this case, the two hypotheses overlap. As discussed in chapter 2 (section 2.2.3), less prototypical coalitions would need to be identified (for instance non-progressive atelic predicates in FWD moves or progressive telic predicates in SIDE) to

establish which of the two factors is more relevant in the choice of a particular verb form.

Previous research has established a hierarchy between the semantic and discourse factors conditioning the use of tense-aspect morphology in interlanguage, going from congruous form-meaning mappings in the early stages to more incongruous ones which respond to discourse organisational principles in the more advanced stages (see chapter 2 for a detailed discussion). This means that learners gradually become aware of the semantic “load” of the verb forms as such and of how grammatical aspect (for instance, the progressive/non-progressive opposition in English) interacts with lexical aspect in the different form/predicate coalitions, in search for a more personal or subjective rendering of a situation irrespective of its intrinsic characteristics. It also means that learners adjust their choice of tense-aspect forms to the conventions of a specific discourse type. In the case of the narrative discourse, this means using tense-aspect forms to distinguish between forward, sideways and backward moves.

Nevertheless, the two hypotheses are not mutually exclusive. In English, for instance, state predicates are strongly marked in the progressive and, hence, take the non-progressive form regardless of the type of information they encode, whether plot-advancing or sideways material. In our corpus, we observed that non-progressive forms (either the PRES or the PAST), dominate both FWD and SIDE moves in English L1 and in the narratives of the most proficient learners (FRENGT and CATENGT) (sections 8.2.2 and 8.2.3). This seems to indicate that nativelike choice of tense-aspect morphology in picture book oral narratives like the *Frog* story is, to a certain extent, homogeneous and aspectually neutral, with the non-progressive as a default form in FWD and SIDE²⁴ moves, both in the present and in the past, which goes beyond the more polarised use of verb morphology observed in the less proficient groups (FRENGS and CATENGS), namely non-progressive forms in RT-shift contexts and progressive forms in RT-maintenance ones.

We think, therefore, that it is necessary to combine the aspect and discourse hypotheses for a better understanding of these findings, mainly because the use of the PRES or the PAST in SIDE moves is, at least in part, motivated by the abundant presence of state predicates in these contexts, which strongly attract the non-progressive

²⁴ For coherence purposes, the discussion in this section will not include BACK moves given that perfect forms were not analysed in terms of the aspect hypothesis.

forms. A possible way to get around this bias is to look for other less prototypical coalitions, for instance durative (atelic) predicates encoded in the PRES in SIDE moves, which would be a more reliable indicator of a genuinely flexible use of tense-aspect morphology.

In the present section we are going to analyse the distribution of tense-aspect morphology (the PRES, PROG, PAST and PPROG forms) with regard to the aspectual class of the predicate (ST, ACT, ACC and ACH) and its narrative function (FWD and SIDE moves) simultaneously. The objective is to establish the rates of verb form/predicate type correlations in FWD and SIDE moves. This analysis will answer a question such as “Does PRES coalesce with activity predicates more frequently in FWD moves than in SIDE moves?”. According to Bardovi-Harlig (2000), similar rates of PRES across FWD and SIDE indicate an effect of the aspectual class of the predicate, whereas different rates indicate a discourse effect.

Similar to the approach in chapter 7, the discussion of the correlations with the PRES and the PROG forms will be limited to the oral narratives of ENG, FRENGS and FRENGT, given that these groups generally produce present-based narratives. This will be done in section 8.3.1. The correlations with the PAST and the PPROG forms will be discussed with respect to CATENGs and CATENGt only, who narrate mostly in the past. This will be the object of section 8.3.2. Even though the English L1 data provides more information regarding the distribution of the PRES and PROG forms, the distributional patterns of PAST and PPROG in English L1 will be presented for comparative purposes, in need of additional evidence.

Table 8.20 below contains two types of information: the number of PRES, PROG, PAST and PPROG tokens observed in each aspectual class in FWD and SIDE moves and the group means calculated for each verb form by means of the within-category approach (indicated by the downward arrow). As in chapter 7, group means were preferred to direct conversion of the tokens into percentages in order to control for excessive weight of some individuals in the groups (indicated by the broken arrow).

8.3.1 The Simple Present (PRES) and the Present Progressive (PROG)

States are almost exclusively encoded in non-progressive forms (the PRES and the PAST) both in English L1 and in advanced English L2, irrespective of the narrative

move. With respect to the forms analysed here, the native speakers and the two groups of French learners produce balanced rates of PRES states in FWD and SIDE moves: 80.32% and 79% for ENG, 59.44% and 53.57% for FRENGS,²⁵ and 78.78% and 77% for FRENGT, which indicates that, in the case of this class of predicates, the choice of the PRES is triggered by the inherent properties of the predicate (AH) rather than by a specific move type (DH).

		Aspectual class / narrative move															
		STFWD		STSIDE		ACTFWD		ACTSIDE		ACCFWD		ACCSIDE		ACHFWD		ACHSIDE	
		% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens	% Group mean	Total observed tokens
FRENGS n=12	PRES	59,44	27	53,57	38	41,2	20	9,64	8	45,83	16	12,5	1	50,78	64	14,8	2
	PAST	38,89	14	41,75	28	27,6	8	12,58	8	38,33	25	37,5	4	46,02	77	55,56	11
	PROG	1,67	1	2,78	2	28,2	16	52,26	46	15,83	5	50	4	3,2	4	29,63	5
	PPROG	0	0	2,08	1	3	1	25,52	17	0	0	0	0	0	0	0	0
		(100)	15	(100)	69	(100)	45	(100)	79	(100)	46	(100)	9	(100)	145	(100)	18
FRENGT n=12	PRES	78,78	32	77	70	55,54	44	37,43	31	74,14	43	64,28	7	71,14	100	58,33	11
	PAST	18,18	12	17,71	37	16,67	7	7,47	7	10,58	16	14,28	4	22,09	40	25	5
	PROG	3,03	1	5,29	8	27,79	25	48,1	57	15,28	5	21,43	2	6,76	7	16,67	2
	PPROG	0	0	0	0	0	0	7	8	0	0	0	0	0	0	0	0
		(100)	45	(100)	115	(100)	76	(100)	103	(100)	64	(100)	13	(100)	147	(100)	18
CATENGS n=12	PRES	27,27	4	17,05	8	20,04	13	6,82	6	19,18	12	25	1	27,67	31	27,78	3
	PAST	72,73	25	74,67	33	62,3	20	8,64	5	72,49	43	25	1	72,33	100	50	5
	PROG	0	0	1,3	1	6,94	2	20,45	5	5,56	2	0	0	0	0	5,56	1
	PPROG	0	0	6,98	3	10,72	5	64,09	25	2,78	1	50	2	0	0	16,67	1
		(100)	29	(100)	45	(100)	40	(100)	41	(100)	58	(100)	4	(100)	131	(100)	10
CATENGT n=12	PRES	25	8	32,29	14	30,3	12	8,48	4	35	17	9,38	3	32,66	54	33,33	5
	PAST	75	44	66,28	66	53,03	25	18,6	13	61,67	57	62,53	11	66,23	102	66,67	5
	PROG	0	0	0	0	0	0	15,15	7	0	0	3,13	1	1,11	2	0	0
	PPROG	0	0	1,43	2	16,67	7	57,76	47	3,33	2	25	6	0	0	0	0
		(100)	52	(100)	82	(100)	44	(100)	71	(100)	76	(100)	21	(100)	158	(100)	10
ENG n=12	PRES	80,32	36	79	52	62,28	43	36,64	26	77,98	53	45,83	8	78,65	106	65,97	26
	PAST	17,59	6	19,37	13	16,25	11	6,67	4	18,06	13	12,5	1	19,67	29	22,92	9
	PROG	2,08	1	1,63	2	19,38	12	40,15	35	3,97	3	41,68	9	0,49	1	11,11	4
	PPROG	0	0	0	0	2,08	1	16,55	9	0	0	0	0	1,19	1	0	0
		(100)	43	(100)	67	(100)	67	(100)	74	(100)	69	(100)	18	(100)	137	(100)	39

Table 8.20. Distribution of tense-aspect forms within aspectual classes and move types by group (group means)

The distribution of the PRES and the PROG with activity predicates is clearly influenced by the function these predicates have in the narrative, both in English L1 and English L2. Statistically significant differences were established between the rates of the PRES in FWD activities and the PRES in SIDE activities in English L1 (62.28%

25 The lower rates of PRES states in FRENGS are due to the fact that this group produce more past-based narratives than FRENGT and ENG. If we take into account the rates of PAST states, the other non-progressive form, non-progressive states represent 98.33% of all states in FWD moves and 95.32% of all states in SIDE moves.

and 36.64% for ENG; $z = -2.652$, $p = .008$)²⁶ and in the narratives of FRENGS (41.2% and 9.64%; $z = -2.524$, $p = .012$) and a marginally significant difference in the case of FRENGT (55.54% and 37.43%; $z = -1.886$, $p = .059$). On the whole, the PRES can be said to coalesce with activity predicates more strongly in FWD than in SIDE moves in native speaker and French L1 English L2 learner narratives, in line with the predictions of the DH. Nevertheless, the coalition between the PRES and activity predicates as a class is less frequent than other coalitions such as the PRES and telic predicates (see chapter 7, section 7.2.1). The PROG is strongly associated with activities in SIDE moves both in English L1 and English L2, in a coalition which is also a prototypical semantic pairing, according to the AH. Statistically robust differences were found between the PROG in FWD and SIDE activities in the production of ENG (19.38% vs. 40.15%, $z = -2.449$, $p = .014$), FRENGS (28.2% vs. 52.26%, $z = -2.383$, $p = .017$) and FRENGT (27.79% vs. 48.1%, $z = -2.046$, $p = .041$).

In the inter-group analysis, repeated Mann-Whitney U tests established that the rates of the PRES in SIDE activities were significantly higher in the narratives of the English native speakers (36.64%) and the French L1 professors (37.43%) than in those of the French L1 students (9.4%).²⁷ This coalition is doubly atypical according to the AH and the DH in that, *a priori*, the PRES matches neither the semantics of the predicate (durative atelic) nor the narrative context (RT-maintenance). As already mentioned, in certain contexts such as online reports, the PRES has a bounded, single-event quality (Leech 2004) which makes it, on the one hand, a less prototypical match for activity predicates and, on the other, a better candidate for plot-advancing material. Nevertheless, the English native speakers and the French L1 professors in our study use the PRES with activities even when the context contains an explicit mark of simultaneity, which would typically call for the use of the progressive (examples (25) and (26)):

²⁶ Unless indicated otherwise, the statistical values provided in this section were all obtained by means of a series Wilcoxon signed ranks tests for each group. Including all the relevant tables in the text (8 tables per group) would have made the reading cumbersome. We opted for including the z and p values when necessary in the text.

²⁷ $U = 26$, $z = -2.731$, $p = .006$ for ENG vs. FRENGS and $U = 34.5$, $z = -2.249$, $p = .025$ for FRENGT vs. FRENGS.

(25)	a. the little boy falls off the tree -	FORWARD
	b. uh frightened by an owl /	(-)
	c. the dog runs away	SIDEWAYS
	d. as - bees <u>follow</u> him ...	SIDEWAYS
	(Eng L1, E2)	
(26)	a. so he jumps he jumps up.	FORWARD
	b. and tries to bark at the hive.	SIDEWAYS
	c. and tries to shake the tree.	SIDEWAYS
	d. to see what happens.	FORWARD/RT-MAINTENANCE
	e. and in the meantime the boy <u>peers</u> into a hole in the ground.	SIDEWAYS
	(Fr L1 Eng L2, T1)	

This seems to indicate that, in the presence of explicit markers of durativity like the framing conjunction *as* and the prepositional phrase *in the meantime*, the progressive form is felt to be redundant with activity predicates in an oral picture book narrative like the *Frog* story. The semantic contribution of these simultaneity markers together with the inherent temporal properties of the predicate suffice to interpret the situation encoded in the PRES as unbounded and simultaneous with the previous material in the scene. In this case, the PRES represents a neutral choice in that the speaker simply reports the situation without any focalisation on its internal stages. This focalisation would have been entailed by the PROG, yet the temporal overlap is perfectly obtained with *as* and *in the meantime*. The PRES gives the situation encoded a more holistic quality and, consequently, produces an overall dynamic effect which increases the narrative quality of the scene.

The PRES is unevenly distributed in FWD and SIDE accomplishments both in English L1 and English L2. It appears to coalesce with accomplishments more robustly in RT-shift contexts than in RT-maintenance ones - 77.98% and 45.83% with ENG ($z = -2.546$, $p = .011$), 45.83% and 12.5% with FRENGS ($z = -2.388$, $p = .017$), 74.14% and 64.28% with FRENGT ($z = -1.972$, $p = .049$). This coalition also represents a prototypical match with accomplishments, according to the AH.

Similar to what was observed for PRES activities, the inter-group analysis established that the rates of the PRES in SIDE accomplishments were marginally higher in the narratives of the English native speakers (45.83%) and the French L1 professors (64.28%) than in those of the French L1 students ($U = 40.5$, $z = -1.933$, $p = .053$ and U

= 44, $z = -2.017$, $p = .072$ respectively).²⁸ While this coalition is intrinsically more prototypical than that of the PRES with activities according to the AH, it is rather unexpected in contexts containing an explicit mark of simultaneity, which would typically call for the use of the progressive (examples (27) and (28)):

- | | | |
|------|---|----------|
| (27) | a. uh as the little boy <u>comes</u> nearer to the place. | SIDEWAYS |
| | b. where he thinks there are frogs. | SIDEWAYS |
| | c. <he asks> [/] he asks his friend the dog. | FORWARD |
| | d. to be quiet. | (-) |
| | (Fr L1 Eng L2, T7) | |
| (28) | a. { oh boy . } - fends off - um the owl | FORWARD |
| | b. who is flapping about him - | SIDEWAYS |
| | c. and proceeds to um look at the owl | FORWARD |
| | d. while he <u>climbs up</u> this rock. – | SIDEWAYS |
| | (Eng L1, E6) | |

As discussed in the case of the PRES activities in SIDE moves, the English native speakers and the French L1 professors seem to find the progressive redundant in the presence of explicit markers of durativity like the framing conjunctions *as* and *while*. The semantic contribution of these markers together with the inherent temporal properties of the predicate (telic durative) suffice to interpret the situation as unbounded and to establish a relation of temporal overlap with the other events in the same scene.

Turning now to the use of the PROG with accomplishments, ENG differ from FRENGS and FRENGT in that they are the only ones to show a clear discourse influence on the use of the PROG with this type of predicates in FWD and SIDE moves. The PROG robustly coalesces with accomplishments in SIDE moves rather than in FWD moves in English L1 (3.97% in FWD and 41.68% in SIDE; $z = -1.997$, $p = .046$), while no statistically significant differences were obtained for FRENGS and FRENGT, who also use the PROG with accomplishments in FWD moves (15.83% in FWD and 50% in SIDE for FRENGS; 15.28% in FWD and 21.43% in SIDE for FRENGT). This seems to indicate that a certain predicate class effect exists in the use of the PROG with

²⁸ Note, though, that accomplishments as a category are not often found in SIDE moves in our narrative. FRENGS produce 9 tokens (of which only 1 in the PRES), FRENGT 13 and ENG 18.

accomplishments in advanced English L2, which are encoded in the progressive form irrespective of their narrative function. Nevertheless, the PROG accomplishments represent a less prototypical coalition than the PROG activities in English L2. As discussed in chapter 7 (section 7.2.2), with higher proficiency, atelicity seems to consolidate along with durativity as conditioning semantic features in the distribution of the PROG.

While PROG accomplishments indicate the relaxation of the initial semantic prototype, *i.e.*, [-punctual], [-telic] in the distribution of the PROG, when used in FWD moves, the PROG creates a tension between the intrinsic bounded quality of the predicate and the unbounding effect of the progressive marker. In such cases, the RT is updated by means of other elements at sentence-level such as the temporal adverbial *then* in example (29). In this case, the anaphoric quality of the adverbial contrasts with the deictic quality of the verb form, illustrating how fine the line between narration and picture description is in the *Frog* story in English L2. In English L1, *then* is never used in the context of the progressive form, not even when the predicate is durative atelic (example (30)):

- (29) a. **then** the little boy with his boots on and his dog they are going near the forest.
FORWARD
b. to try <to> [//] to find the frog. FORWARD/RT-MAINTENANCE
(Fr L1 Eng L2, S5)
- (30) a. and **then** he looks into holes FORWARD
b. and the dog keeps playing with the beehive. SIDEWAYS
(Eng L1, E7)

Achievements are generally encoded in non-progressive forms (the PRES and the PAST) both in English L1 and English L2, irrespective of the move type, which made us expect a clear predicate class effect on the choice of the verb form with achievements. The PRES with achievement predicates constitutes a strongly prototypical coalition, according to the AH. Nevertheless, rates of PRES achievements were found to be marginally higher in FWD than in SIDE moves in English L1 (78.65% and 65.97%; $z = -1.826$, $p = .068$), while a statistically robust difference was established between PRES achievements in FWD and SIDE moves in English L2 - 50.78% and

14.8% for FRENGS ($z = -2.384$, $p = .017$) and 71.14% and 58.33% for FRENGT ($z = -1.956$, $p = .050$). This discourse effect on the distribution of PRES with achievements seems to be the result of the competition from the PAST and, particularly, the PROG in SIDE moves in this class of predicates, competition which is much more reduced in the case of stative predicates.

Unlike states, achievements can be encoded in the PROG in English. Rates of the PROG in achievements are very low both in FWD and SIDE moves, with no statistically relevant differences between the two types of moves in any of the three groups. Even so, the PROG/achievements coalition constitutes a highly unprototypical pairing and the proof that, similar to the native speakers, FRENGS and FRENGT make a grammaticalised use of tense-aspect morphology in the target language. The limited presence of this coalition in our corpus is related to the clash between the intrinsic temporal properties of this class of predicates and those of the progressive form. When achievements are encoded in the PROG, a slow motion effect is obtained, as illustrated in (31 c) and (32 b), or an iterative reading as in (32 c):

- | | | |
|------|---|------------------|
| (31) | a. well – eventually the boy and dog grow tired- | FORWARD |
| | b. and they go to bed | FORWARD |
| | c. while the frog - <u>is escaping</u> from his jar right now. | SIDEWAYS |
| | (Eng L1, E3) | |
| (32) | a. the little boy is bit by a mole. | FORWARD |
| | b. he <u>s going out</u> of a hole. | SIDEWAYS |
| | c. and # <u>hitting</u> him +... | SIDEWAYS FORWARD |
| | (Fr L1 Eng L2, S10) | |

The inter-group analysis reveals that the French L1 professors use the PROG with FWD achievements marginally more often than the native speakers in our study ($U = 46.5$, $z = -1.935$, $p = .053$). The coalition as such is a clear indication that the PROG is no longer tied to a particular class of predicates in advanced English L2 and that it is now flexibly used across predicate types. Nevertheless, in terms of narrative quality, the PROG used with FWD achievements represents a switch from the holistic perspective of the narrative mode to the perspective “from within” characteristic of the descriptive mode (example (33)). As already mentioned, this approach is licensed by the picture

book format of the story, in which situations are “frozen” at a certain moment in their unfolding, irrespective of their intrinsic duration.

- | | | |
|------|--|---------|
| (33) | a. the stag lets the little boy fall down the cliff. | FORWARD |
| | b. and the silly puppy along. | (-) |
| | c. now that is frightening. | (-) |
| | d. he <u>is falling</u> . | FORWARD |
| | (Fr L1 Eng L2, T2) | |

To conclude, the three-fold analysis undertaken in this section confirms that inherent semantic factors (the AH) interact with discourse-specific factors (the DH) in the distribution of the PRES and the PROG in English L1 and advanced English L2 *Frog* stories, as summarised in Table 8.21 below. The use of tense-aspect forms is strongly conditioned by the predicate type in the case of states. In the case of achievements, a predicate class effect was observed only with the PROG, which is very marginally used with achievements, irrespective of the move type. A discourse effect was observed in the distribution of the PRES with these predicates, mainly due to competition from other tense-aspect forms in SIDE achievements, particularly the PROG.

Discourse plays a clear role in the case of activities and accomplishments in English L1, which are more frequently encoded in the PRES in FWD moves and in the PROG in SIDE moves. A similar discourse effect on the distribution of tense-aspect morphology was observed with activities in English L2, whereas move type seems to impact only on the distribution of the PRES with accomplishments. A predicate class effect was established for the PROG with accomplishments in the production of FRENGS and FRENGT. It seems that the coalition between the PROG and accomplishments is produced in advanced English L2 irrespective of the narrative function of the predicate, probably because the inherent telic quality of the predicate is felt to balance the unbounding effect of the progressive form and ensure temporal progression in plot-advancing contexts. Note also that ambiguity between discourse and predicate class factors occurs with PRES accomplishments and achievements in FWD moves and PROG activities in SIDE moves.

	ST	ACT	ACC	ACH
PRES	Predicate (all groups)	Discourse (all groups)	Discourse (all groups)	Discourse (all groups)
PROG	Predicate (all groups)	Discourse (all groups)	Predicate (FRENGS, FRENGT) Discourse (ENG)	Predicate (all groups)

Table 8.21. Semantic and discourse factors in the use of the PRES and the PROG in English L1 and English L2

The three-fold analysis undertaken in this section confirms that the use of the non-progressive PRES form in SIDE moves with ENG and FRENGT is not only due to the high number of states in this type of moves but also to the presence of less prototypical coalitions, namely PRES activities and PRES accomplishments. This seems to indicate that native speakers of English and the most proficient L2 learners often opt for an aspectually neutral presentation of events and rely instead on the inherent temporal properties of the predicates and other linguistic devices in the context (subordinating conjunctions, temporal adverbials, etc.) to encode temporal relations of RT-maintenance in the *Frog* story.

In picture book narratives, nativelike use of tense-aspect morphology involves going beyond the one form/one function coalitions PRES/FWD moves and PROG/SIDE moves towards a default form, the non-progressive, which encompasses all predicate types and fulfils an array of discourse functions. We believe the presence of the PRES in SIDE moves with durative predicates (activities and accomplishments) should not be interpreted as a strategy of simplification but rather as an indication of the widening of the functional-semantic scope of the non-progressive form as a consequence of the specialisation of the PROG for explicit ongoingness in discourse. With ENG and FRENGT, the PROG with durative predicates in SIDE moves is generally used in those contexts in which the speaker wants to emphasise the temporal overlap or framing between events/situations, particularly when the RT-maintenance relation is established with a whole series of events (example (34)) or with a punctual event (example (35)). In parallel durative situations, grammatical aspect is redundant, the listener being able to obtain a correct temporal interpretation on the basis of the predicate type and the temporal conjunction *while* (example (36)).

(34)	a. and the owl came out of the hole	FORWARD
	b. and scared the boy	FORWARD
	c. the boy fell off the tree	FORWARD
	d. and landed on his back	FORWARD
	e. while the dog <u>is running</u> away from all the bees	SIDEWAYS
(Eng L1, E3)		
(35)	a. uh and the little boy <falls> falls down from the tree	FORWARD
	b. while the little dog <u>is fleeing</u> the bees	SIDEWAYS
	c. which are following him.	SIDEWAYS
(Fr L1 Eng L2, T4)		
(36)	a. the boy looks in his boots	FORWARD
	b. while the dog <u>looks</u> in the jar.	SIDEWAYS
(Eng L1, E2)		

8.3.2 The Simple Past (PAST) and the Past Progressive (PPROG)

The two groups of Catalan L1 learners produce balanced rates of PAST states in FWD and SIDE moves (72.73% and 74.67% for CATENGS; 75% and 66.28% for CATENGT), which indicates that, in the case of this predicate class, the choice of the PAST responds to the inherent properties of the predicate (AH) rather than to the function it has in the narrative (DH). The same was observed for the PAST and states in English L1, even though at much lower rates than in English L2 given that the native speakers in our corpus produce present-based stories (17.59% and 19.37% for ENG).

The PPROG is very marginally used with states irrespective of the move type in English L2, while no such combination was observed in English L1. This is, once again, a predicate class effect given that states are marked for the progressive in English. The coalition PPROG/states is, nonetheless, an atypical coalition which indicates that the Catalan L1 learners in our study have moved away from the one-to-one mappings in the lower stages of L2 learning. Moreover, a qualitative difference was observed between CATENGS and CATENGT with respect to the PPROG/states coalition: while CATENGS use the PPROG exclusively with position states (example (37)), the CATENGT group extends the use of the PPROG to fully stative predicates (example (38)).

- (37) a. and then something unexpected happened
 b. because <while he was standing> [//] **while** Mike was standing <on> [/] on a big stone. SIDEWAYS
 c. a big deer caught him. FORWARD
 (Cat L1 Eng L2, S11)
- (38) a. then he opened the window. FORWARD
 b. and started calling out for the frog. FORWARD
 c. and **at the same time** the dog was being a bit naughty. SIDEWAYS
 d. and was playing with the bowl. SIDEWAYS
 (Cat L1 Eng L2, T11)

The distribution of the PAST and the PPROG with activity predicates shows a clear discourse effect with both CATENGS and CATENGT: the PAST strongly coalesces with activities in FWD rather than in SIDE moves - 62.3% and 8.64% with CATENGS ($z = -2.677$, $p = .007$) and 53.03% and 18.6% with CATENGT ($z = -2.243$, $p = .025$), whereas the PPROG encodes more SIDE than FWD activity predicates - 10.72% and 64.09% for CATENGS ($z = -2.433$, $p = .015$) and 16.67% and 57.76% for CATENGT ($z = -2.499$, $p = .012$). The coalition between the PAST and activity predicates as a class is marginal when compared with other coalitions such as the PAST and telic predicates (see chapter 7, section 7.3.1). Note also that PPROG activities in SIDE moves constitute a prototypical coalition not only for the DH but also for the AH, meaning that there is an overlap between semantic and discourse factors in the use of tense-aspect morphology in this case.

With respect to English L1, a discourse effect was observed in the use of the PPROG with activities, SIDE activities being more frequently encoded in the PPROG than FWD activities (2.08% and 16.55%, $z = -2.032$, $p = .042$). Rates of PAST activities seem to be more balanced across FWD and SIDE moves than in the case of the PPROG (16.25% and 6.67% respectively). The coalition between PAST and SIDE activities remains, nevertheless, an idiosyncratic feature in our analysis due to the fact that the percentage corresponds to only 4 tokens produced by the same individual, E9. It matches previous corpus-based findings by Trévisé (1992) and is indicative of the fact that, in oral picture book narratives, the PAST may have a “default” value with durative

atelic predicates, similar to the non-progressive PRES in present-based narratives, whereas the PPROG consolidates as a discourse device for ongoingness. As already discussed in chapter 3, the PAST can have both a bounded and an unbounded reading, depending on the inherent semantics of the predicate it encodes and other contextual factors. In example (13) above, repeated here for convenience as (39), the relation of temporal overlap between the sequence of events in (39 a, b) and the situation in (39 c) is entailed by the characteristics of the predicate *chase* (durative atelic) and the coordinating conjunction. Note the dramatic contrast created by the PPROG in (40), the only instance in which E9 uses this form with a durative atelic predicate in a SIDE move.

- | | | |
|------|--|----------|
| (39) | a. ! oops ! an owl flew out of the hole in the tree - | FORWARD |
| | b. and knocked him down out of the tree - | FORWARD |
| | c. and the bees <u>chased</u> the dog . | SIDEWAYS |
| | (Eng L1, E9) | |
| (40) | a. but ! oops ! ...the little boy <u>was holding</u> onto a branch | SIDEWAYS |
| | b. which turned out to be the antlers of a deer . | FORWARD |
| | (Eng L1, E9) | |

With ENG, the PPROG with activities in SIDE moves is generally used in those contexts in which the speaker wants to emphasize the temporal overlap or framing between events/situations, particularly when the RT-maintenance relation is established with a punctual event (example (41)), or with an explanatory function in present-based narratives (example (42)). The use of the PPROG in (42 c) reinforces not only the simultaneity relation between the act of looking into the hole and the encounter with the hedgehog but also produces a certain hierarchy effect among the different SIDE moves in the scene and establishes a connection with the previous scene. The use of the PPROG with an explanatory function was not identified in the present-based narratives produced by the Catalan L1 learners.

- | | | |
|------|---|----------|
| (41) | a. to the dog's amazement he knocked the beehive off the tree | FORWARD |
| | b. while the boy <u>was searching</u> the trunk. | SIDEWAYS |
| | (Eng L1, E4) | |

- | | | |
|------|--|----------|
| (42) | a. and then the - boy runs into a hedgehog | FORWARD |
| | b. which comes out of { the ground } - the hole | SIDEWAYS |
| | c. that he <u>was looking</u> in | SIDEWAYS |
| | d. {and - the dog still (is sicked on by) the bees } | SIDEWAYS |
- (Eng L1, E7)

In English L2, the Catalan L1 professors produce higher rates and more tokens of PAST in SIDE activities (18.6%, 13 tokens) than the Catalan L1 students (8.64%, 5 tokens). Nevertheless, when CATENGT use the PAST to encode SIDE activities, it appears predominantly in forestalling contexts, with an explanatory or elaborative value (example (43) below). These contexts are not cases of simultaneity in the plot (see chapter 5), so no conclusions can be drawn with respect to optionality of aspectual marking with durative atelic predicates in the production of the Catalan L1 English L2 professors.

- | | | |
|------|--|----------------------|
| (43) | a. so they just decided to look for the frog | FORWARD/FORESTALLING |
| | b. they <u>looked</u> for it <absolutely>[!] <everywhere>[!] | SIDEWAYS |
| | c. under the bed. | (-) |
| | d. in the boots. | (-) |
| | e. absolutely everywhere. | (-) |
| | f. in and out the house as well. | (-) |
- (Cat L1 Eng L2, T11)

There is a discourse effect in the distribution of the PAST with accomplishments in the narratives of CATENGs – the PAST is more frequently used with accomplishments in FWD moves than in SIDE moves (72.49% and 25%, $z = -2.75$, $p = .006$), certainly also as an effect of the intrinsic semantic congruence between this coalition and the plot-advancing function of such predicates. However, this discourse effect wears off in the production of CATENGT, who produce more balanced rates of PAST in FWD and SIDE accomplishments (61.67% and 62.53%). This is in line with what happens in English L1, native speakers also producing balanced rates of PAST accomplishments irrespective of the move type (12.5% and 19.67%).

The relatively higher rates of PAST accomplishments in SIDE moves indicate

that, with rising proficiency, the PAST is used as a default form with accomplishments both in FWD and SIDE moves. Unlike English L1, where this extension of the functional-semantic scope of the PAST seems to affect all durative predicates in SIDE moves, whether telic or atelic,²⁹ with CATENGT the coalition with the PAST is more consistent with the durative telic predicates. This coalition is semantically more congruent than the one between the PAST and activities (example (44)).³⁰ Note that the PAST in (44 a) is used in the context of the framing conjunction *as* which allows the use of the PPROG:

(44)	a. and as they <u>went</u> inside the forest	SIDEWAYS
	b. they saw a beehive	FORWARD
	c. with lots of bees flying around	SIDEWAYS
	d. and the dog became very interested about the bees.	FORWARD

(Cat L1 Eng L2, T12)

The inter-group comparison established that the rate of PAST used with SIDE accomplishments by CATENGT is robustly higher than that in CATENGS ($U = 43$, $z = -2.099$, $p = .036$, 11 vs. 1 tokens). Similar to what was observed with the French L1 English L2 groups for the PRES, the coalition between the non-progressive PAST form and durative telic predicates in SIDE moves seems to constitute a potential distinguishing criterion between advanced and very advanced Catalan learners of English regarding the use of tense-aspect morphology in picture book narratives like the *Frog* story.

The PPROG is only marginally used with accomplishments in English L2, both in FWD and SIDE moves (no such tokens were found in English L1). In spite of the discrepancy in percentages, no statistically relevant differences were established between the rates of PPROG with FWD and SIDE accomplishments in CATENGS

²⁹ While CATENGT produce more tokens of PAST activities in SIDE moves than ENG (13 vs.4), we have seen that the PAST is used mainly in contexts of event forestalling, which do not constitute cases of simultaneity. It is only the native speakers who produce tokens of PAST activities in clear simultaneity contexts (informant E9).

³⁰ CATENGT produce similar amounts of PAST tokens in SIDE activities and SIDE accomplishments (13 vs.11 tokens), yet the weight of these tokens in the category of SIDE activities as a whole is very different (18.6% vs. 62.53%). The imbalance in percentage rates is attributable to the fact that fewer accomplishments are used in SIDE moves than activities, and when they are used, they are predominantly encoded in the PAST. SIDE activities are much more numerous than SIDE accomplishments and are predominantly encoded in the PPROG.

(2.78% vs. 50%), nor in CATENGT 3.33% vs. 25%). The rather high rate in SIDE contexts with CATENGS represents in fact a very small number of tokens (2 tokens) and is the result of the overall limited number of accomplishments used in RT-maintenance contexts by this group. The presence of the PPROG in sequences of events such as the one illustrated in (45) blurs the transition between the events in (45 e) and (45 g). Note also that PPROG accomplishments constitute a less prototypical coalition than PPROG activities and, as such, indicate a relaxation of the use of tense-aspect morphology, which was expected at the advanced stages of L2 learning:

(45)	a. so the owl said +"/.	FORWARD
	b. +" go out of here.	(-)
	c. <you are not> [//] your frog is not in here.	(-)
	d. it was strange.	BACKGROUND
	e. he <u>was climbing</u> a rock.	FORWARD
	f. and <he was still shouting> [/] he was still shouting +"/.	SIDEWAYS
	e. +" <froggy> [!] <where are you> [?].	(-)
	g. and he <u>took</u> some strange bough.	FORWARD
	h. but he didn't know exactly.	BACKGROUND
	i. that that bough would be a deer.	BACKGROUND
	(Cat L1 Eng L2, S6)	

CATENGS and CATENGT differ with respect to the distribution of the PAST with achievements: while the less proficient group shows a discourse effect, PAST achievements being more frequently found in FWD rather than SIDE moves (72.33% and 50%, $z = -2.213$, $p = .027$), no such effect was observed in the production of CATENGT, who produce relatively balanced rates of PAST in FWD and SIDE achievements (66.23% and 66.67%). The discourse effect in the use of the PAST with achievements by CATENGS is due mainly to the competition from other verb forms, particularly in SIDE moves where 2 out of the 10 achievement tokens are encoded in the progressive form (1 in the PROG and 1 in the PPROG). Nevertheless, note that in terms of tokens, PAST achievements are almost exclusively used in RT-shift contexts in both Catalan L1 English L2 groups (see table 8.19 above). A predicate class effect was also established regarding the distribution of the PAST with achievements in English L1 (19.67% and 22.92%).

Interestingly, the only token of the PPROG with an achievement predicate was produced by CATENGS in the scene of the fall into the pond, which also gave rise to a PROG/achievement coalition in some of the present-based narratives produced by the French L1 learners. As already mentioned in section 8.3.1 above, the coalition as such is a clear indication that the PPROG is no longer tied to a particular class of predicates in advanced English L2 and that it is now flexibly used across predicate types. In example (46), the progressive reinstates the situation already encoded in the PAST with a slow motion effect, signalling a switch from the narrative to the descriptive mode. The protraction of the fall by means of the progressive form is a discursive strategy which allows the narrator not just to establish a relation of simultaneity with the rest of the events in the scene but, also, to explicitly focus on the trajectory of the fall.

- | | | |
|------|--|----------|
| (46) | a. all of a sudden the deer stopped <and> [//] like pulling a break. | FORWARD |
| | b. and Niki fell down. | FORWARD |
| | c. and the doggy too. | (-) |
| | d. +” where was he falling down? | (-) |
| | e. he <u>was falling</u> into the lake. | SIDEWAYS |
- (Cat L1 Eng L2, S6)

To conclude this section, the distribution of the PAST and the PPROG in English L1 and English L2 narratives appears to be influenced both by predicate type and discourse function, as summarised in Table 8.22 below. Use of verb morphology is strongly conditioned by the predicate type in the case of states. In the case of achievements, a predicate class effect was observed only with the PPROG which is very marginally used with achievements, irrespective of the move type. A discourse effect was observed in the distribution of the PAST with these predicates in the production of CATENGS, mainly due to competition from other tense-aspect forms in SIDE achievements, particularly the progressive (both the PPROG and the PPROG). CATENGT and ENG consistently encode achievements in the PAST irrespective of the move type.

Discourse plays a clear role in the case of activities in English L2 – activities are more frequently encoded in the PAST in FWD moves and in the PPROG in SIDE moves. Interestingly, a predicate class effect as observed with these predicates in the use

of the PAST in English L1 - the English native speakers in our corpus produce relatively balanced rates of PAST activities both in FWD and SIDE moves. While this may be a mere consequence of the fact that ENG produce very few tokens of PAST (ENG narrate mainly in the present) and bearing in mind that it characterises the production of only one informant, we believe that it is also indicative of a widening of the functional-semantic scope of the PAST, similar to the one observed with the PRES in present-based narratives, which results in the spread of the PAST in atypical coalitions with durative atelic predicates in SIDE moves. It seems that with this type of predicates, ENG can use the PAST as a default form unless explicit emphasis on the ongoingness of a given situation is wanted.

Accomplishment predicates are homogeneously encoded in the PAST only by the most proficient Catalan L1 learners and the native speakers in our corpus, whereas the less proficient learners are sensitive to the function these predicates have in the narrative and distinguish between FWD and SIDE accomplishments by means of grammatical aspect. With CATENGT, the use of the PAST as a default form appears to be more consistent with accomplishments than with activities in SIDE moves. A predicate class effect was established for the PPROG with accomplishments in the production of CATENGS and CATENGT. Similar to what was observed in the production of FRENGS and FRENGT, the coalition between the PPROG and accomplishments persists with CATENGS and CATENGT irrespective of the narrative function of the predicate, probably because the inherent telic quality of the predicate is felt to balance the unbounding effect of the progressive form and ensure temporal progression in plot-advancing contexts. Note also that ambiguity between discourse and predicate class factors occurs with PAST accomplishments and achievements in FWD moves and PPROG activities in SIDE moves.

	ST	ACT	ACC	ACH
PAST	Predicate (all groups)	Discourse (CATENGS, CATENGT) Predicate (ENG)	Discourse (CATENGS) Predicate (CATENGT, ENG)	Discourse (CATENGS) Predicate (CATENGT, ENG)
PPROG	Predicate (all groups)	Discourse (all groups)	Predicate (CATENGS, CATENGT)	Predicate (all groups)

Table 8.22. Semantic and discourse factors in the use of the PAST and the PPROG in English L1 and English L2

8.4 Conclusion

In this chapter we have seen that the overall number of narrative moves is not a language-specific feature – the English, French and Catalan native speakers in our corpus produce similar narratives in terms of the total number of moves produced, but it distinguishes between the different groups of advanced learners of English in our corpus, with the most advanced groups (FRENGT and CATENGT) producing robustly more narrative moves than the less proficient ones (FRENGS and CATENGS).

The selection of the narrative moves appears to be language-specific. The Catalan and French native speakers in our corpus produce linear *Frog* stories dominated by FWD moves, whereas the English native speakers give a more lateral account of the situations in the picture book, including also numerous SIDE moves. As discussed, information selection is related to the availability of certain linguistic devices in the speakers' mother tongue and is what underlies the preferred way of telling a story in a specific language. The dominance of SIDE moves in English L1 *Frog* stories is, at least in part, attributable to the progressive/non-progressive contrast and the choice of the present as a temporal anchor for the narrative.

The dominance of FWD moves in French and Catalan L1 stories appears to draw on different factors. While both languages encode grammatical aspect, the perfective/imperfective contrast is not available in the present, the temporal anchor

chosen by the majority of FRE in our corpus. The lack of grammaticalised linguistic devices to encode ongoingness in the present in French L1 might divert speakers' attention from simultaneity in the scenes. In Catalan L1, while the perfective/imperfective contrast is fully exploited, the choice of the past as a narrative anchor seems to prompt speakers to focus on plot-advancing material and give a less exhaustive lateral account of the scenes.

In English L2, the amount of SIDE moves produced distinguishes between the learner groups: irrespective of their L1, the students' groups produce fewer SIDE moves than the professors' groups. Overall, the choice of the temporal anchor in the narratives of our learners seems to contribute to a more linear (with the Catalan L1 English L2 groups, but particularly in the case of CATENGS) or a more "lateral" (with the French L1 English L2 groups, but particularly with FRENGT) account of the scenes. These two groups also seem to constitute the extremes of our sample in terms of proficiency.

With respect to the distribution of tense-aspect morphology in the different move types, both semantic and discourse factors shape the distribution of the PRES, the PAST, the PROG and the PPROG. In line with Bardovi-Harlig (2000), we found that discourse factors are more determining in the use of tense-aspect morphology with activities and accomplishments. A predicate class effect was established in the case of states and achievements which are consistently encoded in the non-progressive forms irrespective of the move type.

Nevertheless, our analysis uncovered certain tendencies in the use of tense-aspect morphology which might be linked to the picture book narrative as a discourse type. Firstly, a certain discourse effect was observed in the use of tense-aspect morphology with achievements. In present-based narratives (and only marginally in past-based ones), achievements are encoded in the progressive form both in FWD and SIDE moves. One of the characteristics of the picture book is precisely the fact that it "freezes" all events and situations in process, irrespective of their inherent duration.

The other tendency uncovered by our analysis is the fact that, while the English native speakers make a discourse sensitive use of tense-aspect morphology with durative (a)telic predicates, the PRES and the PAST widen their functional-semantic scope to encode RT-maintenance relations with such predicates when no explicit emphasis on the ongoing nature of the situation is wanted. Other elements, both

semantic and syntactic, come into play in establishing the RT from one clause to the next.

A similar tendency was observed among the most proficient groups in our study, FRENGT and CATENGT. While all the learners in our study make a flexible use of tense-aspect morphology with respect to predicate type, having clearly moved out of the prototypical coalitions of the early stages, it is only the most proficient learners who have reached this second degree of flexibility in their use of tense-aspect morphology and choose a default non-progressive form with durative predicates in SIDE moves when explicit reference to ongoingness is not felt to contribute to the account of a given scene.

The analysis carried out in this chapter has shown that both the aspect and discourse hypotheses need to be taken into account when analysing the use of tense-aspect morphology in the oral *Frog* stories of advanced French and Catalan learners of English. This interplay of factors also underlies the distribution of verb forms in English native speaker production. It also seems clear that other devices and strategies interact with tense-aspect morphology in English L1 and English L2 to encode temporal relations in picture book narratives. The weight of these devices seems to increase in the expression of SIDE moves, particularly when the speakers opt for the aspectually neutral PRES or PAST.

Our analysis would not be complete if we did not take an extra step towards what lies beyond the aspect and discourse hypotheses. We will do so by focusing on the expression a specific type of temporal relation, namely that of simultaneity. This will be done in the following chapter.

Chapter 9: Beyond the Aspect and Discourse Hypotheses in Advanced English L2. The Expression of Simultaneity.

In chapters 7 and 8 we discussed to what extent the semantic properties of the predicates (the Aspect Hypothesis) and the type of temporal relations these predicates encode (the Discourse Hypothesis) influence the distribution of tense-aspect morphology in English L1 and advanced English L2 oral narratives. Our findings indicate that both semantic and discourse factors underlie the choice of verb forms both in native speaker and advanced learner production: while states and achievements are encoded in non-progressive forms generally irrespective of their discourse function, activities and accomplishments show greater sensitivity to the type of temporal relation to be established with the previously introduced narrative material (activities more than accomplishments).

Interestingly, this sensitivity to discourse sets in place its own typical coalitions, namely non-progressive forms (PRES and PAST) are generally used in FWD moves and progressive forms (PROG and PPROG) in SIDE moves. While this is a clear indication of a proficient use of verb morphology in English L2, it is not entirely equivalent to the use the English native speakers in our corpus make of tense-aspect forms. As discussed in chapter 8, English does not need to distinguish between FWD and SIDE moves by means of verb inflections. For SIDE moves, it can opt for the more neutral PRES or PAST forms and rely instead on other contextual or implicit elements (temporal conjunctions, adverbials, the predicate type, logical inferences, etc.) to maintain the previously established RT. In English, the distinction between RT-shift and RT-maintenance contexts in a narrative depends only in part on the progressive/non-progressive contrast, both in present and past-based narratives. In our corpus, it is only the native speakers and the very advanced learners who tend to use the non-progressive PRES or PAST with activities and accomplishments in SIDE moves, in spite of the semantic and discourse grounds for the use of the progressive form in such contexts (see chapter 8 for a discussion).

In the present chapter we would like to take our analysis a step further and see how tense-aspect morphology interacts with other linguistic devices in the rendering of a specific temporal relation in narrative discourse, namely that of simultaneity. In the

analytical framework used here, simultaneity is a case of reference time (RT)-maintenance and is encoded by means of SIDE moves.¹ Previous studies have shown that the expression of simultaneity activates an array of morphological, lexical and syntactic devices to indicate the temporal overlap between two or more events in a narrative, both in English L1 and English L2 (Aksu-Koç and von Stutterheim 1994; Schmiedtová 2004; Leclercq 2007). The availability or lack of aspectual marking in a given language has been found to influence the choice of linguistic devices in the expression of simultaneity. Schmiedtová (2004) shows that German native speakers, whose mother tongue does not grammaticalise aspect, resort to adverbials to encode simultaneity in German, whereas English and Czech native speakers use aspectual marking in combination with adverbials and temporal subordinates. A difference seems to exist even between languages with grammatical aspect, Czech speakers relying at times on a stronger aspectual style than English speakers in the expression of simultaneity, *i.e.*, the perfective/imperfective contrast on its own, without adverbials or temporal subordination.

The expression of simultaneity in the *Frog* story was analysed by Aksu-Koç and von Stutterheim (1994), working with child and adult L1 productions from a variety of languages, English among them. With regard to English L1, the authors identified a series of specialised devices such as the use of temporal subordinating conjunctions (*when, while, as*), the progressive aspect and the contrast between progressive/non-progressive verb forms, or the temporal expressions *meanwhile* and *in the meantime*. Very significantly, the authors observed that the use of aspect marking to encode simultaneity declines at age 9, while other strategies (particularly subordination and present participle clauses) take over in older children and adult narratives. Other, less specialised, devices were also used in the English native speaker *Frog* stories, such as inceptive or continuative periphrases with *start* or *continue*, the adverb *still*, or the inherent durative quality of the predicates in parallel constructions (*The boy looks in the boots and the dog looks in the jar*). We shall come back to this repertoire in section 9.1.

It is important to distinguish between extra-linguistic simultaneity, *i.e.*, what is perceived as simultaneous in the extra-linguistic world and linguistic simultaneity, *i.e.*,

¹ SIDE moves also include cases of event elaboration and event nesting or forestalling which do not refer to simultaneous events or situations (see chapter 5, section 5.2 for discussion). This material has not been included in the analysis here.

what is encoded as simultaneous. This distinction is relevant for at least two reasons. Firstly, in discourse, a simultaneity relation can be established between events which do not overlap in the extra-linguistic world. According to Aksu-Koç and von Stutterheim (1994: 397), two events, processes, or states, are considered to be simultaneous if they share “a value on the time axis”. This value does not need to be the actual event time (ET) but a more subjective standpoint, the reference time (RT), from which the speaker presents a temporally anterior event as still relevant at the time of a later event. In example (1), the knocking down of the hive necessarily precedes the start of the bees’ chasing the dog but the use of the present perfect in (1 c) establishes a temporal continuum between the two events as part of a cause-effect construct:

- | | | |
|-----|---|----------|
| (1) | a. at this point - an owl - pops out of the hole in the tree | FORWARD |
| | b. and - a bunch of bees <u>start following</u> the dog - | SIDEWAYS |
| | c. probably angry that the dog <u>has knocked</u> their hive out of the tree. | |
| | BACKWARD/RT-MAINTENANCE. | |
| | (Eng L1, E2) | |

Secondly, the distinction between extra-linguistic and linguistic simultaneity is relevant because a speaker may choose not to encode two simultaneous events as such. This is common in some L2 productions, as learners struggle with accessing target language structures in an online task like the *Frog* story and often prune the scenes down to their plot-advancing elements. Example (2) corresponds to the rendering of the same scene in example (1) by one of the Catalan L1 English L2 students in our corpus. The density of events per scene is higher in the English L1 example than in the English L2 one:

- | | | |
|-----|--|---------|
| (2) | a. they <u>meet</u> many other animals such as bees #. | FORWARD |
| | b. but the frog was not there yet #. | (-) |
| | c. the boy <u>looks</u> for the # frog. | FORWARD |
| | d. # but he couldn't find it. | (-) |
| | (Cat L1 Eng L2, S1) | |

In the present chapter, we would like to extend the analysis of the expression of simultaneity to English L2 *Frog* stories and establish to what extent our advanced

learners are able to integrate target language morphological, lexical and syntactic devices to convey a nativelike temporal perspective on certain simultaneity scenes in the picture book. As argued so far, we expect that this will depend not only on the learners' command of the target language but also on the availability of certain grammaticalised devices and other linguistic means in their L1, which appear to have a bearing on the learners' ability to attend to and encode different types of temporal relations in L2.

We shall discuss the expression of simultaneity with respect to two episodes in the *Frog* story, namely the “mole” episode (pages 9 and 10 in the picture book) and the “owl” episode (pages 11 and 12), given the *a priori* high degree of coercion on the speaker to encode the simultaneity relation in these scenes.² In these scenes, the protagonists are involved in parallel plots: the boy looks for the frog in a hole in the ground where he gets bitten by a mole, and in a hole in a tree, where he disturbs an owl; the dog is playing with a beehive which eventually falls on the ground and the dog gets chased by all the bees living in the hive.

The simultaneity relations in these episodes are complex both in terms of the number of protagonists involved (up to four in some of the scenes) and the kind of temporal overlap to be encoded (total overlap, framing of a [+ punctual] event by a [+ durative] situation, simultaneity between two sequences of events). More specifically, we are interested in the explicit encoding of simultaneity by means of SIDE moves in the two episodes. For a better insight into the actual use of aspectual marking, SIDE moves containing state predicates have been excluded from the analysis.³

We need to say, nevertheless, that the complexity of the scenes is potential, in the sense that all speakers, particularly when they narrate in their mother tongue and are assumed to have full control of the linguistic repertoire, can decide whether or not to encode all the elements in the scenes. In L1, we believe this choice is strongly motivated by the subjacent or preferred information selection patterns which surface as group trends in our analysis. In L2, factors such as the ability to retrieve certain forms while doing the task online also need to be taken into account, along with the possible

² See pictures in Appendix 1.

³ States were included in the analysis of the Aspect and Discourse Hypothesis for a full picture of tense-aspect morphology use in English L1 and advanced English L2. In this chapter, the discussion is limited to the coalitions between verb forms and dynamic predicates.

transfer of the information selection patterns from the learners' L1. The selection of advanced learners for our study aimed to minimise the impact of the former and allow for an analysis of the latter.⁴

The present chapter is divided into two parts. In section 9.1, we analyse the repertoire of linguistic devices used to encode the temporal relation of simultaneity in the source and target languages in our study. Our goal is to see whether English, Catalan and French native speakers adopt a similar temporal perspective on the simultaneous material depicted in the “mole” and the “owl” episodes, given the availability of grammatical aspect⁵ in the three languages, or whether certain language-specific features can be established when looking beyond the distribution of tense-aspect forms. In section 9.2, we try to determine to what extent the temporal perspective preferred in the learners' mother tongue remains in their L2 production, even at advanced stages of L2 learning. Our interest is to see whether the initial similarity between source and target language facilitates the task of the learners (on the basis of the so-called transfer to somewhere principle (Andersen 1983)), or whether it also gives rise to choices which result in a non-nativelike temporal perspective on the selected scenes. A difference in rhetorical styles (Slobin 2004) would locate the ultimate attainment in L2 learning beyond the mastery of the functional-semantic scope of the forms, namely in the realm of conceptualisation.

9.1 The expression of simultaneity in English, Catalan and French L1 narratives

While English, Catalan and French encode grammatical aspect, the choice of the temporal anchor in the narratives creates an imbalance among the three languages. The English (ENG) and French native speakers (FRE) in our corpus tell their stories in the present, whereas the Catalan L1 speakers (CAT) opt for the past. Unlike English, the present is a domain for which French does not grammaticalise aspect. The *présent* is, consequently, used as a default form both in FWD and SIDE moves, as illustrated in

4 Factors such as the speakers' willingness to tell the story at the time of the interview also need to be taken into account.

5 The degree of grammaticalisation of aspect is different in the three languages. See discussion in chapter 3.

example (3). The lexical progressive periphrasis *en train de* is extremely scarce in the selected episodes (3 occurrences out of the 51 SIDE moves produced by FRE in the selected episodes):

- | | | |
|-----|--|------------|
| (3) | a. ensuite le petit garçon <u>voit</u> .
“then the little boy sees” | FORWARD |
| | b. que <dans un arbre> [//] dans un tronc d'arbre il y a un trou.
“that in a tree trunk there is a tree” | BACKGROUND |
| | c. donc il <u>grimpe</u> sur l'arbre.
“so he climbs on the tree” | FORWARD |
| | d. et <u>essaie de chercher</u> sa grenouille dans l'arbre #.
“and tries to look for his frog in the tree” | FORWARD |
| | e. une chouette <u>sort</u> du tronc.
“an owl comes out of the trunk” | FORWARD |
| | f. le <u>fait tomber</u> .
“makes him fall | FORWARD |
| | g. pendant que le chien <u>est en train de vivre</u> une mésaventure.
“while the dog is in the process of having a misadventure” | SIDEWAYS |
| | h. plein d abeilles le <u>poursuivent</u> .
“lots of bees chase him” | SIDEWAYS |
| | i. le <u>terrorisent</u> #.
“harass him” | SIDEWAYS |
| | (Fr L1, F6) | |

In the past, Catalan possesses a grammaticalised aspectual distinction between the *pretèrit* (i.e., the perfective past form) and the *pretèrit imperfet* (i.e., the imperfective past form). This aspectual opposition is fully exploited in the expression of simultaneity by the Catalan native speakers, often in the context of the temporal subordinating conjunction *mentre* or the temporal adverbial *mentrestant* (example (4)):

- | | | |
|-----|--|------------|
| (4) | a. ben enfadades les vespes <van perseguir el gos>[///] <u>van començar a perseguir</u> el gos.
“really angry the wasps start-PFV to chase the dog” | FORWARD |
| | b. el nen <u>continuava buscant</u> <per dintre tots els>[///] per dintre els forats.
“the boy continue-IPFV looking in all the holes” | SIDEWAYS |
| | c. que hi havia al bosc. | BACKGROUND |

“that there were in the forest”	
d. el nen <u>va caure</u> de l’arbre.	FORWARD
“the boy fall-PFV from the tree”	
e. que <u>s’havia enfilat</u> .	BACKWARD/RT-MAINTENANCE
“where he had climbed”	
f. d’un ensurt que li <u>va donar</u> un mussol.	BACKWARD
“from a startle that an owl give-PFV him”	
g. i mentrestant el gos <u>corria</u> i <u>corria</u> davant de les vespes.	SIDEWAYS
“and meanwhile the dog run-IPFV and run-IPFV away from the wasps”	
f. que el <u>perseguien</u> .	SIDEWAYS
“who chase-IPFV him”	
(Cat L1 Eng L2, C11)	

Figure 9.1 below presents the overall distribution of verb forms in SIDE moves in the three languages. Three main categories were established: perfective and/or non-progressive forms (namely PRES and PAST for English, the *présent*, the *passé composé* and the *passé simple* for French, the *present* and the *pretèrit* for Catalan);⁶ imperfective and/or progressive forms (namely the progressive periphrasis *be + Ving* in English, the progressive lexical periphrasis *être en train de* and the *imparfait* for French, the progressive periphrases *estar + gerund* and *anar + gerund* and the *pretèrit imperfet* for Catalan); non-finite forms (namely present participles and infinitives used in SIDE moves). The percentages were obtained with respect to the total number of SIDE moves produced by each group in the selected episodes. The percentages represent group means, and not a direct conversion of the tokens observed, to compensate for the excessive weight of some individuals in the group.⁷

6 While the progressive is included in the imperfective viewpoint, there is no part-whole relation between the perfective and the non-progressive. The perfective is contrasted with the imperfective. We do not imply that the present forms in English, Catalan and French are perfective.

7 For a clearer insight into the use of aspectual marking for the expression of simultaneity state predicates have been excluded from all the calculations in this chapter. Group medians were discarded because they do not account for more peripheral or marked phenomena. See chapter 7, section 7.1.2 for a discussion.

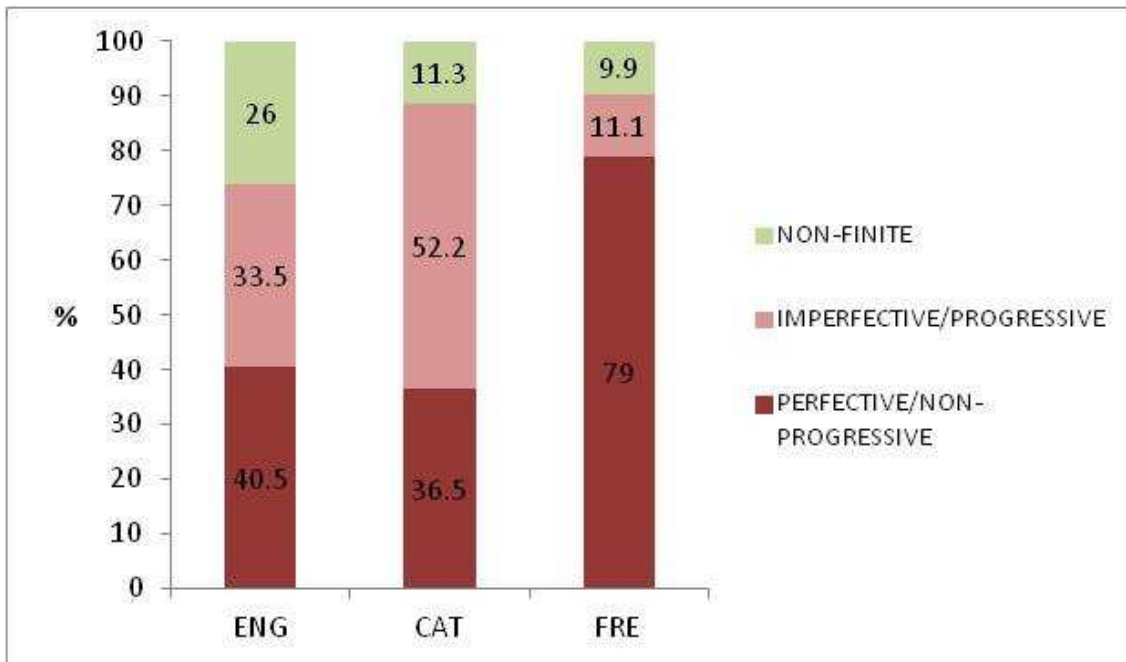


Figure 9.1. Distribution of verb forms in simultaneity contexts in English, Catalan and French L1

Regarding the use of tense-aspect forms in the “mole” and “owl” episodes, no statistically significant differences were established between ENG and CAT with respect to the distribution of tense-aspect forms in SIDE moves. As expected, FRE produce significantly more perfective/non-progressive forms in SIDE moves than ENG ($U = 25, z = -2.771, p = .006$)⁸ in the selected scenes, whereas the latter use more imperfective/progressive forms than the former ($U = 36, z = -2.232, p = .026$).

The use of non-finite forms to encode the relation of simultaneity constitutes an area of dissimilarity among the three languages. Non-finite subordinates are a device of event condensation (Noyau *et al.* 2005). The English native speakers in our corpus appear to rely on marginally more non-finite forms, particularly present participle clauses, in the expression of simultaneity than both the Catalan native speakers (26 % vs. 11.3 %; $U = 46, z = -1.677, p = .094$) and the French native speakers (26 % vs. 9.9 %, $p = .107$).⁹ The non-finite clauses allow the narrator to stack multiple events/situations with respect to a single character (example (5)) or highlight the actantial connection existing between two different protagonists in the same scene

⁸ All statistical values provided in this section were obtained by means of repeated non-parametric Mann-Whitney U tests carried out on percentages of the total SIDE moves identified in the scenes.

⁹ We have so far considered that significance values in the interval between .05 and .1 were marginally significant. However, given the very reduced size of the sample used in this chapter, we accept values of p between .1 and .15 as marginally significant.

(example (6)):

- | | | |
|-----|---|----------------------------------|
| (5) | a. a. while the boy is busy yelling for the frog. | SIDEWAYS (with respect to (6 c)) |
| | b. <u>checking</u> for the frog in a - in a groundhog's hole. | SIDEWAYS |
| | c. the dog is barking away at the bees and the hive. | FORWARD |
| | d. <u>jumping</u> against the tree. | SIDEWAYS |
| | (Eng L1, E11) | |
| | | |
| (6) | a. the boy tumbles down from the branch | FORWARD |
| | c. because of an owl who's popped up from the hole – | BACKWARDS/RT-MAINTENANCE |
| | d. and the dog - runs - um - howling by | SIDEWAYS/SIDEWAYS |
| | e. with this swarm of bees <u>chasing</u> him. | SIDEWAYS |
| | (Eng L1, E6) | |

The relation of simultaneity can also be encoded hypotactically by means of finite clauses introduced by a binding conjunction (5 a). Nevertheless, the degree of event condensation is higher with the non-finite subordinate clauses than with the finite ones due to the absence of an overt subordination marker. We believe that the participle clauses in (5) and (6) are a more synthetic and implicit device for encoding simultaneity than the temporal conjunctions *when*, *while*, *as*, which spell out the hierarchy the speaker establishes among the simultaneous events/situations in the scenes.

Still at the level of the verb forms used to express the relation of simultaneity, other differences can be established between Catalan and English, which put into perspective the initial resemblance regarding the expression of simultaneity in these languages. The Catalan native speakers often rely on phasal periphrases which focus on the onset of a situation (inceptive periphrases) or an intermediary stage in its unfolding (continuative periphrases). These periphrases are used in 19.2% of the total moves in the selected scenes by CAT, as compared to the 5.7% in ENG production and 7.6% with FRE. A statistically robust difference was established between CAT and ENG with respect to the frequency of phasal periphrases in the “mole” and “owl” episodes ($U = 21.5$, $z = -2.930$, $p = .003$), whereas no statistically significant difference was found between ENG and FRE. The main inceptive periphrases identified were those with the aspectual verbs *començar* (*a*) and *posar-se* (*a*) (example (7)). The main continuative

periphrases were those with the aspectual verbs *continuar* (a), *tornar* (a), *seguir* and, more marginally, the interjection *vinga* (a) (example (8)):

- | | | |
|-----|--|------------------|
| (7) | a. i això que cau el rusc al terra.
“and with this the beehive falls onto the ground” | FORWARD |
| | b. les abelles s’emprenyen.
“the bees get angry” | FORWARD |
| | c. # i el gos està tot espantat.
“and the dog is really scared” | SIDEWAYS |
| | d. ja comença <a>[/] a posar se nerviós.
“he already starts getting nervous” | SIDEWAYS |
| | e. el nen segueix buscant.
“the boy continues searching” | SIDEWAYS |
| | f. i fica el cap a dins d un forat d’un arbre.
“and puts his head into a hole in a tree”
(Cat L1, C6) | SIDEWAYS-FORWARD |
| | | |
| (8) | a. i <no>[!] a dintre del forat hi havia un mussol.
“and no inside a hole there be-IPFV an owl” | SIDEWAYS |
| | b. i el mussol es va enfadar mo:lt.
“and the owl get-PFV very angry” | FORWARD |
| | c. i el va tirar de dalt a baix de l’arbre.
“and throw-PFV off the tree” | FORWARD |
| | d. +” què fas a casa meva?
“what are you doing in my house” | (-) |
| | e. # i mentrestant el gos <vinga a córrer> [/] <u>vinga a córrer</u> amb les abelles al darrere.
“and meanwhile the dog goes running with the bees behind”
(Cat L1, C5) | SIDEWAYS |

Aspectual periphrases are explicit unbounding devices, similar to the imperfective past or the progressive periphrasis. In chapter 8 we observed that, at the level of the entire narrative, CAT produce significantly more FWD moves than ENG. The “push forward” of the plot is often ensured by means of inceptive periphrases which establish initial points and obliterate right boundaries. With respect to the expression of simultaneity, the function of the continuative periphrases is different from

that of the progressive – while the latter presents a situation as unfolding at a specific reference point, the former establish a link between two successive stages of the same situation, generally depicted in adjacent pictures in the picture book (*e.g.*, the dog playing with the bees in pictures 9 and 10). While continuative periphrases are available in English L1 (*keep + Ving* in (9 b)), ENG generally resort to lexical devices to indicate a protracted situation, namely the adverb *still* and the adverbial particle *on* (example (9) below). The adverb *still* was found in 10.9% of the total SIDE moves produced in the selected scenes:

(9)	a. and then - he looks into holes	FORWARD
	b. and the dog <u>keeps playing</u> with the – beehive	SIDEWAYS
	c. and then the - boy runs into a hedgehog	FORWARD
	d. which comes out of { the ground } - the hole	SIDEWAYS
	e. that he was looking in	SIDEWAYS
	f. and - the dog still is sicked on by the bees	SIDEWAYS
	(Eng L1, E7)	

Returning to the use of subordinating devices in the expression of simultaneity in English, Catalan and French, no statistically relevant differences were established among the three groups regarding the total use of finite subordination in SIDE moves in the selected episodes. Figure 9.2 below presents the distribution of the main types of subordinate clauses which encode SIDE moves in the “mole” and “owl” episodes: temporal subordinates, relative clauses, and other subordinates (mainly adverbial clauses of cause and *that* clauses). The values represent percentages calculated on the basis of the total SIDE moves in the episodes. Once again, group means were used to compensate for the excessive weight of some individuals in the group. The farthest bar on the right in each group represents the total amount of subordination in SIDE moves in the selected scenes.

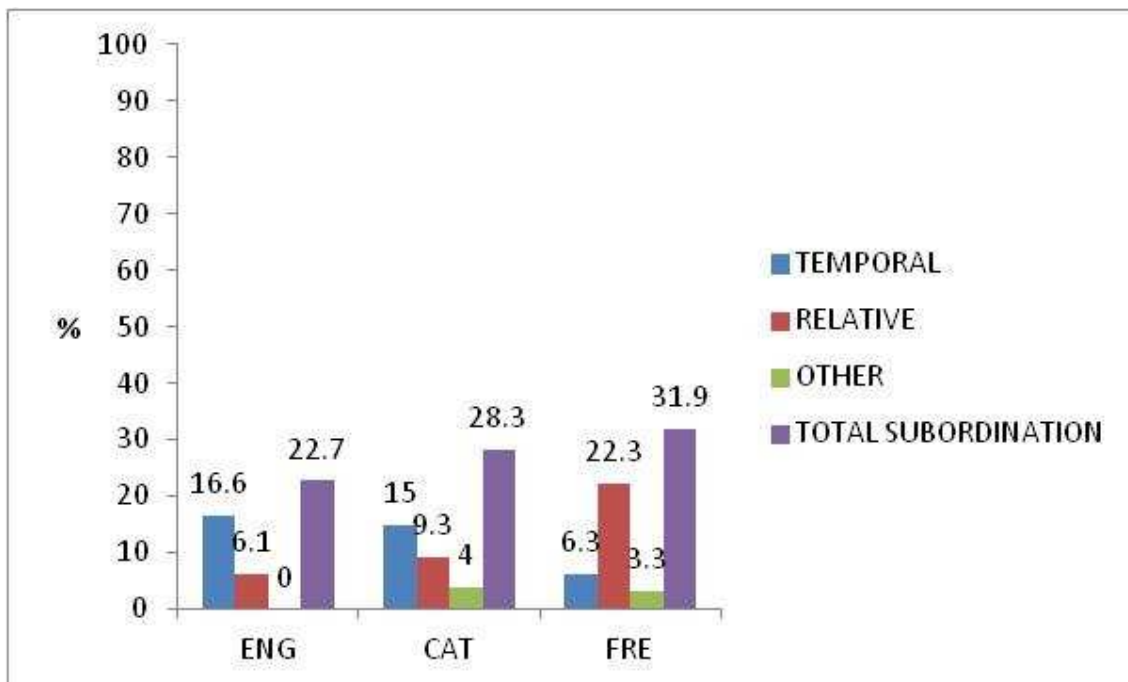


Figure 9.2. Types of finite subordinates in simultaneity contexts in English, Catalan and French L1

At a closer look, certain differences were observed between FRE and ENG with respect to the type of subordinates used to express the relation of simultaneity. FRE encode simultaneous material by means of relative clauses more often than ENG (22.3 % vs. 6.1 %, $U = 38.5$, $z = -2.111$, $p = .035$) (examples (10) and (11)), whereas ENG use temporal subordinates with *while* to a slightly bigger extent than FRE (16.6 % vs. 6.3 %, $U = 45$, $z = -1.795$, $p = .073$) (see example (5) above):

- | | | |
|------|--|---------------------------|
| (10) | a. toujours le chien qui joue avec <les abeilles> [/] la ruche. | FORWARD |
| | “still the dog which plays with the hive” | |
| | b. et qui fait tomber la ruche. | FORWARD |
| | “and which makes the beehive fall” | |
| | c. le garçon toujours en train de chercher. | SIDEWAYS/FORESTALLING |
| | “the boy still in the process of searching” | |
| | d. le voici dans en arbre. | SIDEWAYS |
| | “here he is in a tree” | |
| | e. et là le hibou qui sort de chez lui. | FORWARD |
| | “and there the owl which comes out of its house” | |
| | f. et les abeilles <qui se> [/] qui se fâchent contre le chien. | SIDEWAYS |
| | “and the bees that get angry with the dog” | |
| | g. qui s’en va en courant. | SIDEWAYS-FORWARD/SIDEWAYS |

“which goes away running”

(Fr L1, F1)

- (11) a. en fait c’est le bazar. [+ bch]
 “in fact it’s a mess”
- b. **il y a** les abeilles. FORWARD
 “there are the bees”
- c. **qui** courent après le chien. SIDEWAYS
 “which are running after the dog”
- d. **il y a** le hibou. SIDEWAYS
 “there is the owl”
- e. **qui** court <après> [/] après Paul. SIDEWAYS
 “which is running after Paul”
- f. et ça commence à devenir la panique. [+ bch]
 “and it’s starting to get out of control”
- g. de ce fait là ils courent dans tous les sens. SIDEWAYS
 “in fact they are running in all directions”
- h. et ils s’enfoncent au fin fond de la forêt. SIDEWAYS
 “and they are going deeper into the forest”
- (Fr L1, F3)

Although both temporal and relative subordinates represent condensation devices, the latter can be said to have an increased descriptive quality than the former. The relative subordinates in the examples above encode simultaneous material not as a temporal relation but as a property of their referents. The presence of a visual scope gradually incorporating the different components of the scene is also indicated by the locative/existential periphrasis *il y a* in (11 b, d) and the deictic expressions *voici* and *là* in (10 d, e). As discussed in chapter 8, we believe that the choice of the *présent* as temporal anchor in French L1 introduces a deictic dimension which brings together the “now” of the scenes in the picture book and the “now” of the narrative act, making the passage from narrative to description more flexible. The use of relative clauses in French L1 gives a somewhat static quality to the scenes, which come across as collections of referents with different defining properties, whereas in English the temporal subordinates highlight the dynamic nature of the scenes and focus on the events/situations in which the different protagonists are involved.

The narrator occupies an external vantage point which allows him to dress an

inventory of all the participants in the scene, without establishing any hierarchy, simply mentioning their defining trait. This external perspective is in line with what Slobin (1996: 84-85) observed in relation to the expression of movement in English L1 and Spanish L1 *Frog* stories. While English native speakers focus on the description of trajectories and processes, leaving resultant locative states to be inferred, Spanish speakers tend to provide more descriptions of resulting states, leaving trajectories to be inferred. It seems that the French speakers in our corpus also favour this static account of dynamic scenes.

Another interesting trend was observed with regard to the type of subordination used in simultaneity scenes by the Catalan and French L1 speakers in our corpus, even though it constitutes only a marginal phenomenon in our sample. Unlike ENG, CAT and FRE sporadically encode SIDE moves by means of subordinates of cause (3 and 2 occurrences respectively; no such clauses in ENG). When this happens, the sequencing effect of the binding conjunction, which typically requires a retrospective interpretation, is cancelled by means of aspectual periphrases, which remove the right boundary of the event in the subordinate, protracting the cause into the territory of its effect (example (12)), or by the inherent durative quality of the predicate *anar rere* (*go after*) in the subordinate (13). A predilection for encoding causal connections between events was also observed by Carroll and Lambert (2003, 2006) (see examples and the discussion in chapter 2, section 2.3):

- | | | |
|------|--|----------|
| (12) | a. donc Téó <tombe> [/] tombe par terre.
“consequently Téó falls on the ground” | FORWARD |
| | b. Louki s'échappe.
“Louki escapes” | SIDEWAYS |
| | c. parce que toutes les abeilles <u>commencent <à> [/] à lui courir</u> derrière.
“because all the bees start running after him” | SIDEWAYS |
| | (Fr L1, F12) | |
| (13) | a. es troba que surt una òliba.
“it happens that a owl comes out” | FORWARD |
| | b. # s'espanta.
“he gets scared” | FORWARD |
| | c. i cau a terra. | FORWARD |

- “and falls on the ground”
 d. el gos segueix corrent. SIDWAYS
 “the dog continues running”
 e. **perquè** les abelles van rere d’ell ##. SIDWAYS
 “because the bees go after him”
 (Cat L1, C6)

Lexical devices are also involved in the expression of simultaneity in English, Catalan and French L1, namely framing expressions. The main framing devices identified in the three languages are: *meanwhile*, *in the meantime* and *at the same time* for English, *pendant ce temps (-là)* for French, and *mentrestant* for Catalan. Figure 9.3 presents the proportion of frame adverbials used to encode SIDE moves in the “mole” and “owl” episodes in English, Catalan and French L1 (mean percentages calculated of the total SIDE moves in the selected scenes).

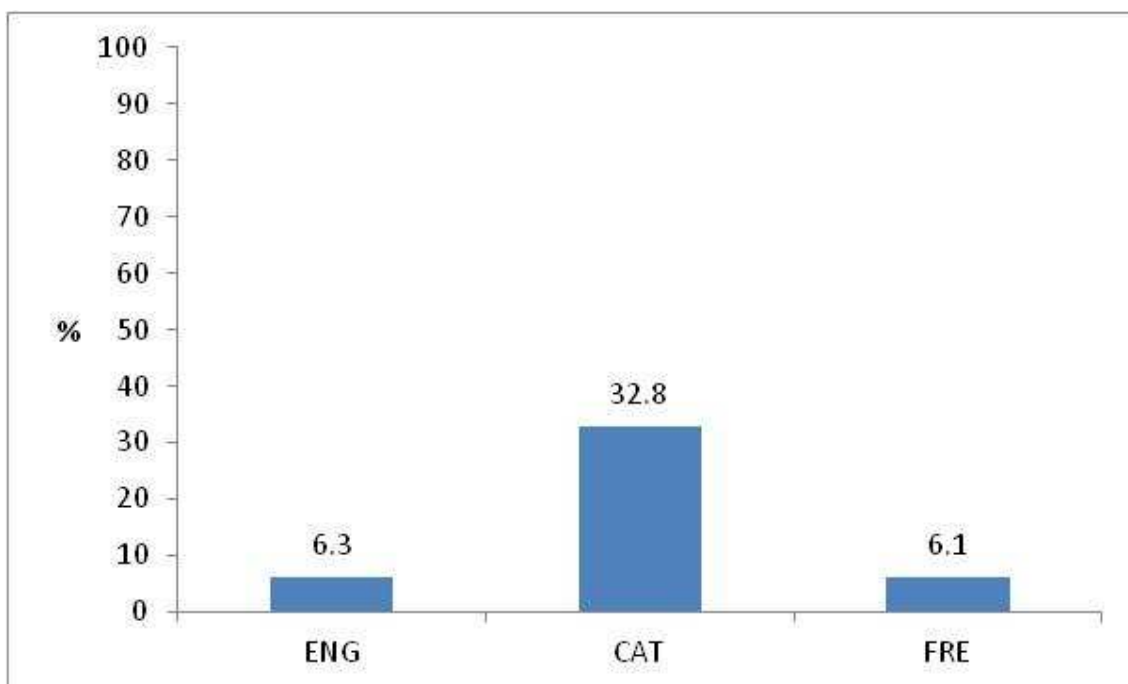


Figure 9.3. Framing devices in English, Catalan and French L1

The use of framing expressions in the three languages proves to be an area of divergence between English and Catalan. While English and French native speakers opt for finite hypotactic devices to encode SIDE moves in the selected episodes, Catalan native speakers rely both on finite subordination and the use of the frame adverbial

mentrestant. CAT rely significantly more on the use of framing devices than ENG (32.8% vs. 6.3%, $U = 40$, $z = -2.066$, $p = .039$), as illustrated in example (8) above. According to Aksu-Koç and von Stutterheim (1994), adverbials like *mentrestant* or its English equivalent *meanwhile* connect independent clauses and are used for interweaving chunks of sequential events taking place concurrently. The temporal span delimited by these adverbials can also include retrospective material encoded by means of a perfect form (see more examples and discussion in chapter 5):

(14)	a. enlloc de la granota li surt un mussol “instead of the frog an owl comes out”	FORWARD
	b. tot espantat “all scared”	BACKGROUND
	c. que el fa <es>[/] espantar en el Pepet. “which makes Pepet get scared”	FORWARD
	d. i fer lo caure de l’arbre. “and fall from the tree”	FORWARD
	e. i mentrestant <per>[/] encara per empitjorar les coses. “meanwhile to make things worse”	BACKGROUND
	f. resulta que les abelles <u>han començat</u> <a>[/] a <u>perseguir</u> <el>[/] el gosset. “it appears that the bees have started chasing the little dog”	BACKWARDS/RT-MAINTENANCE
	g. # o sigui # que ara tots dos estan amb problemes. “in other words now both of them are in trouble”	(-)
	(Cat L1, C4)	

Table 9.1 below summarises the main findings with respect to the expression of simultaneity in English, Catalan and French L1. The similarities and differences identified in this section are believed to give the advanced learners in our corpus a distinct starting point when encoding the relation of simultaneity in English L2. As we shall try to show in section 9.2, the choice of linguistic devices in L2 bears the imprint of the temporal perspective favoured in the learners' L1, along with other interlanguage specific features.

Tense-aspect forms	ENG > FRE imperfective/progressive forms FRE > ENG perfective/non-progressive forms ENG = CAT
Phasal periphrases	CAT > ENG ; FRE = ENG
Non-finite forms	ENG > CAT embedded present participle clauses ENG = FRE
Finite subordinate clauses	FRE > ENG relative clauses ENG > FRE temporal clauses ENG = CAT
Framing devices	CAT > ENG FRE = ENG

Table 9.1. Overview of the differences and similarities regarding the expression of simultaneity in English, Catalan and French L1

9.2 The expression of simultaneity in English L2 narratives

The findings in section 9.1 give support to von Stutterheim and Klein's (2002) claim that a specific linguistic system induces a specific perspective on the information structure to be communicated. As we have seen, even languages which encode grammatical aspect like English, Catalan and French differ in the way their speakers express the relation of simultaneity. Given a similar pool of linguistic tools, English, Catalan and French native speakers do not make the same choices when presented with the same informational input. A language-specific temporal perspective on the simultaneity scenes arises at the level of the group analysis.

In L2, cross-linguistic studies have shown that learners remain bound by the temporal perspective of their mother tongue even at very advanced stages (Carroll and Lambert 2006). Learners' linguistic choices, particularly in the case of advanced learners who have a wide linguistic repertoire of the target language, reflect a way of filtering the informational input which is shaped by the grammaticalisation patterns available in the learners' mother tongue. In other words, the advanced learners accommodate in target language structures a way of selecting and organising the information proper to their mother tongue. In what follows, we are going to analyse the expression of simultaneity in English L2 by our advanced Catalan and French learners from the perspective of the similarities and differences established in section 9.1. The goal of the analysis is to establish the range of linguistic devices used to encode

simultaneity by these learners and the proximity or distance between their choices and those made both in their mother tongue and in the target language.

9.2.1 The French L1 English L2 groups

Figure 9.4 presents the distribution of verb forms, both finite and non-finite, in the English L2 narratives of FRENGS and FRENGT. The percentages were obtained with respect to the total number of SIDE moves produced by each group in the selected episodes and represent group means. The values for FRE and ENG have been included for the purpose of comparison.

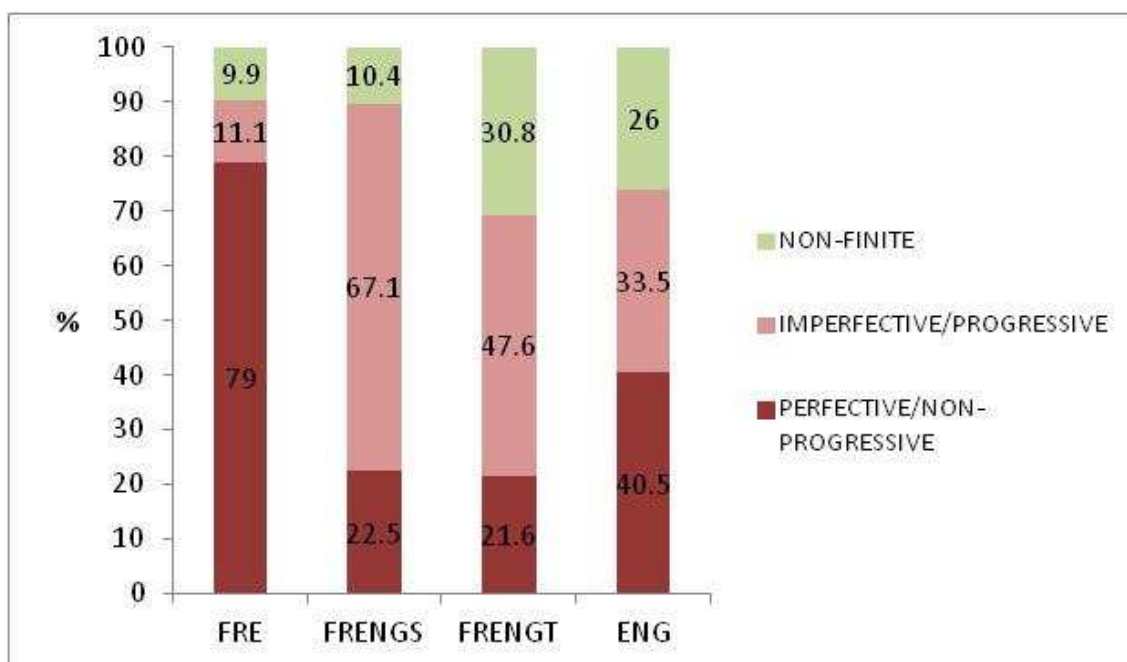


Figure 9.4. Distribution of verb forms in simultaneity contexts in English L2 (FRENGS and FRENGT)

Regarding the distribution of tense-aspect forms, Figure 9.4 gives us a clear indication that the expression of simultaneity in English L2 is dominated by the use of aspectual marking, namely the progressive forms PROG and PPROG, both with FRENGS and FRENGT. While this radically differs from the patterns identified in French L1, it is not entirely targetlike. FRENGS use the progressive form to a greater extent than the English native speakers (67.1% vs. 33.5 %; $U = 25$, $z = -2.733$, $p = .006$), who make a more balanced use of progressive and non-progressive forms when encoding the relation of simultaneity. The reliance on the progressive forms decreases,

but not to statistically significant values, in the case of the professors, who make a more nativelike use of these forms than FRENGS in SIDE moves in the “mole” and “owl” episodes.

In spite of the difference in percentage rates, ENG are only marginally different from FRENGS and FRENGT with respect to the use of the non-progressive forms, particularly the PRES, in the expression of simultaneity (40.5% vs. 22.5%, $U = 45$, $z = -1.582$, $p = .114$ for FRENGS; 40.5% vs. 21.6%, $U = 45$, $z = -1.574$, $p = .115$ for FRENGT). Nevertheless, at the level of the entire narrative, rates of PRES activities in SIDE moves were found to be robustly higher in the narratives of ENG and FRENGT than in those of FRENGS (see chapter 8, section 8.3.1), even in the context of an explicit mark of simultaneity (examples (25) and (26) in chapter 8 repeated here for convenience as (15) and (16)). This tendency decreases in the two episodes analysed here due to the centrality of aspectual marking in this type of contexts. No differences exist between FRENGS and FRENGT regarding the use of the non-progressive forms in the selected episodes:

- | | | |
|------|---|------------------------|
| (15) | a. the little boy falls off the tree - | FORWARD |
| | b. uh frightened by an owl / | (-) |
| | c. the dog runs away | SIDEWAYS |
| | d. as - bees <u>follow</u> him ... | SIDEWAYS |
| | (Eng L1, E2) | |
| | | |
| (16) | a. so he jumps he jumps up. | FORWARD |
| | b. and tries to bark at the hive. | SIDEWAYS |
| | c. and tries to shake the tree. | SIDEWAYS |
| | d. to see what happens. | FORWARD/RT-MAINTENANCE |
| | e. and in the meantime the boy <u>peers</u> into a hole in the ground. | SIDEWAYS |
| | (Fr L1 Eng L2, T1) | |

The comparison between the two learner groups shows that there is a tendency to incorporate more synthetic devices in the expression of simultaneity at very advanced stages of English L2 learning than at less advanced ones. While FRENGS produce relatively more progressive forms than FRENGT (67.1% vs. 47.6%, $U = 24.5$, $z = -1.710$, $p = .087$), the latter resort to significantly more non-finite forms (mainly present

participles) to encode SIDE moves in the selected episodes (10.4 % vs. 30.8 %, $U = 32$, $z = -2.431$, $p = .015$) (examples (17) and (18)). The use of non-finite forms also distinguishes the French learners from the English native speakers – FRENCS produce marginally fewer non-finite forms than ENG (10.4% vs. 26%, $U = 47.5$, $z = -1.580$, $p = .114$), whereas no statistically relevant difference was established between FRENCT and ENG:

- | | | |
|------|--|------------------|
| (17) | a. the bees started flying after the dog. | FORWARD |
| | b. and wanted to pinch it to pinch the dog #. | SIDEWAYS |
| | c. so the dog ran away. | FORWARD |
| | d. with the bees <u>following</u> him a huge amount of bees. | SIDEWAYS |
| | (Fr L1 Eng L2, T12) | |
| (18) | a. so the owl is actually taking <its> [/] <its> [//] well <it s flying> [//] yeah it s flying away. | FORWARD |
| | b. <u>surprising</u> the boy. | SIDEWAYS |
| | c. and exactly at the same time <the> [/] the bees are <getting> [/] getting so annoyed at the dog. | SIDEWAYS |
| | d. that they are running after him. | SIDEWAYS-FORWARD |
| | e. <u>chasing</u> him. | SIDEWAYS |
| | f. so the boy (dog) is now running away for his own sake. | SIDEWAYS |
| | g. the little boy is on the floor. | SIDEWAYS |
| | h. unbalanced <by the> [/] by the owl. | BACKGROUND |
| | i. <u>coming out</u> <from the> [/] from the tree. | SIDEWAYS |
| | (Fr L1 Eng L2, T6) | |

The use of non-finite forms in FRENCT is often linked to some indication of an external visual *locus*, generally encoded by the verb *see* with a first person plural subject or the locative construction *there is* (examples (19) and (20)).¹⁰ Such constructions are extremely scarce in the English L1 production (except for one occurrence of *there is + NP + Ving*). This gives a deictic quality to the expression of simultaneity in English L2 by FRENCT which, according to the discussion in 9.1, may constitute an imprint of their L1 temporal perspective, in spite of the otherwise targetlike presence of non-finite clauses:

¹⁰ We are aware that, while both constructions require participle clauses, these clauses fulfil different syntactic functions. This distinction is beyond the purpose of the discussion here.

- (19) a. <the> [/] <the> [/] the bees are chasing the dog. FORWARD
 b. and **there's** an owl. SIDEWAYS
 c. coming from <the> [/] the tree trunk ##. SIDEWAYS
 (Fr L1 Eng L2, T5)
- (20) a. so <the arrival> [//] the sudden emergence of the of the owl has startled him. BACKWARD / RT-MAINTENANCE.
 b. and he lost his balance. BACKWARD-FORWARD
 c. and **we can see** him sprawling on his back. SIDEWAYS
 d. and the bees the bees are chasing the dog. SIDEWAYS
 (Fr L1 Eng L2, T8)

Turning now to the use of finite subordination in the “mole” and “owl” episodes, which was established as an area of discrepancy between the French and English native speakers in our study, Figure 9.5 below indicates that both FRENGS and FRENGT are consistently different from French L1 with respect to the use of relative clauses in the expression of simultaneity. In section 9.1, we pointed out that that FRE often rely on relative clauses to encode simultaneity in the selected scenes (22.3% of the total SIDE moves). This preference for relative clauses was not identified in the French L1 English L2 groups who produce significantly fewer relative clauses than FRE in the “mole” and “owl” episodes. No relative clauses were found with FRENGS and only 3.5% of the total SIDE moves were encoded by means of relative clauses in the narratives of FRENGT ($U = 32.5$, $z = -2.550$, .011).

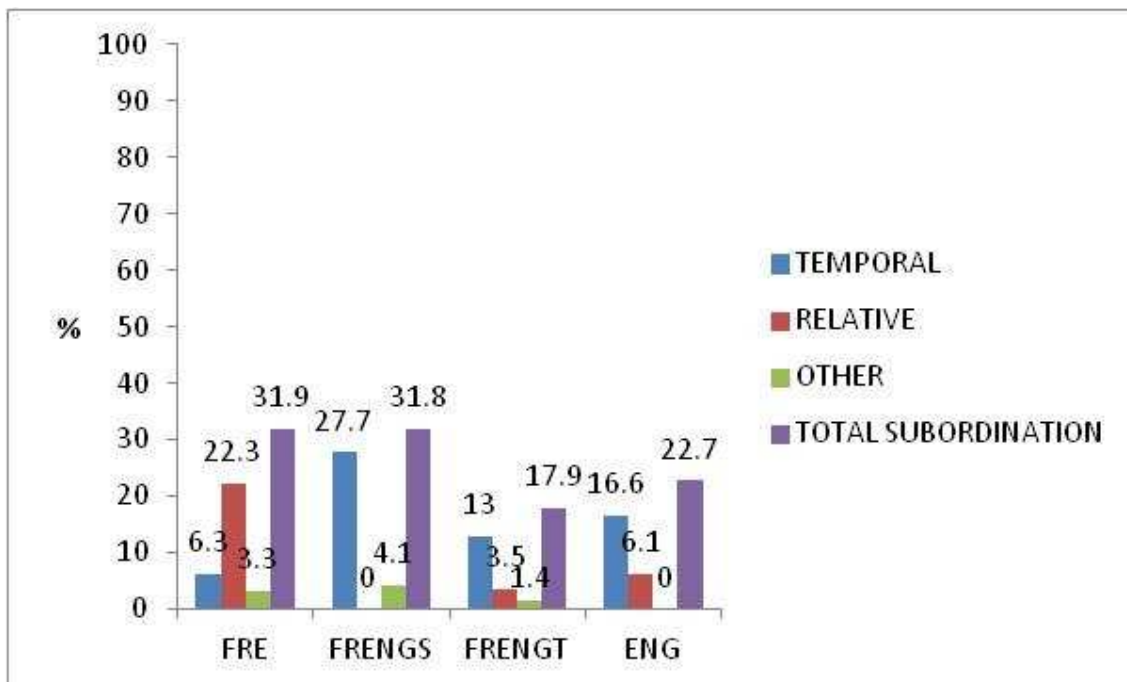


Figure 9.5. Types of finite subordinates in simultaneity contexts in English L2 (FRENGS and FRENGT)

Similar to ENG, French learners of English opt for temporal subordinates as the main finite hypotactic device for encoding SIDE moves (no statistically significant differences were established between FRENGS, FRENGT and ENG with respect to finite temporal subordinate clauses). Interestingly, FRENGS appear to rely on the use of temporal subordination to a greater extent than FRENGT (27.7 % vs. 13 %, $U = 43.5$, $z = -1.698$, $p = .090$). While this might seem surprising in that the use of hypotaxis is expected to increase with higher proficiency stages, it is in line with the tendency to incorporate more synthetic devices in the expression of simultaneity previously identified in the narratives of FRENGT. While FRENGS often encode simultaneity by means of coordination or finite subordination (mainly temporal and causal subordinates), FRENGT also rely on non-finite clauses, which contribute to a more compact and integrated temporal perspective (Granger 1997). This synthetic quality of the expression of simultaneity was also identified in English L1 (see section 9.1) and seems to be a feature of very advanced English L2 narratives. Contrast, for instance, example (17) above, produced by a French L1 professor, and the one in (21) below, produced with respect to the same scene by a French L1 student:

- (21) a. **and then** the little boy fell off the tree. FORWARD
 b. because this hole <was> [//] seemed to be the house of an owl. BACKGROUND
 c. **and** the dog is running away. SIDEWAYS
 d. **because** of course the bees are chasing him. SIDEWAYS
 (Fr L1 Eng L2, S10)

The comparison between French and English L1 in section 9.1 also established that both source and target language rely only marginally on the use of framing devices (3 tokens in English L1 and 2 tokens in French L1). Rather than an L1 predisposition, the use of such devices in English L2 by French learners is believed an interlanguage phenomenon. Figure 9.6 presents the percentage of frame adverbials used to encode SIDE moves in the “mole” and “owl” episodes in English L2 by the French learners, with information about French L1 and English L1 for comparison purposes. The percentages are group means and were calculated of the total SIDE moves produced in the selected scenes by each group.

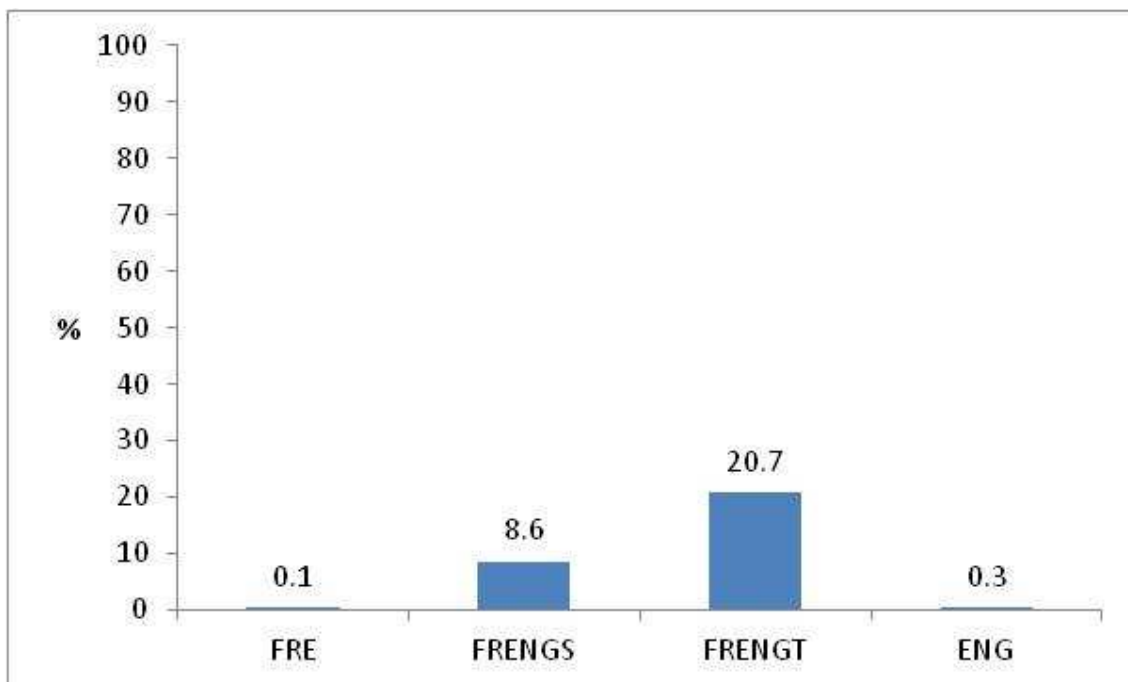


Figure 9.6. Framing devices in the French L1 English L2 groups

FRENGT were found to use significantly more framing devices than both French and English native speakers in the selected episodes ($U = 38, z = -2.099, p =$

.036 and $U = 39.5$, $z = -2.007$, $p = .045$ respectively). A statistically significant difference was also established between FRENGT and FRENGS ($U = 40$, $z = -1.977$, $p = .048$), whereas no such difference exists between FRENGS and ENG, nor between FRENGS and FRE. The abundant presence of framing expressions in the narratives of the French L1 professors is also linked to the type of simultaneity they establish. Expressions such as *meanwhile* and *in the meantime* open up an interval which allows for simultaneity between sequences of events, often including retrospective passages. They reinforce the temporal and referential continuity of the scenes, particularly when one of the protagonists has been “out of focus” (Bamberg 1994). In the production of FRENGT, this interval often contains a PERF form which establishes a relation of temporal overlap between two otherwise chronologically ordered situations, as illustrated in example (22):

- | | | |
|------|--|-------------------------|
| (22) | a. well what comes out of the hole [flapping its wings] is an owl. | FORWARD |
| | b. flapping its wings. | SIDEWAYS |
| | c. and down the little boy falls. | FORWARD |
| | d. the silly puppy in the meantime <u>has found</u> | BACKWARD/RT-MAINTENANCE |
| | e. what he wanted. | (-) |
| | f. and the bees are all chasing him. | SIDEWAYS |
- (Fr L1 Eng L2, T2)

In chapter 8, we observed that FRENGT use the PERF more often than the English native speakers in their oral *Frog* stories, fully involved in the process of charting the functional-semantic scope of this form in the target language. With this group of learners, the abundant use of framing expressions seems to be related, at least in part, to this other linguistic device in English L2.

9.2.2 The Catalan L1 English L2 groups

In section 9.1, Catalan and English L1 were found to pattern similarly with respect to the use of tense-aspect forms in the expression of simultaneity. The choice of the past as temporal anchor favoured the deployment of the perfective/imperfective aspectual contrast in the “mole” and “owl” episodes in Catalan L1.

Figure 9.7 below presents the distribution of verb forms, both finite and non-

finite, in the English L2 narratives of CATENGS and CATENGT. The distribution of verb forms in CAT and ENG has been included for comparison. The percentages were calculated out of the total number of SIDE moves produced by each group in the selected episodes and represent group means.

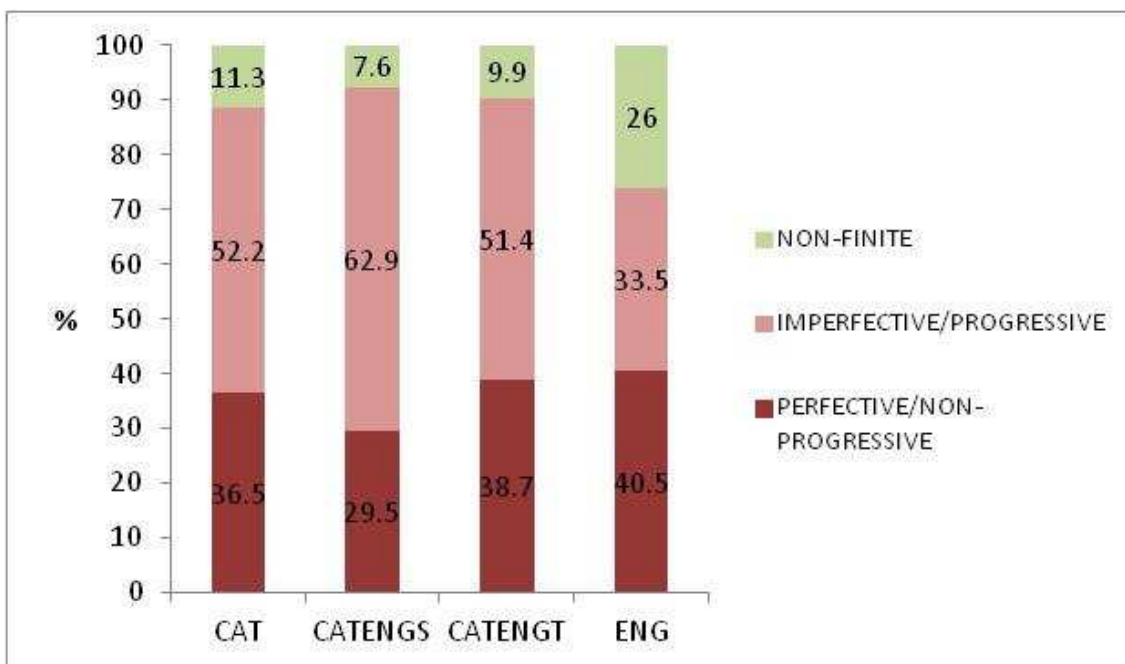


Figure 9.7. Distribution of verb forms in simultaneity contexts in English L2 (CATENGS and CATENGT)

As can be seen in Figure 9.7, the distributional patterns for tense-aspect morphology in English L2 are similar to the ones in Catalan L1 (no statistically relevant values were established between CATENGS and CAT, nor between CATENGT and CAT), indicating that there is a functional-semantic overlap between the PAST/P PROG distinction in English L2 and the *pretèrit/pretèrit imperfect* in Catalan in the expression of simultaneity, which the learner groups seem to draw on, irrespective of their proficiency level. Nevertheless, this similarity between source and target language does not ensure natively like use of aspectual marking in the English L2 production of the less advanced group. CATENGS use the PPROG form marginally more often than ENG in SIDE moves (57.6 % vs. 33.5 %, $U = 425$, $z = -1.734$, $p = .083$), generally in the context of the temporal subordinating conjunction *while* (example (23)):

- (23) a. and **while** looking inside the beehive. SIDEWAYS (with respect to 23b)
 b. the bees started chasing the dog. FORWARD
 c. and **while** <the> [/] # the little child was looking inside the tree. SIDEWAYS
 d. uh an owl started uh # chasing him. FORWARD
 (Cat L1 Eng L2, S10)

In spite of the apparently different percentage rates, no statistically significant difference was established between CATENGT and ENG with respect to the use of the progressive form in the expression of simultaneity. However, while SIDE moves are clearly dominated by the PPROG in the narratives of CATENGT, the Catalan L1 professors also use the non-progressive PAST to express simultaneity, occasionally in combination with durative telic predicates (example (24)). This combination is not encountered in the expression of simultaneity by CATENGS, who consistently encode accomplishments by means of the PPROG in SIDE moves (see chapter 8). Note, nevertheless, that the difference between the two Catalan L1 groups regarding the rates of progressive/non-progressive forms in the selected episodes is not statistically significant, which seems to indicate that the groups do not belong to two different learning stages, but rather to the lower and upper end of the same stage:

- (24) a. but **at the same time** the little boy kept looking for the frog. THEME REINSTITIATION
 b. he climbed up onto a tree. SIDEWAYS
 c. and shouted.+"/ SIDEWAYS-FORWARD
 d. +" <frog frog> [!] < are you here > [?]
 (Cat L1 Eng L2, T11)

In section 9.1, the use of phasal periphrases (*i.e.*, inceptive and continuative periphrases) was identified as an area of dissimilarity between Catalan and English L1 when encoding the relation of simultaneity. The Catalan learners of English in our study remain attached to this device in English L2, as can be seen in Figure 9.8 below (group means). Data from Catalan and English L1 have been included for comparison.

No statistically significant differences were established between CATENGS and CAT, nor between CATENGT and CAT, with respect to the use of phasal periphrases in the “mole” and “owl” episodes. With respect to ENG, the difference was found to be robustly relevant in the case of CATENGT ($U = 37.5$, $z = -2.018$, $p = .044$) and only

marginally so in the case of CATENGS ($U = 47.5$, $z = -1.443$, $p = .149$), due to higher intra-group variation among the latter. The two learner groups were found to behave similarly.

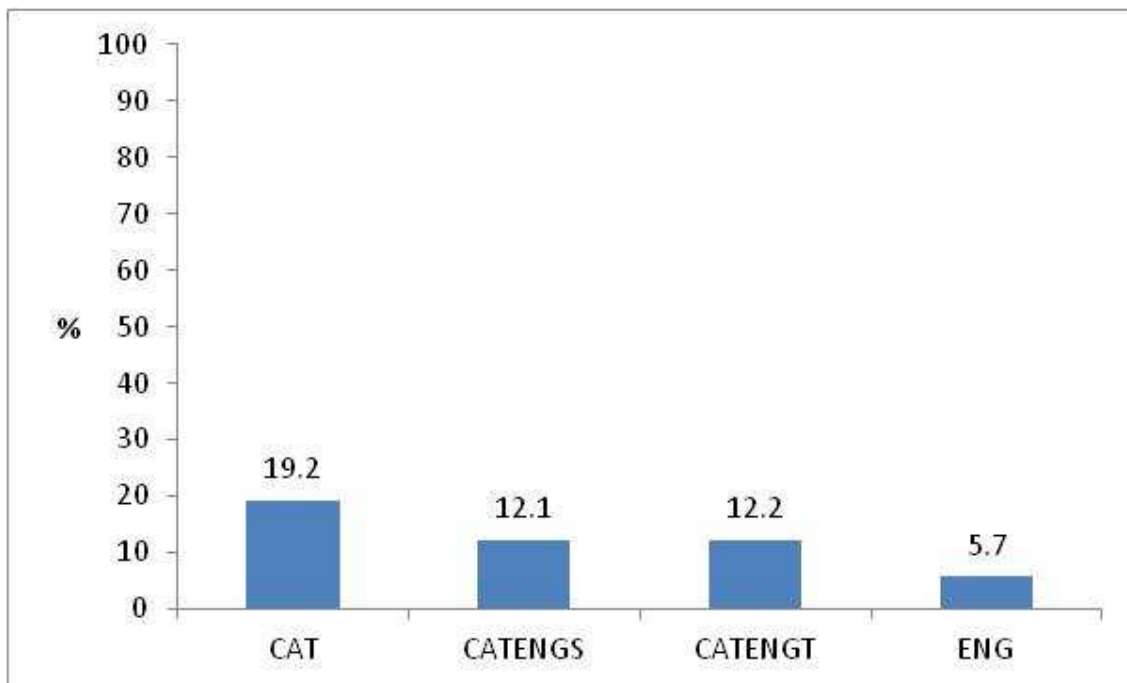


Figure 9.8. Distribution of phasal periphrases in English L2 (CATENGS and CATENGT)

The use of phasal periphrases in the narratives of CATENGS is often felt as an avoidance strategy, an “easy way out” for the learner in the challenging task of choosing a verb form in agreement with the intrinsic characteristics of the predicate and its function in discourse, as illustrated in examples (25) and (26) below. Note also that, when progression takes place across the left boundary as is the case with the inceptive periphrases in (26 b) and (26 c), the cohesive links between the plot-advancing elements in the story are weakened because of the lack of explicit right boundaries to trigger the shift of RT. Other, local inferences need to be made to establish the relation of temporal progression (for instance, the fact that at least some of the bees need to be out of the hive to threaten the dog):

- (25) a. and the boy um started looking into holes in the forest. FORWARD
 b. and the dog started playing with the beehive. SIDEWAYS
 (Cat L1 Eng L2, S8)

- (26) a. and then a problem starts to grow. (-)
- b. because from the <beehout [*]> [//] <beehive> [//] <Jesus> [!] from the beehive the bees start to come out. FORWARD
- c. and start to # threaten the dog <ok> [?]. FORWARD
- d. <whereas> [/] **whereas** Mike um keeps looking for the frog. SIDEWAYS
- (Cat L1 Eng L2, S11)

Similar to what was observed with the French learners of English in section 9.2.1, the use of non-finite verb forms in the expression of simultaneity is an area of dissimilarity between the Catalan learners and the English native speakers. Figure 9.7 above shows the proportion of non-finite clauses in SIDE moves observed in the selected episodes by CATENGS and CATENGT (group means).

No statistically relevant differences were established between the two learner groups and CAT with respect to the use of non-finite forms. The comparison with ENG, on the other hand, established a robust difference between the English native speakers and CATENGS (7.6% vs. 26%, $U = 41.5$, $z = -2.027$, $p = .043$) and a marginally significant difference between CATENGT and ENG (9.9% vs. 26%, $U = 47.5$, $z = -1.512$, $p = .130$). While no statistically relevant difference was established between CATENGS and CATENGT, the use of non-finite clauses is extremely scarce in the former, *i.e.*, only two of the twelve Catalan students produce this construction, and mainly associated with the perception verb *see*, as illustrated in example (27):

- (27) a. well twelve a and b **you can see** the dog being followed by all the bees. FORWARD
- b. and how the little kid is also surprised by an owl. SIDEWAYS
- c. and pulling out of the tree. SIDEWAYS
- d. which is jumping. SIDEWAYS
- (Cat L1 Eng L2, S12)

Non-finite clauses often encode manner of motion information in the “mole” and “owl” episodes in CATENGT, reflecting a pattern typically encountered in verb-framed languages like Spanish and Catalan L1 (Slobin 2004). English native speakers generally encode manner of motion information in the verb rather than as an adjunct, a feature shared by satellite-framed languages like German. A qualitative difference seems to exist between the two Catalan L1 English L2 learner groups - non-finite forms cover a

wider variety of syntactic functions in CATENGT than in CATENGS. The constructions in (28 c) and (28 d) are highly synthetic and denote a more proficient L2 command than in the case of (27 a) and (27 c). A similar widening of the functional scope of *Ving* clauses was observed by Berman and Slobin (1994: 140) in English L1, where younger children (preschoolers) used non-finite forms generally as complements of presentative structures with *there's* and verbs of perception, and only older children and adults used *Ving* clauses to encode simultaneity between events. Nevertheless, non-finite forms are also an indication of the persistence of the L1 “lens” in the expression of simultaneity in CATENGT. As already pointed out by Slobin (1996: 89), L1 conceptualisation patterns underlying the expression of motion events are “(...) exceptionally resistant to restructuring in adult second language acquisition”. The thorough analysis of the expression of motion events is, nevertheless, beyond the scope of the discussion here:

- | | | |
|------|---|------------|
| (28) | a. but what a surprise he got. | BACKGROUND |
| | b. instead of the frog an owl came. | FORWARD |
| | c. <u>flying out</u> of the hole from the tree. | SIDEWAYS |
| | d. <u>saying +</u> ". | SIDEWAYS |
| | e. +” what are you doing here. | |
| | (Cat L1 Eng L2, T11) | |

Turning now to the use of framing devices in English L2, strongly preferred in Catalan L1 and very marginally used in English L1, the Catalan learners of English in our study appear to remain under the influence of the patterns identified in their mother tongue. Figure 9.9 below presents the proportion of framing expressions used to encode SIDE moves in the “mole” and “owl” episodes in English L2 (mean percentages calculated out of the total SIDE moves in the scenes).

No statistically significant difference was established between any of the learner groups and CAT regarding the use of frame adverbials in the expression of simultaneity. With respect to the target language, the Catalan professors were found to use such adverbials to a greater extent than ENG ($U = 44.5$, $z = -1.775$, $p = .076$), whereas the less advanced group perform in a nativelike way. No statistically significant difference was found between the two learner groups, indicating that CATENGS and CATENGT cannot be said to belong to separate learning stages with respect to the use of framing

devices.

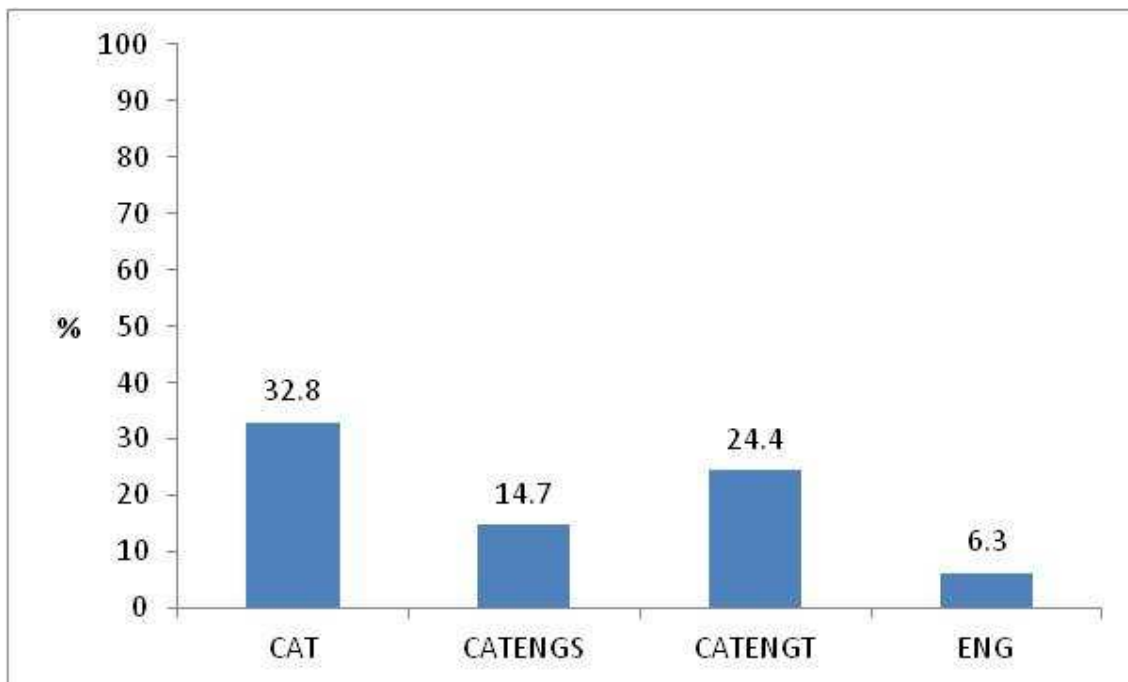


Figure 9.9. Framing devices in Catalan L1 English L2 (CATENGS and CATENGT)

The difference between the groups is, once again, more qualitative than quantitative. Similar to what was observed with the French L1 learners, the Catalan L1 professors establish more complex temporal relations than the Catalan L1 students. The Catalan L1 students opt for more local, binomial links between two simultaneous events by means of the subordinating conjunctions *while* and *when* (example (29)). The Catalan L1 professors, on the other hand, have a more encompassing perspective on adjacent scenes, integrating series of temporally ordered events in one interval (example (30)):

- | | | |
|------|--|----------|
| (29) | a. a gopher appeared. | FORWARD |
| | b. while the dog was playing with the bees. | SIDEWAYS |
| | c. and ### <the> [/] the bees and its house fell down of the tree. | FORWARD |
| | d. while the boy was looking for the frog inside another tree. | SIDEWAYS |
| | (Cat L1 Eng L2, S2) | |
| (30) | a. and the dog became very interested about the bees. | FORWARD |
| | b. and he started chasing them. | FORWARD |
| | c. the boy in the meantime saw a hole <on the floor> [/] on the ground. | SIDEWAYS |

- d. and he thought. SIDEWAYS-FORWARD
 - e. that maybe his frog would be in there. (-)
 - f. so he put his nose next to the hole. SIDEWAYS-FORWARD
- (Cat L1 Eng L2, T12)

Table 9.2 summarises the main findings with respect to the expression of simultaneity in English L2 by the four groups of advanced French L1 and Catalan L1 learners in our study. The patterns identified in the L2 production are compared and contrasted with those found both in the target language and the learners' mother tongues.

Tense-aspect forms	Imperfective/progressive forms: FRENGS > FRE, ENG, FRENGT FRENGT > FRE, ENG Perfective/non-progressive forms: ENG > FRENGS, FRENGT
	Imperfective/progressive forms: CATENGS > ENG CATENGS = CATENGT, CAT CATENGT = ENG, CAT
Phasal periphrases	CATENGS > ENG CATENGS = CATENGT, CAT CATENGT = ENG
Non-finite forms	FRENGS = FRE FRENGS < ENG FRENGT > FRENGS, FRE FRENGT = ENG
	CATENGS < ENG CATENGS = CATENGT, CAT CATENGT < ENG
Finite subordinate clauses	relative clauses: FRE > FRENGS, FRENGT temporal clauses: FRENGS > FRENGT FRENGS = ENG FRENGT = ENG
Framing devices	FRENGS = ENG, FRE FRENGT > FRENGS, ENG, FRE
	CATENGS = CATENGT, ENG, FRE CATENGT > ENG CATENGT = CAT

Table 9.2. Overview of the differences and similarities regarding the expression of simultaneity in English L2 and English, Catalan and French L1s

9.3 Conclusion

In this chapter we have tried to show how tense-aspect morphology interacts with other linguistic devices in the expression of simultaneity in English L1 and English L2 and to what extent the way events are rendered in L2 is influenced by certain patterns preferred in the learners' mother tongue. These patterns represent a constellation of morphological forms, lexical items and syntactic constructions which are readily accessible to native speakers in online tasks such as the *Frog* story and which underlie the so-called "rhetorical style" (Slobin 2004: 220) of any given language. With respect to the expression of temporal relations in narrative discourse, the rhetorical choices of English, Catalan and French differ in subtle ways that have not been fully grasped by the advanced learners in our study.

One of the main findings of the present chapter is the fact that aspectual marking has a different weight in the construction of the temporal perspective in simultaneity scenes in English, Catalan and French L1. What constitutes a common feature proves to be deployed differently in the three languages in the *Frog* story. The imperfective viewpoint, encoded by means of the *passat imperfect* or the past progressive periphrases *estar+gerund* and *anar+gerund*, is strongly associated with the expression of simultaneity in Catalan past-based narratives, whereas such viewpoint is not encoded in French present-based narratives. Unlike English and (to a lesser extent) Catalan, French does not grammaticalise viewpoint aspect in the present and relies almost exclusively on the neutral *présent*. The relation of simultaneity is established on the basis of the telic/atelic quality of the predicates and other contextual elements such as temporal subordinates and adverbials. In present-based English L1 narratives, SIDE material is generally presented imperfectively by means of the progressive form, but speakers also choose not to encode viewpoint information and use instead the non-progressive PRES. When this is the case, the relation of simultaneity is inferred from other contextual devices and the semantic properties of the predicate. In terms of the use of aspectual marking in SIDE moves, the distance is, nevertheless, smaller between English and Catalan than between English and French.

The three languages also differ in the selection of linguistic devices which interact with the tense-aspect forms and viewpoint information in the expression of

simultaneity. In Catalan L1, speakers encode more phasal information than the English native speakers and also rely on frame adverbials to a greater extent than in English L1. In French L1, speakers encode simultaneous material by means of relative clauses. This condensation strategy is not very common in English, which prefers temporal subordination and, especially, non-finite clauses in SIDE moves. Note, nevertheless, that the differences observed are not attributable to the lack of certain linguistic devices in any of the three languages but, rather, to a different choice in the use of these devices in online tasks such as the *Frog* story.

In English L2, viewpoint information plays a central role in the expression of simultaneity in the narratives of the less proficient learners, irrespective of their source language. The progressive form, whether the PROG or the PPROG, is the dominant choice for SIDE moves with FRENGS and CATENGs. Interestingly, the propensity to encode viewpoint information is bigger with FRENGs, who produce present-based narratives. This may be due, in part, to a tendency to remain attached to a deictic perspective in their narratives, signalled not only by means of the progressive form but also by the verb *see*, existential constructions with *there is/are* and other locative expressions indicating the position of the protagonists in the pictures with respect to the *locus* of the narrator. It may also be the case that the less proficient learners, both CATENGs and FRENGs, make a one-to-one pairing of the imperfective viewpoint and, hence, of an unbounded reading with the progressive form in English L2, whereas the unbounded quality of a predicate is not conditioned by the use of the progressive form in English L1. Regarding the expression of simultaneity, the function of the progressive is considered only locally, namely to present an event or situation as ongoing, but not globally, with respect to the discourse type in which it is inserted, *i.e.*, picture book narrative.

The initial advantage that French and Catalan speakers may have with respect to the learning of the progressive/non-progressive distinction in English does not ensure a nativelike discourse use of aspectual marking in English L2. This seems to indicate that “transfer to somewhere” at the level of tense-aspect morphology can also mislead from the preferred rhetorical choices in the target language. In our study, it is only the more proficient groups, FRENGT and CATENGT, who provide less viewpoint information in the expression of simultaneity and rely instead on other semantic and syntactic devices

to encode SIDE moves.

In very proficient L2 narratives, similar to what was observed in English native speaker production, the focus seems to widen from providing viewpoint information to condensing a maximum amount of event information with respect to the selected scenes. With FRENGT, and more marginally with CATENGT, tense-aspect forms compete with non-finite verb forms in the expression of simultaneity, conferring a synthetic quality to the scenes. This synthetic quality is not consolidated with CATENGS and FRENKS, who rely on more conventional devices, namely temporal subordination with *while* and *when*. Interestingly, in L2 narratives non-finite forms are often used in patterns which recall the temporal perspective preferred in the learners' mother tongue, meaning that even a very proficient use of target language structures can remain under the influence of the conceptualisation patterns in the learners' L1. In the case of FRENGT, participle clauses function as verb complements in structures with *see* or as reduced relative clauses in the context of the locative construction *there is +determiner + noun*, indicating the existence of a visual *locus* which structures the scene. In the case of CATENGT, participle clauses occasionally encode manner of motion information in a way typical of verb-framed languages like Catalan.

The presence of an L1 "lens" is also indicated by the abundant phasal information provided by the Catalan L1 learners in their English L2 narratives. Often employed as an avoidance device among CATENGS, inceptive and continuative periphrases consolidate as a rhetorical device with CATENGT. Such periphrases, particularly the continuative ones, are only marginally used in the expression of simultaneity by ENG, who prefer lexical devices such as the adverb *still*.

The most proficient learners in our study also differ from the less advanced ones in that they establish more complex simultaneity relations in the selected episodes. CATENGT and FRENGT use more frame adverbials than CATENGS and FRENKS respectively, which allows them to encode simultaneity between whole series of events and even between two otherwise chronologically ordered events. The use of frame adverbials as a cohesive device denotes a more encompassing temporal perspective on the scenes and a more complex construction of the temporal reference in the target language. In case of the French L1 learners, it seems to be related to the use of the perfect for the expression of simultaneity in discourse. In the case of the Catalan L1

learners, it seems to be related more to the availability of a morphophonetically similar device in the learners' L1, namely the adverb *mentre*. This, nevertheless, does not match the rhetorical choice in English L1 narratives, where such adverbials are almost absent. According to Aksu-Koç and von Stutterheim (1994), this could be a consequence of the fact that native speakers marginally rely on the perfect to encode material in simultaneity scenes.¹¹

It seems, therefore, that while the linguistic devices of the target language are familiar to the advanced learners in our corpus, the less proficient groups have not yet fully grasped the optionality of viewpoint morphology in the expression of simultaneity in English L1 narratives. The decreasing weight of the progressive form is accompanied by a growing complexity in event condensation and cohesion strategies with the most proficient groups. This hides, nevertheless, subtle dissimilarities with the native speaker rhetorical style, dissimilarities which are often attributable to preferred choices in the learners' mother tongue.

¹¹ In this study, perfect forms encode BACK moves and were analysed in chapter 8, where FRENCH were found to produce significantly higher rates of perfect forms than ENG in BACK moves. See section 8.2.4.2.2.

Chapter 10: Conclusions

The present study constitutes an integrated analysis of some of the semantic and discourse factors underlying the use of tense-aspect morphology in oral English L2 narratives produced by advanced French and Catalan EFLs. In the analysis carried out in the previous chapters we have attempted to determine to what extent the inherent semantic properties of a predicate (the Aspect Hypothesis), the type of temporal relations a predicate encodes in narrative discourse (the Discourse Hypothesis) and the learners' L1 shape the systematic patterns of use of verb morphology in oral English L2 narratives. We have also tried to probe into the way tense-aspect marking interacts with other linguistic devices in the expression of simultaneity, giving rise to what Slobin (2004: 20) referred to as the L2 rhetorical style.

Tense-aspect marking by advanced French and Catalan EFLs has been discussed from three different perspectives: (1) developmental - by contrasting the distribution of verb morphology in the productions of different types of advanced learners, namely students and university professors from several English departments in France and Catalonia; (2) endstate - by scrutinizing to what extent the distributional patterns found in English L2 match or differ from those in English native speaker production; and (3) cross-linguistic - by looking for possible L1 influences in the choice of tense-aspect forms in English L2.

Our dissertation has specifically addressed the Aspect and Discourse Hypotheses in a complex production task based on the *Frog, where are you?* picture book (Mayer 1969). The choice of the *Frog* story was motivated by the possibility to account for the situations depicted in it adopting a holistic or commentary-like perspective on the scenes, or in a more descriptive way, dealing with the picture book as a collection of ongoing scenes at successive reference points. Both choices were believed to favour certain non-prototypical aspectual class/verb form and verb form/narrative move coalitions. Moreover, we considered the *Frog* story to be particularly interesting for the study of simultaneity in that its two protagonists, a boy and a dog, are involved in a common plot which branches out in certain scenes where the protagonists go through parallel series of events. This was expected to lead to complex event constellations and

multiple patterns of temporal overlap and framing.

Until recently, the advanced English L2 variety had only marginally been analysed from the perspective of the Aspect and Discourse Hypotheses, mainly because it was assumed that, at this stage, the distribution of tense-aspect morphology would be flexible with respect to the coalitions predicted by the two hypotheses in the early stages of L2 learning. Nevertheless, the studies which specifically dealt with the advanced EFLLs (Ayoun and Salaberry 2008) observed that certain prototypical coalitions predicted by the Aspect Hypothesis, namely the coalition between the progressive form and activity predicates, seemed to strengthen with increasing proficiency. Moreover, form-function relations in advanced L2 tense-aspect morphology were also found to respond to an underlying rhetorical style shaped in subtle ways by the grammaticalisation patterns existing in the learners' L1 (Carroll and Lambert 2003, 2006; von Stutterheim and Lambert 2005). This style consists of systematic linguistic choices made by L2 learners in a given task, drawing on their learnt repertoire of L2 linguistic devices and also on the way in which information is encoded and organised in their mother tongue.

It also seemed to us that it was necessary to carry out a specific analysis of the advanced English L2 variety in instructional settings. Input in instructional settings differs significantly from input in second language settings, as the ones in which the majority of the studies on the Aspect and Discourse Hypotheses in the literature were conducted. Instruction was believed to have an impact on the persistence of certain coalitions in the use of tense-aspect morphology and, hence, to alter the predictions of the two hypotheses for the EFLLs.

Apart from the findings regarding the use of tense-aspect morphology in the advanced English L2 variety, which will be outlined in section 10.1, one of the main contributions of the present dissertation is the overview of the different criteria available for the interpretation of temporal relations in narrative discourse and the fine-tuning of an analytical framework for temporality in narratives on the basis of Nakhimovsky (1988) and Curell (2002). In this analytical framework, a narrative is understood as an articulated system of moves, where a move represents the way in which the reference time (RT) is established from one clause to another. As discussed in chapter 5, the concept of narrative move enables the researcher to perform an integrated analysis of

temporality in the *Frog* story and account for special temporal scenarios such as progression in parallel plots or retrospective passages.

In our dissertation we have tried to establish a hierarchy among the different criteria put forward in the literature regarding the interpretation of temporal relations in narratives, highlighting, for instance, the precedence of RT-shift adverbials like *then* or *now* on the presence of unbounding devices like the progressive marker in plot-advancing contexts. The narrative moves were established on the basis of pragmatic, semantic and syntactic criteria, trying to rely only minimally on the actual verb forms. This was done to minimise the circularity inherent in determining the role played by tense-aspect morphology in encoding temporal relations in narrative discourse if the same verb form has been used as a criterion for establishing the nature of these relations.

In what follows we would like to summarise and put into perspective the main findings of the dissertation in relation to the three research questions stated in the Introduction section. This will be done in section 10.1. We will then refer to some of the shortcomings of our study in section 10.2 and, finally, outline several paths for future research that our analysis opens in section 10.3.

10.1 Answers to the research questions

1. *To what degree do semantic prototypes, i.e., the inherent semantic properties of predicates, condition the use of tense-aspect morphology in oral narratives by advanced EFLs (the Aspect Hypothesis)?*

The analysis of the use of the PRES, PROG, PAST and PPROG in Vendler's four aspectual classes (states, activities, accomplishments and achievements) has revealed that the non-progressive forms PRES and PAST strongly coalesce with states and [+ telic] predicates both in English L1 and English L2. Unlike Andersen (1989, 1991) and Bardovi-Harlig (2000), the [+ punctual] feature was not found to influence the distribution of the PRES and the PAST with telic predicates – no separate patterns were identified for the non-progressive forms in accomplishments and achievements in our corpus, neither in English L1 nor in English L2.

The distribution of the PROG and the PPROG is strongly skewed towards durative atelic predicates (activities) both in English L1 and English L2. Nevertheless, the English native speakers in our study and the most proficient groups (FRENGT and CATENGT) seem to be more flexible than the less proficient groups (FRENGS and CATENGS) with respect to the use of tense-aspect morphology within this category of predicates. One of the most interesting findings in our analysis is the fact that the English L1 speakers and the French L1 professors use the PRES form with activity predicates significantly more often than the French L1 students. A similar trend was observed with respect to the Catalan L1 groups for the PAST with activities, though statistical values in this case were only marginally relevant.

The existence of the atypical coalition PRES or PAST/activities seems to indicate that, similar to what was observed in English L1, the non-progressive form in advanced English L2 eventually becomes “desensitised” to the inherent semantic properties of the predicate and is used across all the aspectual classes, though to a lesser extent in activities due to competition from the PROG or the PPROG. This is unlikely to happen with the progressive forms (both the PROG and the PPROG) given the combinatorial restrictions imposed by certain predicate types, namely states, on the coalition with the progressive marking.

Interestingly, the PROG and the PPROG were found to marginally pattern with achievements both in English L1 and English L2. This non-prototypical coalition is the proof that the advanced learners in our study make a grammaticalised use of tense-aspect morphology. It is also an indication that, in line with what was observed by Muñoz and Gilabert (2011) with respect to the PROG/accomplishments pairing, a certain task effect exists in the use of the progressive with achievements in picture narratives. As already mentioned, such coalition is licensed by the possibility to refer to the situations in the picture book as ongoing scenes. When used with punctual telic predicates, the PROG has a slow motion effect or an iterative reading.

Even though the task effect on the coalitions predicted by the Aspect Hypothesis was only indirectly dealt with in this dissertation, we believe that such coalitions, particularly those involving the progressive form, might also be influenced by the task type. Muñoz and Gilabert (2011) found that the production of progressive accomplishments outnumbered the production of progressive activities at the earliest

stages in their picture book narratives, which seems to indicate that, in certain task types, the spread of the progressive might follow slightly different patterns from those proposed so far in the literature on the basis of film retellings and personal narratives.

Different types of directionality were established in the coalition between the progressive forms and activities in English L1 and English L2. In English L1, the coalition is form-driven, in the sense that the PROG typically encodes activities but activities as a class are not dominated by the progressive form. In English L2, directionality in the PROG/activities coalition distinguishes between FRENGS and FRENGT – predicate-driven in the case of FRENGS, who predominantly encode the class of activity predicates in the progressive form, and form-driven in the case of FRENGT. With respect to the Catalan L1 English L2 groups, both CATENGs and CATENGT make a form-driven use of the progressive in activities (though the values are balanced with CATENGT).

It seems, therefore, that when the degree of grammaticalisation of the progressive is very different in source and target languages, as is the case with French and English, the coalition between activities and the progressive form (the PROG and the PPROG) remains strong until very proficient stages of English L2 learning, when the distribution of morphology in this aspectual class eventually becomes more flexible and activities as a class are dominated by the non-progressive form (the PRES and the PAST). When the degree of grammaticalisation of the progressive aspect is similar in source and target languages, as is the case with Catalan and English, the relaxation of the coalition between the progressive form, particularly the PPROG, and activities occurs more quickly in English L2 than when source and target languages grammaticalise the progressive to very different degrees. As such, our findings provide further support to Housen's (2002) claim that the absence of certain grammaticalised distinctions in L1 appears to increase learners' reliance on invariant semantic prototypes to reconstruct the form-meaning relations encoded by the tense-aspect morphology in L2.

2. How do advanced EFLLs use tense-aspect forms to encode temporal relations in L2 narrative discourse (the Discourse Hypothesis)?

One of the main findings of the present dissertation regarding the expression of temporal relations in L2 narrative discourse has to do with the fact that the overall number of narrative moves is not a language-specific feature – the English, French and Catalan L1 speakers in our study produce similar narratives in terms of the overall number of moves, but it distinguishes between the groups of advanced learners in our study. The most proficient groups (FRENGT and CATENGT) were found to produce significantly more narrative moves than the less proficient groups (FRENGS and CATENGS). Nevertheless, the total amount of narrative moves is not a reliable criterion for establishing the nativelike quality of advanced learner production. The richness of moves in a given narrative also depends, particularly with advanced learners and native speakers, on non-linguistic factors, such as the speaker's willingness to carry out the task.

The fact that the total number of narrative moves was not found to be a language-specific feature contrasts with Noyau *et al.*'s (2005) claim that narrative granularity is language specific. We need to point out that the total number of narrative moves in our study is not equivalent to Noyau *et al.*'s concept of narrative granularity. In our case, the total number of moves does not include several types of material in the *Frog* story, for instance negative clauses or direct and indirect speech, whereas narrative granularity represents the degree of partitioning of the narrative into episodes, utterances, and clauses, without discarding any of the material produced by a given speaker. The choice not to include certain types of material from our *Frog* stories was motivated by the fact that background material, direct and indirect speech, deontic and epistemic modality and negative clauses do not contribute to the timeline of the story as such but introduce other temporal dimensions, which should make the object of a separate study.

What seems to be language specific is the type of temporal information encoded in the narrative. The French and Catalan L1 narratives in our corpus were observed to be more linear than those produced by the English native speakers, who give a more lateral account of the scenes in the picture book, including also numerous SIDE moves. We argue that this has to do both with the availability of certain linguistic devices in the three languages and with the choice of the temporal anchor in the narratives. French does not grammaticalise aspect in the present and relies on the *présent* as a default form

for both FWD and SIDE moves. According to Noyau *et al.* (2005), absence of aspectual contrast gives rise to linear narratives, based on sequential relations between events/situations at the expense of simultaneous material. In the case of the Catalan L1 narratives, which are anchored in the past and exploit the *perfet/imperfet* contrast, the disconnection from the moment of speech seems to prompt speakers to focus on plot-advancing material and give a more moderate “lateral” account of the scenes.

The learner groups in our study have, generally, done away with the linearity characteristic of the French and Catalan L1 *Frog* stories (except for the CATENGS, who stay closer to the L1 mode). The amount of SIDE moves produced in L2 appears to distinguish between proficiency levels, the professor groups encoding consistently more SIDE material than the student groups.

With respect to the use of tense-aspect morphology in narrative moves, a clearly polarised distribution of the non-progressive forms in FWD moves and the progressive forms in SIDE moves was observed both in English L1 and English L2. Interestingly, the polarisation appears to be weaker with the English native speakers and the two groups of professors with respect to the non-progressive PRES and PAST forms, which are often used in SIDE contexts. This is not only a consequence of the abundant presence of states in SIDE moves but also of the fact that these speakers produce atypical coalitions such as PRES or PAST/activities and PRES or PAST/accomplishments in these contexts, often to encode simultaneity in the plot .

This tendency to use the non-progressive form as a default form was attributed to the specialisation of the progressive marking as a rhetorical device for those contexts in which the speaker wants to make explicit reference to ongoingness. This is the case when simultaneity is established with a series of events/situations or to obtain a framing effect. Picture book narratives like the *Frog* story license the use of the commentary PRES which gives the situations depicted in the scenes a more holistic and dynamic quality (PAST also has this quality, but not the commentary value of the PRES). When the non-progressive PRES and PAST are used in SIDE moves with durative (a)telic predicates, the reading of simultaneity is generally obtained on the basis of the inherent semantics of the predicate and/or other elements available in the larger context.

The analysis of the distribution of tense-aspect forms in the different narrative moves has also revealed that, as observed also by Kihlstedt (2002) in her study of

advanced Swedish learners French, the advanced learners in our study do not use tense-aspect morphology for the same range of discourse functions as the English native speakers. Several examples come to mind. Firstly, the use of the PERF to encode FWD moves in retrospective passages by FRENGT constitutes a non-nativelike extension of the functional-semantic scope of the form, which is not considered acceptable in temporally ordered sequences of events in English L1. Secondly, the use of the PROG in contexts of anaphoric linkage with *then* in the production of FRENKS and FRENGT, a combination which was not encountered in the English L1 data.

Unexpected form-functions coalitions were encountered in the English L1 data as well, for instance the use of the PPROG or the PERF as cohesive devices, the former with an explanatory value in present-based narratives and the latter in the context of an RT-shift adverbial at the onset of a scene. Such coalitions stress the importance of constantly charting the functional-semantic scope of forms on the basis of corpus data, given that the inherent “predisposition” of forms to encode certain types of information can often be extended in discourse to include new values. It is only when these discourse-specific features of the target language forms have been seized that the contrastive study of the L2 can start.

3. How does L2 tense-aspect morphology interact with other morphosyntactic devices when encoding a specific temporal relation, namely that of simultaneity, and to what extent is the expression of simultaneity in English L2 influenced by certain form-meaning pairings and information selection patterns in the learners' L1?

The analysis of the expression of simultaneity in the “mole” and the “owl” episodes has revealed that, in spite of the fact that English, Catalan and French grammaticalise aspect, they rely on it differently when encoding the relation of simultaneity. A certain hierarchy was established among the three languages with respect to the use of the imperfective/progressive forms in SIDE moves in the selected scenes: the Catalan native speakers are the ones who most rely on aspectual marking, namely the *imperfet* or the progressive periphrases *estar+gerund* and *anar+gerund*, whereas the French native speakers are the ones to least rely on such marking. French does not grammaticalise aspect in the present, the temporal anchor of most French L1

narratives in our corpus, and the lexical periphrasis *être en train de* is a marked choice. Interestingly, the English native speakers occupy a middle position in this hierarchy, making a balanced use of progressive and non-progressive forms in the selected scenes. In the absence of aspectual marking, the relation of simultaneity is established by means of temporal adverbials or conjunctions and/or inferred from the inherent semantic properties of the predicates.

It seems to us that, with the English native speakers in our corpus, the progressive in oral *Frog* stories is not so much a viewpoint device to highlight the unbounded quality of a situation, but rather a discourse device to make explicit an overlap among certain elements in the scenes. This is in line with the observations made at the level of the entire narrative, where the non-progressive PRES was observed to strengthen as a default form across FWD and SIDE narrative moves and enter into non-prototypical coalitions with activities in SIDE contexts.

Furthermore, tense-aspect forms were found to interact with a different range of linguistic devices in the expression of simultaneity in the three languages. While English native speakers appear to rely on temporal subordination and non-finite clauses, the Catalan native speakers make use of phasal periphrases and the frame adverbial *mentrestant*. Simultaneity is often encoded by means relative clauses in French L1, which have a more descriptive quality than the temporal subordinates. This seems to be linked, at least in part, to the intrinsic ambiguity of the French *présent*, which neutralizes the distinction between narrative and description, “(...) qui ne s’effectue plus alors que par le type de procès exprimé par le verbe au présent et par le contexte – de successivité ou non – dans lequel il s’insère” (“(...) which is, consequently, made only on the basis of the type of process expressed by the verb in the *présent* and the context – of sequentiality or not – in which the verb is inserted”) (Chuquet 1994: 9). In L1, tense-aspect morphology interacts with strategies of hierarchical organisation and condensation of the information contained in the selected episodes.

In English L2, the expression of simultaneity was found to be robustly tied to the use of the progressive form, both in the present and in the past, particularly among the less proficient groups (FRENGS and CATENGs). The coalition between the progressive and SIDE moves seems to weaken with the more proficient groups (FRENGT and CATENGT), though to a lesser extent with the French professors than

with the Catalan ones. We propose two explanations for this asymmetry between the French L1 and Catalan L1 learner populations in our study. Apart from the semantic grounds discussed with respect to the Aspect Hypothesis, the presence of the progressive form in the production of FRENKS and FRENKT is linked to the deictic anchorage often adopted in the selected scenes by these two groups, anchorage which was also observed in the French L1 production and might constitute a subtle L1 influence on the way information is selected and encoded in English L2. Secondly, the predominance of the progressive with these learners may also be related to the prototypicality (Kellerman 1977) of the progressive in English, as opposed to French, and the awareness our learners could be assumed to have built through extensive instruction in the foreign language. While we cannot make any firm claims about the instruction received by the EFLs in our study, nor about their perception of the functional-semantic contribution of the progressive in the target language, the abundant use of the progressive in English L2 may also be an instructional effect in a population of language specialists like the one analysed here, the result of the systematic highlighting of the progressive form as a prototypical feature of the English tense-aspect system. The use of the progressive could, then, also constitute an “Englishness” feature and an attempt to produce more nativelike discourse by learners whose L1 does not grammaticalise the progressive. Robberecht (1998) observed a similar tendency among Dutch L1 university students of English.

The analysis of the expression of simultaneity revealed two areas of dissimilarity between the students and the professors groups, namely the complexity of the simultaneity relations encoded in the scenes and the synthetic quality of the account given of the “mole” and “owl” episodes. The former was gauged by means of the presence of framing devices (*e.g., in the meantime, meanwhile*) which allow the speaker to establish complex simultaneity relations between sequences of events/situations in the same scene or in adjacent scenes, whereas the latter was determined by the amount of non-finite clauses used to encode SIDE moves in the selected scenes.

The analysis of the expression of simultaneity also revealed that the L1 “lens” is subtly present in the English L2 production of our advanced EFLs. In the case of the French L1 learners, it seems that the influence is located in the selection of the information, from a deictically anchored perspective. In the case of the Catalan L1

learners, the influence is perceived in the use of the phasal periphrases (*i.e.*, inceptive and continuative) which are not a typical device for the expression of simultaneity in the English L1 production. As such, the contrastive study of interlanguage appears to provide a valuable insight not only into the specific constellations of linguistic devices which learners use to encode meaning but also into the psycholinguistic processes which shape these observable systems. It is in this area that we now need to focus our efforts. We shall come back to this point in section 10.3.

10.2 Limitations of the study

Some of the limitations of this study have already been pointed out in the Research Methodology (chapter 6). Probably one of the biggest limitations is the small group size, which biases the outcome of the non-parametric tests used for establishing the significance of the differences observed among the groups in terms of percentages and group means. As already discussed, we opted for using these tests to reinforce the validity of the linguistic phenomena observed in our corpus, with the risk of not taking into account certain trends which did not reach statistical significance. Nevertheless, when such a trend stood out to the researcher in the process of qualitative analysis of the data, it was duly mentioned in the analysis, irrespective of whether it reached the statistical relevance threshold.

Another important limitation of our dissertation has to do with its external validity or the extent to which our findings can be generalised to the overall population of advanced French and Catalan EFLs. The data analysed in the present dissertation were not obtained under proper experimental conditions - for instance, the individuals in the groups were not randomly selected from their respective populations and were not randomly distributed in the proficiency groups. The difficulty to gain access to the individuals that participated in the study made it impossible for the researcher to comply with such strict experimental design. Consequently, it is difficult to generalise our findings beyond the very specific sets of individuals analysed here. Our analysis should be understood as a case study, a stepping stone on the way towards more thorough experimental analysis. Much bigger groups with more controlled parameters would be needed in this case.

Furthermore, the decisions made regarding what was to be the domain of our analysis meant discarding valuable parts from the wealth of material obtained by means of the *Frog* story. To speak only of the verb phrase domain, several areas were affected by our choice to zoom in on the four tense-aspect forms traditionally analysed in the literature (the PRES, PAST, PROG and PPROG): the use of modal verbs, negation and the use of tense-aspect morphology in indirect speech. These areas will make the object of further research based on the corpus collected for this dissertation, which will hopefully shed additional light on the expression of temporality in the advanced English L2 variety and also on the extent to which the narrative moves could account for the temporality encoded by these devices.

We also need to elicit more past-based narratives by French L1 EFLLs and present-based narratives from Catalan L1 EFLLs to complete the analysis presented here. Moreover, the scrutiny of the Catalan and French L1 corpora from the perspective of the Distributional Bias Hypothesis would certainly provide additional insight into the patterns observed in English L2. As with all dissertations, the present one is only the beginning of an exciting adventure.

10.3 Future research directions and final remarks

Two areas of future research stand out to us as a necessary follow-up to the present study. First of all, a lot remains to be done with regard to the use of tense-aspect morphology in the advanced English L2 variety in oral production tasks. Trying to vary the type of tasks and the L1 background of the learners would give us better insight into how L1 thinking is restructured for L2 speaking (Slobin 1996). It seems to us that tense-aspect morphology is a magnifying glass for this fascinating phenomenon. The conceptual recast that speaking in L2 involves is not synchronous with the mastery of the L2 linguistic repertoire and might, in fact, never fully set in place. Contrastive studies like the one carried out in our dissertation probe into the unconscious filtering of L2 production through the conceptual sieve of the learners' L1. The limits of the ultimate attainment in L2 learning are traced by this subtle connection between source and target languages, a connection about which we still do not know enough.

The second area of research has to do precisely with how instruction could play

a role in pushing back these observed limits in English L2. One of the main findings of our dissertation is the fact that the non-progressive forms PRES and PAST in English have a wider functional-semantic scope than the one traditionally assigned to them in contrast with the progressive forms (the PROG and the PPROG) and can coalesce with dynamic durative predicates to encode simultaneous material. The advanced learners in our study do not seem to have gained insight into this peripheral feature of the English tense-aspect system, except for the groups of professors, who could be said to be exceptional learners. This seems to indicate that certain non-prototypical features of the target language might remain beyond the grasp of the advanced EFLs, even in the case of language specialists like the populations sampled from in the present study, with prolonged access to instruction and target language input.

A question that comes to mind is whether such peripheral features like the one mentioned above should be taught or whether EFLs do not need to reach this degree of mastery of the target language. It seems to us that, particularly in the case of the populations of learners analysed here, who will go on to become language teachers in primary, secondary and tertiary education, this insight into the target language is necessary, be it only to avoid meta-linguistic simplifications of the type “the simple past encodes a short action in the past; the past progressive encodes a long action in the past”. Are the situations in *She smoked a cigarette while she waited for the train* short just because they are in the simple past? Such dichotomies have long-lasting effects on the structuring of L2 linguistic systems and should be handled with care. While not all EFLs may need to reach this stage of refinement in their mastery of the L2, we think that those EFLs who set out to become models of L2 proficiency in foreign language settings, where access to authentic input is limited, should be aware of such linguistic refinements.

Recent research into the effects of instruction on language learning has pointed at the necessity to deal with peripheral and non-prototypical L2 features through instruction (Housen *et al.* 2005). If so, the question is which kind of instruction would be more efficient in foreign language contexts to get learners to grasp the functional-semantic scope of the non-progressive forms in English? We believe that the kind of form-function mappings uncovered in the present study need a contextualized treatment, in the sense that forms need to be presented to learners in their context of

communication where the traditional dichotomy between the progressive and the non-progressive is reset. Whether this should be done explicitly, for instance by means of input processing instruction (VanPatten and Cadierno 1993), metalinguistic explanations and consciousness-raising tasks (Fotos 2002), or implicitly, by means of exposure to authentic L2 discourse containing examples of the target structure in context, remains to be answered by means of highly controlled experimental studies.

The advanced EFLLs are, ultimately, a fast track to L2 implicit knowledge, accessed spontaneously in complex production tasks like the *Frog* story. This knowledge underpins effective communication in the target language and, as such, is probably the truest measure of our instructional efforts. The advanced learner is a reliable usher to this invisible realm.

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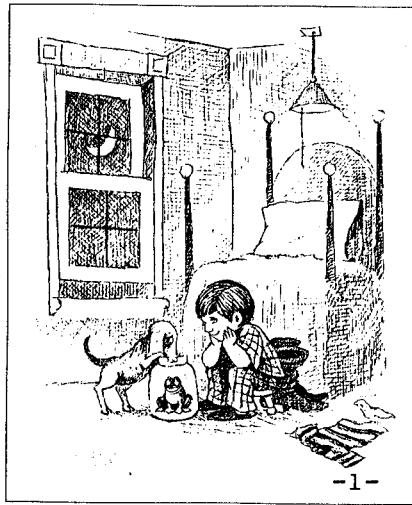
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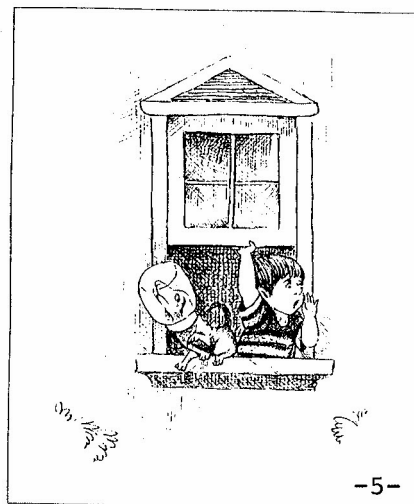
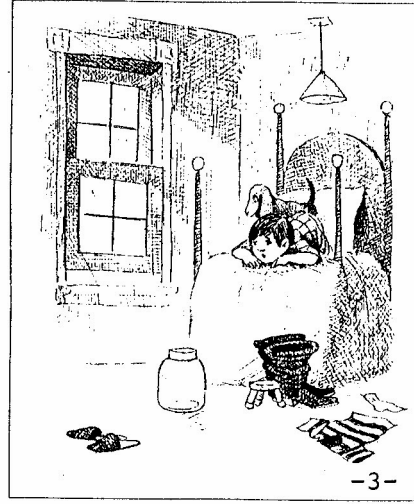
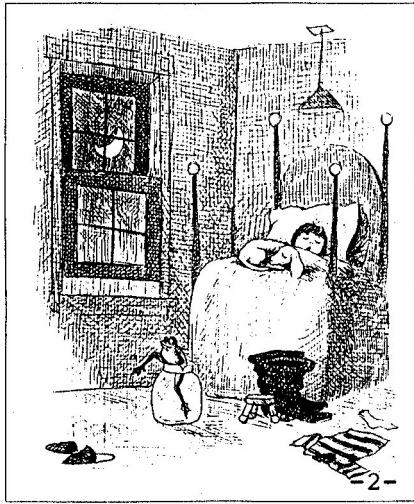
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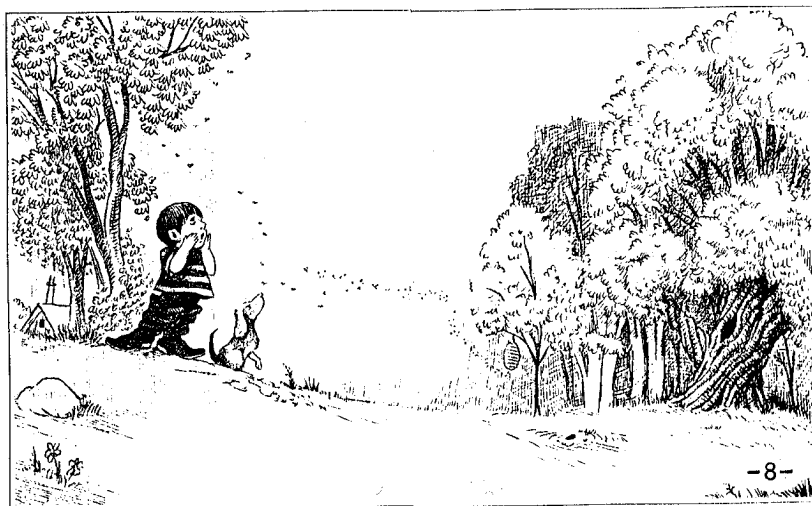
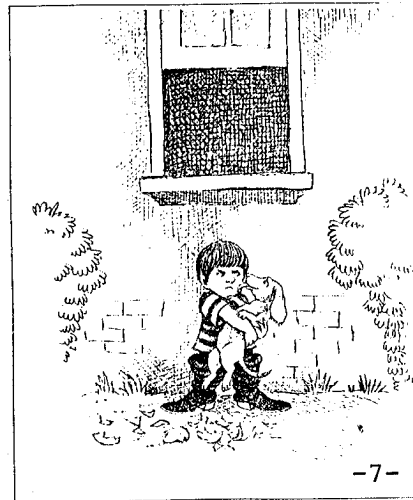
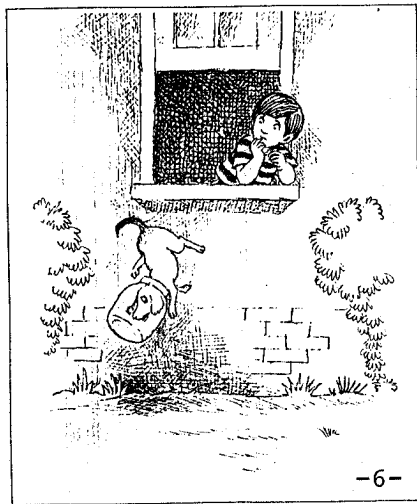
Appendices

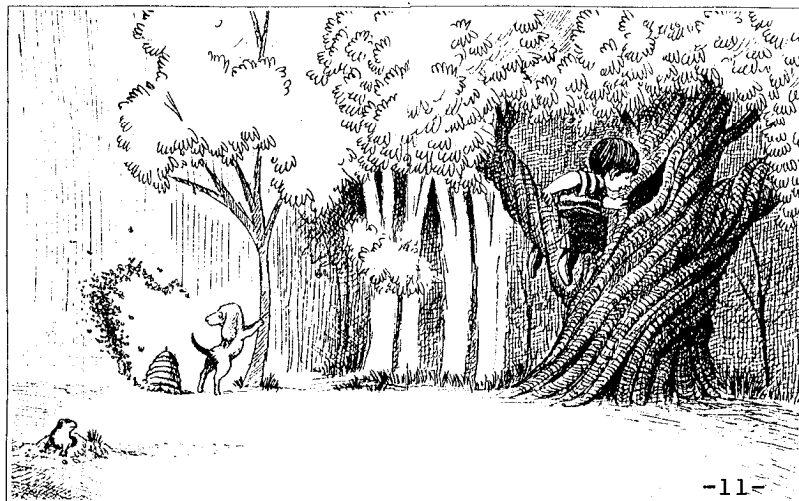
Appendix 1: Picture Book

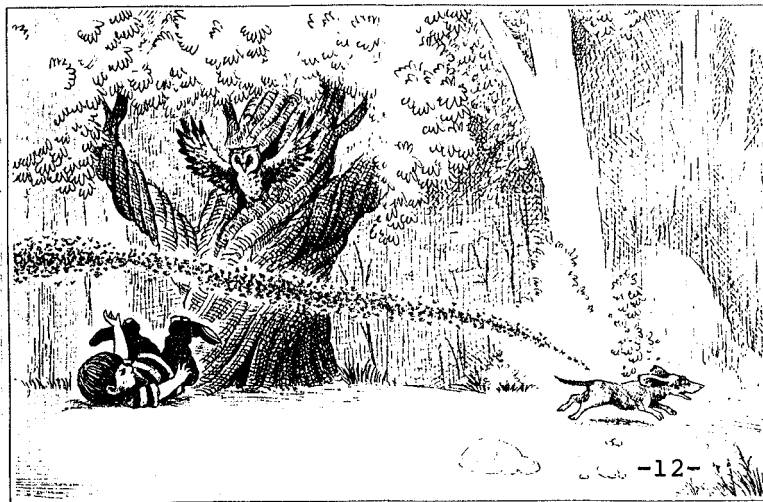
+*Frog, Where Are You?* (Mayer, 1969)

















Appendix 2 : Transcription Conventions¹

Constant Headers

@Begin

@Languages : en / cat / fr

@Participants : 1. speaker ID / 2. speaker NAME / 3. speaker ROLE

@ID: language/ corpus/ code/ age/ sex/group/role/education

@End

@Birth of (speaker ID):

@Coder:

The main line

*speaker ID: TAB clause.

All clauses are marked by a full stop to make them readable by the CLAN software.

Default punctuation set

. ? !

Words

xxx unintelligible speech

@s words different from the main language of the narrative
e.g. ID: <i> [!] havien tingut pues@s granotetes o # uh #.

@o onomatopoeia
e.g. ID: and sure enough they heard some uek@o uek@o uek@o.

Clauses

www used to indicate displaced pre-posed clauses which were coded on the following line.

e.g. ID: one night www the frog actually decided <to> [/] to get away.
ID: as the boy and the dog were sleeping in the bed.

Pauses

#, ##, ### unfilled pause; longer pauses between words can be represented

¹ These conventions are different from the ones used in the English L1 corpus which was provided by Prof. Dan I. Slobin. We have not altered this corpus in its formal features. The segmentation into clauses followed the same criteria.

as ## and a very long pause as ###

Special Utterance Delimiters

- "+"/. " direct speech on the next line
- "+" " precedes direct speech on the same line
- "+"..." unfinished utterance

Scoped Symbols

- [!] stressing a word or a whole string of words with angle brackets
e.g. ID: and well he falls <onto a river> [/] <in> [!] a river.
- [/] retracing without correction
e.g. ID: <he asks> he asks is friend the dog.
- [//] retracing with correction
e.g. ID: uh and he holds <the boots> [//] the boot upside down.
- [///] retracing with reformulation
e.g. now <the dog> [///] in fact I forgot to say that on the previous picture the dog was leaning onto the trunk of the tree.

Other Symbols

- [+ bch] a way of marking utterances that are not really a part of the main interaction , but are in some way "back channel"
e.g. ID: but there was one little frog.ID: that was a bit lost. ID: but anyway it happens in every family [+ bch]

Appendix 3: Sample Transcriptions

English L1

20g	01-001	it ' s late at night
20g	01-002	and a boy has a frog in a jar in his bedroom
20g	01-003	and his dog ' s curious too -
20g	01-004	he ' s looking into the jar .
20g	02a005	((but in the middle of the night)) when he goes to sleep / ...
20g	02a006	uh - when he sleeps with the dog on his bed
%mor:		V sleep:PRES:ACT:SIDE:SUBORD.
20g	02a007	< but in the middle of the night > the frog escapes from the jar.
%mor:		V escape:PRES:ACH:FORWARD.
20g	02b008	early the next morning { the } - both discover
%mor:		V discover:PRES:ACH:FORWARD.
20g	02b009	that the frog has escaped
%mor:		V escape:PFV:ACH:BACK:RT_MAINTENANCE.
20g	03a010	and - they look all over the room -
%mor:		V look:PRES:ACT:FORWARD:FORESTALLING.
20g	03a011	the dog slips the jar over his head
%mor:		V slip:PRES:ACH:SIDE.
20g	03a012	and the boy looks into his boots and -
%mor:		V look:PRES:ACT:SIDE.
22b	03a013	crawled around the room.
20g	03a014	he knocked the stool over
%mor:		V knock:PAST:ACH:BACK.
20g	03b015	he - opens the window
%mor:		V open:PRES:ACH:FORWARD.
20g	03b016	and call - for him
%mor:		V call:PRES:ACT:FORWARD.
20g	03b017	and the dog still has the jar on his head
20g	04a018	and the dog falls out the window / - with the jar on his head [laughs] -
%mor:		V fall:PRES:ACH:FORWARD.
20g	04b019	and the boy gets - angry at him
%mor:		V get_angry:PRES:ACC:FORWARD.
20g	04b020	because the jar broke
%mor:		V break:PAST:ACH:BACK.
20g	04b021	and he goes and picks him up -
%mor:		V go:PRES:ACC:FORWARD.
%mor:		V pick_up:PRES:ACH:FORWARD.
20g	05-022	and then they go into the backyard -
%mor:		V go:PRES:ACC:FORWARD.
20g	05-023	and { call for him } - call for the frog
%mor:		V call:PRES:ACT:FORWARD.
20g	06a024	and then - he looks into holes

%mor: V|look:PRES:ACT:FORWARD.
 20g 06a025 and the dog keeps playing with the - beehive
 %mor: V|keep:PRES:ACT:PERIPH:CONT:SIDE.
 20g 06b026 and then the - boy runs into a hedgehog
 %mor: V|run_into:PRES:ACH:FORWARD.
 20g 06b027 which comes out of { the ground } - the hole
 %mor: V|come:PRES:ACH:SIDE.
 20g 06b028 that he was looking in
 %mor: V|look:PAST:PROG:ACT:SIDE.
 20g 06b029 { and - the dog still (is sicked on by) the bees }
 %mor: V|sick:PRES:PASS:ACT:SIDE.
 20g 07-030 ((and then)) while the boy ' s looking into - a hole in a tree
 %mor: V|look:PROG:ACT:SIDE:SUBORD.
 20g 07-031 < and then > the dog - knocks the - uh - beehive down .
 %mor: V|knock_down:PRES:ACH:FORWARD.
 20g 08-032 and then he gets chased by the bees
 %mor: V|get_chased:PRES:ACT:FORWARD.
 20g 08-033 and the boy falls out of the tree
 %mor: V|fall:PRES:ACH:SIDE.
 20g 08-034 because an owl came out of the hole /
 %mor: V|come:PAST:ACH:SIDE:BACK.
 20g 09a035 and then -- he ' s afraid of the owl { s - }...
 %mor: V|be_afraid:PRES:ST:FORWARD.
 20g 09a036 follows him -
 %mor: V|follow:PRES:ACT:FORWARD.
 20g 09b037 and climbs on top of a rock
 %mor: V|climb:PRES:ACC:FORWARD.
 20g 09b038 to call for the frog
 %mor: V|call:INF:ACT:FORWARD:RT-MAINTENANCE.
 20g 10a039 and - gets caught on a deer
 %mor: V|get_caught:PRES:ACH:FORWARD.
 20g 10b040 and then the deer { chases him - the d I mean } runs with
 the boy on his head
 %mor: V|run:PRES:ACT:FORWARD.
 20g 11-041 and - stops at a cliff
 %mor: V|stop:PRES:ACH:FORWARD.
 20g 12a042 and the boy and the dog - fall - into a lake ...
 %mor: V|fall:PRES:ACH:FORWARD.
 20g 12b043 and then they find { that } -- a treestump
 %mor: V|find:PRES:ACH:FORWARD.
 20g 13a044 and seem to hear something
 20g 13b045 and - they climb over the log
 %mor: V|climb:PRES:ACC:FORWARD.
 20g 14a046 and they find the frog - with another frog
 %mor: V|find:PRES:ACH:FORWARD.
 20g 15-047 and they decide to leave him
 %mor: V|decide:PRES:ACH:FORWARD.
 20g 15-048 cause { they have them - um - } they have little frogs. [laughs]

%mor. V|have:PRES:ST:SIDE.

English L2 The French L1 English L2 Groups

1. FRENGS

@Begin

@Languages: en

@Participants: DOR Dorothee Adult

@ID: en|frog|DOR|26;05.00|female|adult||Target_Adult|student|20a01010

@Birth of DOR: 09-AUG-1980

@Comment: date is 08-DEC-2006

@Comment: born in Champagnole

@Coder: Alexandra Vraciu

*DOR: so this is the story of a boy, his dog and a frog. [+ bch]

%com: p 1

*DOR: and he s in his bedroom.

*DOR: about to go to sleep.

*DOR: he s in his pyjes.

*DOR: so he s trying maybe to say good night <to his> [/] to his frog.
[+ bch]

*DOR: who s inside of a bowl ##.

%com: p 2

*DOR: and then <while he> [//] <while the boy s going to sleep> [///] while he s
asleep.

%mor: V|be:PRES:ST:SIDE:SUBORD.

*DOR: and the frog runs away.

%mor: V|run:PRES:ACH:FORWARD.

*DOR: she gets out of the bowl.

%mor: V|get:PRES:ACH:SIDE.

%com: p 3

*DOR: and when the boy and the dog wake up.

%mor: V|wake_up:PRES:ACH:FORWARD:SUBORD.

*DOR: they discover the bowl empty.

%mor: V|discover:PRES:ACH:FORWARD.

*DOR: there s no more frog in it.

*DOR: so they look scared #.

%com: p 4

*DOR: so they re trying to look everywhere.

%mor: V|try_look:PROG:ACT:FORWARD:FORESTALLING.

*DOR: and he s looking inside the boots.

%mor: V|look:PROG:ACT:SIDE.

*DOR: and <the> [/] the dog is putting its head in the bowl.

%mor: V|put:PROG:ACH:SIDE.

*DOR: and then he s <xxx> [//] no <stuck> [//] he s stuck in the bowl.

%mor: V|be:PRES:ST:SIDE:FORWARD.

%com: p 5

*DOR: <and then> [//] <so he s still looking everywhere and yelling outside> [///]

he s opening the window.

%mor: V|open:PROG:ACH:FORWARD.

*DOR: yelling outside.

%mor: V|yell:GER:ACT:SIDE.

*DOR: and at the same time the dog is about uh # to fall down #.

%mor: V|be_about_to_fall:PRES:ST:SIDE.

%com: p 6

*DOR: so the dog <fell off the xxx> [/] fell off the window.

%mor: V|fall:PAST:ACH:FORWARD.

*DOR: and # broke the bowl.

%mor: V|break:PAST:ACH:FORWARD.

%com: p 7

*DOR: <the> [/] the little boy looks very angry.

*DOR: but <the> [/] the dog # seems to be very happy to see his master again.

*DOR: and licks his face.

%mor: V|lick:PRES:ACT:SIDE.

%com: p 8ab

*DOR: right so they are still looking for the little frog.

%mor: V|look_for:PROG:ACT:FORWARD.

*DOR: and they are yelling outside.

%mor: V|yell:PROG:ACT:SIDE.

*DOR: and they might go to the forest.

*DOR: and try to look for every little space they can #.

%com: p 9

*DOR: <then> [/] then the little boy is still looking <for his> [/] for his frog.

%mor: V|look:PROG:ACT:FORWARD.

*DOR: and his dog is playing # with <a bee hive> [/] that s true a bee hive.

%com: the interviewer provides the word "hive"

*DOR: and <while the dog> [/] while the dog is still playing with the bee hive.

%mor: V|play:PROG:ACT:SIDE:SUBORD.

%com: p 10

*DOR: the little boy is bit by a mole.

%mor: V|bite:PASS:ACH:FORWARD.

*DOR: she s going out of a hole.

%mor: V|go:PROG:ACH:SIDE.

*DOR: and # hitting him +...

%mor: V|hit:PROG:ACH:SIDE:FORWARD.

%com: p 11 ab

*DOR: and then # www the bee hive fell off the tree.

%mor: V|fall:PAST:ACH:BACK:RT-SHIFT.

*DOR: what should happen happened. [+ bch]

*DOR: and then the bees <are> [/] seem to be very angry at the dog.

*DOR: and at the same time the little boy is still looking for his frog <in a hole> [/] in a hole in the tree ##.

%mor: V|look_for:PROG:ACT:SIDE.
 %com: p 12 ab
 *DOR: and then the little boy fell off the tree.
 %mor: V|fall:PAST:ACH:BACK:RT-SHIFT.
 *DOR: because this hole <was> [//] seemed to be the house of an owl.
 *DOR: and the dog is running away.
 %mor: V|run:PROG:ACT:SIDE.
 *DOR: because of course the bees are chasing him.
 %mor: V|chase:PROG:ACT:SIDE.
 *DOR: and they are going to sting him everywhere.
 %mor: V|sting:FUT:ACC:FORWARD:RT-MAINTENANCE.
 *DOR: he s going to be sick ##. [+ bch]
 %com: p 13
 *DOR: so the owl <seems> [/] seems to be angry.
 *DOR: but the boy doesn t give up.
 *DOR: he s still looking <for his> [/] for his frog.
 %mor: V|look_for:PROG:ACT:FORWARD.
 %com: p 14
 *DOR: and <he s going up> [///] # he s climbing on a rock.
 %mor: V|climb:PROG:ACC:FORWARD.
 *DOR: and (a) www (b) www he tried to lean on them ##.
 %mor: V|try_lean:PAST:PERIPH:FORWARD.
 *DOR: (a) thinking.
 %mor: V|think:GER:ST:SIDE.
 *DOR: (b) that it is # the branches of a tree.
 %com: p 15
 *DOR: but www they were <an elk> [//] <the xxx of an elk> [//] the antlers of an elk.
 %com: the interviewer provides the word "antlers"
 *DOR: what was it? [+ bch]
 %com: p 16
 *DOR: and the elk took him # took him on his head.
 %mor: V|take:PAST:ACH:FORWARD.
 *DOR: he was so angry.
 %mor: V|be:PAST:ST:SIDE.
 *DOR: that he wanted to get rid of the boy.
 %mor: V|want:PAST:ST:SIDE.
 %com: p 17 ab
 *DOR: and what happened is that the boy fell in a swamp ##.
 %mor: V|fall:PAST:ACH:FORWARD.
 %com: p 18
 *DOR: so <they> [//] the boy and the dog fell in the swamp.
 %mor: V|fall:PAST:ACH:FORWARD.
 %com: p 19
 *DOR: and I think they heard a noise.
 %mor: V|hear:PAST:ST:FORWARD.
 *DOR: and www it must be the frog.
 *DOR: since the boy was very very happy ##.

%mor: V|be:PAST:ST:FORWARD.
 %com: p 20
 *DOR: he wants to surprise the frog.
 %mor: V|want:PAST:ST:SIDE.
 *DOR: and tells his dog.
 %mor: V|tell:PRES:ACC:FORWARD.
 *DOR: to be quiet.
 %com: p 21
 *DOR: and www they looked.
 %mor: V|look:PAST:ACT:FORWARD.
 *DOR: leaning on a tree trunk #.
 %mor: V|lean:GER:ACT:SIDE.
 *DOR: and what did they see? [+ bch]
 %com: p 22
 *DOR: <oh> [!]<two frogs> [!].
 *DOR: they seem to be so cute. [+ bch]
 %com: p 23
 *DOR: and what happens is www.
 *DOR: that we can see they have a whole family a frog family.
 %mor: V|have:PRES:ST:SIDE.
 *DOR: so this is # a happy # moment for the frog family.
 %com: p 24 ab
 *DOR: but <the> [/] the boy takes his frog back.
 %mor: V|take_back:PRES:ACH:FORWARD.
 *DOR: and waves back to the frog family.
 %mor: V|wave:PRES:ACT:FORWARD.
 *DOR: and with his big boots he s going back home.
 %mor: V|go:PROG:ACC:SIDE.
 @End

2. FRENGT

@Begin
 @Languages: en
 @Participants: GUI Guillaume Adult
 @ID: en|frog|GUI|37;03.20|male|adult||Target_Adult|teacher|20a01009
 @Birth of GUI: 16-AUG-1969
 @Comment: date is 06-DEC-2006
 @Comment: born in Chamalière
 @Coder: Alexandra Vraciu
 *GUI: so this is the story <of> [/] of a little boy his dog and his frog.
 [+ bch]
 %com: p 1
 *GUI: the story begins one night.
 *GUI: while the little boy and his dog are gazing at the frog <in a bottle
 of sorts> [//] in a jar.
 *GUI: and <they look as if> [/] they look as if they really like this frog.
 *GUI: <maybe they ve just> [/] maybe they ve just caught the frog or

something #.

%com: p 2

*GUI: in any case it s the evening.

*GUI: and so the little boy <goes to> [/] goes to bed.

%mor: V|go:PRES:ACC:FORWARD.

*GUI: <and> [/] and the dog goes to sleep as well.

%mor: V|go_to_sleep:PRES:ACC:SIDE.

*GUI: and www the frog <crawls out of> [/] crawls out of the jar.

%mor: V|crawl:PRES:ACH:FORWARD.

*GUI: as the little boy and the dog are asleep.

%mor: V|be_asleep:PRES:ST:SIDE:SUBORD.

*GUI: and presumably gets out of the room <from> [//] through the window.

%mor: V|get_out:PRES:ACH:FORWARD.

%com: p 3

*GUI: because the next picture is in the morning.

*GUI: and in the morning <the window> [//] the sash window is still open a little bit.

*GUI: and the little boy realizes.

%mor: V|realize:PRES:ACH:FORWARD.

*GUI: that the frog has gone.

%mor: V|go:PERF:ACC:BACK:RT-MAINTENANCE.

*GUI: and <he looks really> [/] he looks really sad and disappointed.

%com: p 4

*GUI: so the little boy and the dog look for the frog <all over the place> [//] all over the bedroom.

%mor: V|look_for:PRES:ACT:FORWARD:FORESTALLING.

*GUI: they look into the jar.

%mor: V|look:PRES:ACT:SIDE.

*GUI: they look <into the> [/] into <the> [/] the boots.

%mor: V|look:PRES:ACT:SIDE:FORWARD.

*GUI: they look everywhere in the room for the frog.

*GUI: but they can t find it.

*GUI: and the dog has been looking so well <for> [/] <for> [/] for the frog.

%mor: V|look_for:PERF:PROG:ACT:BACK:RT-MAINTENANCE.

*GUI: <that> [/] that he stuck his head inside the jar.

%mor: V|stick:PAST:ACH:BACK:FORWARD.

%com: p 5

*GUI: and now here they are.

%mor: V|be:PRES:ST:FORWARD.

*GUI: calling out for the frog uh from the window.

%mor: V|call:GER:ACT:SIDE.

*GUI: <and the> [/] and the dog <actually has> [/] actually has the jar.

%mor: V|have:PRES:ST:SIDE.

*GUI: that is stuck to its neck.

%mor: V|be_stuck:PRES:ST:SIDE.

%com: p 6

*GUI: unfortunately or fortunately the dog eventually <falls from> [//]

falls out the window <and> [//] head first.
 %mor: V|fall:PRES:ACH:FORWARD.
 %com: p 7
 *GUI: <and> [/] and lands on the ground.
 %mor: V|land:PRES:ACH:FORWARD.
 *GUI: <where the> [/] where the glass jar breaks into a thousand pieces.
 %mor: V|break:PRES:ACH:FORWARD.
 *GUI: the dog is very much relieved.
 %mor: V|be_relieved:PRES:ST:FORWARD.
 *GUI: and licks the little boy s face in gratitude.
 %mor: V|lick:PRES:ACT:SIDE.
 *GUI: <but the> [/] but the little boy is looking very very annoyed.
 *GUI: maybe because the jar is broken.
 *GUI: <but> [/] but certainly because they haven t found the frog yet.
 %com: p 8 ab
 *GUI: so off they go <into the> [/] into the countryside.
 %mor: V|go:PRES:ACC:FORWARD.
 *GUI: to look for the frog.
 %mor: V|look_for:INF:ACT:FORWARD:RT-MAINTENANCE.
 *GUI: calling out I guess the frog s name #.
 %mor: V|call:GER:ACT:SIDE.
 *GUI: there they are in the countryside amongst the trees and so on and so forth.
 *GUI: and the dog <has> [/] <has> [/] has the attitude of and the pose <of> [//]<of>[/] of a hunting dog.
 %com: p 9
 *GUI: and <while>[/] while the little boy <is calling>[/] is trying to call the frog s name into a hole in the ground.
 %mor: V|try_call:PROG:PERIPH:SIDE:SUBORD.
 *GUI: <the>[/] the dog is playing with what looks like a wasps <net>[/] nest.
 %mor: V|play:PROG:ACT:FORWARD.
 %com: p 10
 *GUI: the little boy is not very lucky.
 *GUI: <because>[/] because the hole in the ground is not the hole of a frog.
 *GUI: is the hole of a little rat.
 *GUI: <and>[/] and the rat seems to have bitten the little boy s nose.
 *GUI: <meanwhile the>[/] meanwhile the dog <is>[/] is barking at the wasps net.
 %mor: V|bark:PROG:ACT:SIDE.
 %com: p 11 ab
 *GUI: and the wasps net falls off the tree.
 %mor: V|fall:PRES:ACH:FORWARD.
 *GUI: <in which it was>[/] to which it was attached.
 %com: p 12 ab
 *GUI: <and the>[/] and <the wasps>[/] the wasps <are> [//] get mad at the dog.

%mor: V|get_mad:PRES:ACC:FORWARD.
 *GUI: and <fly after>[/] fly after the dog.
 %mor: V|fly:PRES:ACT:FORWARD.
 *GUI: that s trying to get away.
 %mor: V|try_get_away:PROG:ACT:SIDE.
 *GUI: meanwhile the little boy has been looking into a tree <for>[/] for his frog.
 %mor: V|look:PFV:PROG:ACT:BACK:RT-MAINTENANCE.
 *GUI: and there was a crack in the tree.
 *GUI: and <he called>[/] he called for the frog inside the crack in the tree trunk.
 %mor: V|call:PAST:ACT:BACK.
 *GUI: but out of the crack in the tree trunk comes out an owl.
 %mor: V|come_out:PRES:ACH:SIDE.
 *GUI: <that>[/] <that s>[/] that s very angry too.
 %mor: V|be_angry: PRES:ST:SIDE.
 *GUI: <and>[/] <and>[/] and the little boy <falls>[/] falls off the tree.
 %mor: V|fall:PRES:ACH:SIDE:FORWARD.
 %com: p 13
 *GUI: the owl is so angry.
 %mor: V|be:PRES:ST:SIDE.
 *GUI: that it actually starts # intimidating the little boy.
 %mor: V|start:PRES:ACH:INCEPT:FORWARD.
 *GUI: chasing the little boy.
 %mor: V|chase:GER:ACT:SIDE.
 *GUI: who looks very scared indeed #.
 %com: p 14
 *GUI: things are calming down a little bit.
 *GUI: the dog is sniffing <around>[/] around a big boulder.
 %mor: V|sniff:PROG:ACT:FORWARD.
 *GUI: onto which <the>[/] the boy has climbed.
 %mor: V|climb:PERF:ACC:BACK:RT-MAINTENANCE.
 *GUI: <to>[/] <to>[/] to get on top of things a little bit.
 %mor: V|get_on_top:INF:ACC:FORWARD:RT-MAINTENANCE.
 *GUI: <and to>[/] and <to>[/] <to call the>[/] to call for the frog <at>[/] at a broader distance.
 %mor: V|call:INF:ACT:FORWARD:RT-MAINTENANCE.
 *GUI: <and>[/] and the boy <has>[/] has tried to find balance.
 %mor: V|try:PERF:PERIPH:BACK:FORWARD.
 *GUI: <by>[/] by grasping what looks like a branch.
 %mor: V|grasp:GER:ACH:SIDE.
 %com: p 15
 *GUI: except it s <not> [!] a branch.
 *GUI: it s actually the horns of what looks like a deer or a stag I don t know.
 *GUI: and unfortunately the little boy <is>[/] is now landed <on top of>[/] on top of the deer s head.
 %mor: V|land:PASSIVE:ACH:FORWARD.

%com: p 16
 *GUI: the deer walks off <with>[/] with the little boy on top of its head.
 %mor: V|walk:PRES:ACH:FORWARD.
 *GUI: <the>[/] the little dog is running after them.
 %mor: V|run:PROG:ACT:SIDE.
 %com: p 17 ab
 *GUI: and the deer dumps the little boy off its head into what looks like a pond.
 %mor: V|dump:PRES:ACH:FORWARD.
 *GUI: the dog falls into the pond as well.
 %mor: V|fall:PRES:ACH:SIDE.
 %com: p 18
 *GUI: they collapse into the water.
 %mor: V|collapse:PRES:ACH:FORWARD.
 *GUI: the deer looks very pleased indeed.
 %com: p 20
 *GUI: <and>[/] and the little boy and his dog # wade across the water <to the>[/] <to the>[/] to the water s edge.
 %mor: V|wade:PRES:ACC:FORWARD.
 *GUI: and <there s>[/] a there s a hollow trunk.
 *GUI: <and>[/] and the little boy seems to have heard something.
 *GUI: because <he signals>[/] he signals <to the>[/] to the dog.
 %mor: V|signal:PRES:ACH:FORWARD.
 *GUI: to hush.
 %com: p 19
 *GUI: <and>[/] and yes indeed he has heard something.
 %mor: V|hear:PERF:ST:BACK:RT-MAINTENANCE.
 *GUI: because both the little boy and the little dog prick up their ears.
 %mor: V|prick_up:PRES:ACH:FORWARD.
 %com: p 21
 *GUI: and eventually they look behind the hollow tree trunk.
 %mor: V|look:PRES:ACT:FORWARD.
 %com: p 22
 *GUI: what do you know? [+ bch]
 *GUI: <but here s Mr frog or Mrs frog or whoever>[///] but here s two frogs.
 %mor: V|be:PRES:ST:FORWARD.
 *GUI: that looks like a very happy couple indeed.
 %com: p 23
 *GUI: <and>[/] and they have a nice little family with them.
 %mor: V|have:PRES:ST:SIDE.
 *GUI: <and the>[/] and the boy looks really excited at the sight.
 *GUI: while the frogs the daddy frog and mummy frog <look very>[/] <look very>[/] # look upon their young with a lot of with a lot of care and earnestness.
 %mor: V|look:PRES:ACT:SIDE:SUBORD.
 %com: p 24 ab
 *GUI: and <eventually>[/] eventually it seems as if the little boy has

made a deal <with the>[/] with the frog family.
 *GUI: because he is carrying away one little frog.
 %mor: V|carry_away:PROG:ACT:FORWARD.
 *GUI: and everybody seems <to be>[/] to be fairly happy in the end.
 *GUI: the frog family are looking at the little boy and the little dog and
 one of their young.
 %mor: V|look:PROG:ACT:SIDE.
 *GUI: going away.
 %mor: V|go_away:GER:ACC:SIDE.
 *GUI: <while>[/] while the little boy waves goodbye to them.
 %mor: V|wave:PRES:ACT:SIDE:SUBORD.
 *GUI: and the little dog barks goodbye to them.
 %mor: V|bark:PRES:ACT:SIDE.
 *GUI: and the only thing that I m not sure about at the end of the story
 is.[+ bch]
 *GUI: whether the frog that they are carrying back with them is the frog that ran
 away in the beginning.[+ bch]
 *GUI: or whether the frog that ran away in the beginning is one of the two
 grown up frogs.[+ bch]
 *GUI: so that s the only uncertainty I have about this nice little story.[+ bch]
 @End

English L2 The Catalan L1 English L2 Groups

1. CATENGs

@Begin
 @Languages: en
 @Participants: SIL Sílvia Adult
 @ID: en|frog|SIL|20;10.03|female|adult||Target_Adult|undergraduate|20a01002
 @Birth of SIL: 06-JUN-1984
 @Comment: date is 9-MAY-2005
 @Comment: born in Sant Hilari
 @Coder: Maria Sabaté Dalmau
 *SIL: ok once upon a time. [+ bch]
 %com: p 1
 *SIL: there was a # child?
 *SIL: who had a dog and a frog.
 *SIL: inside a jar.
 %com: p 2
 *SIL: then <they> [///] one day they went to sleep.
 %mor: V|go:PAST:ACC:FORWARD.
 *SIL: and the frog jumped out of the jar.
 %mor: V|jump:PAST:ACH:FORWARD.
 *SIL: and went away.
 %mor: V|go:PAST:ACH:FORWARD.
 %com: p 3

*SIL: next morning the boy and the dog um realised.
 %mor: V|realise:PAST:ACH:FORWARD.
 *SIL: that the frog had escaped.
 %mor: V|escape:PAST:PERF:ACH:BACK:RT-MAINTENANCE.
 %com: p 4
 *SIL: and # decided to look for it.
 %mor: V|decide_look_for:PAST:PERIPH:FORWARD:FORESTALLING.
 *SIL: the boy looked for it inside the boots.
 %mor: V|look_for:PAST:ACT:SIDE.
 *SIL: and the dog put its head in the jar.
 %mor: V|put:PAST:ACH:SIDE.
 %com: p 5
 *SIL: but couldn t take his head off the jar.
 *SIL: and the boy and the dog # um # went out of the window.
 %mor: V|go:PAST:ACH:FORWARD.
 *SIL: and the boy shouted for help.
 %mor: V|shout:PAST:ACT:FORWARD.
 %com: p 6
 *SIL: but the dog was very clever.
 *SIL: and jumped out of the window +...
 %mor: V|jump:PAST:ACH:FORWARD.
 *SIL: # and <break> [//] broke <the> [/] the jar with the floor.
 %mor: V|break:PAST:ACH:FORWARD.
 %com: p 7
 *SIL: and the boy was not very happy.
 *SIL: he was a little bit angry.
 %mor: V|be:PAST:ST:FORWARD.
 *SIL: but the dog was very happy.
 %mor: V|be:PAST:ST:SIDE.
 %com: p 8a
 *SIL: and then they continued looking for the frog.
 %mor: V|continue_look_for:PAST:PERIPH:CONT:FWD:FORESTALLING
 *SIL: which had escaped.
 %mor: V|escape:PAST:PERF:ACH:BACK:RT-MAINTENANCE.
 *SIL: and they were shouting +"/.
 %mor: V|shout:PAST:PROG:ACC:SIDE.
 *SIL: +" <frog> [!] <frog> [!] <where are you> [?].
 %com: p 8b
 *SIL: they went into a forest near a tree.
 %mor: V|go:PAST:ACC:FORWARD.
 *SIL: where there were bees.
 %mor: V|be:PAST:ST:SIDE.
 %com: p 9
 *SIL: and <the> [/] # the boy shouted www inside a hole +"/.
 %mor: V|shout:PAST:ACC:FORWARD.
 *SIL: +" frog where are you?
 *SIL: that there was <in> [/] the floor or in the ground +...
 *SIL: and # um # what was the name? [+ bch]

%com: researcher answers a gopher.
 *SIL: a gopher. [+ bch]
 %com: p 10
 *SIL: a gopher appeared.
 %mor: V|appear:PAST:ACH:FORWARD.
 *SIL: while the dog was playing with the bees.
 %mor: V|play:PAST:PROG:ACT:SIDE:SUBORD.
 %com: p 11ab
 *SIL: and ### <the> [/] the bees and its house fell down of the tree.
 %mor: V|fall:PAST:ACH:FORWARD.
 *SIL: while the boy was looking for the frog inside another tree.
 %mor: V|look_for:PAST:PROG:ACT:SIDE:SUBORD.
 %com: p 12ab
 *SIL: then the bees began to follow the dog.
 %mor: V|begin_follow:PAST:PERIPH:INCEPT:FORWARD.
 *SIL: the boy fell down of the tree.
 %mor: V|fall:PAST:ACH:SIDE.
 *SIL: because from inside the hole appeared an owl.
 %mor: V|appear:PAST:ACH:BACKWARD.
 %com: p 13
 *SIL: and the owl began to follow the boy.
 %mor: V|begin_follow:PAST:PERIPH:INCEPT:FORWARD.
 *SIL: and to bother him.
 %mor: V|bother:INF:PERIPH:INCEPT:SIDE.
 %com: p 14
 *SIL: until they reached a stone.
 %mor: V|reach:PAST:ACH:FORWARD.
 *SIL: and the boy put up of um what.
 *SIL: until he was up # of the stone.
 %mor: V|be:PAST:ST:FORWARD.
 *SIL: and again shouted +".
 %mor: V|shout:PAST:ACC:FORWARD.
 *SIL: +" <frog> [!] <frog> [!] <where are you> [?].
 *SIL: the dog was with him.
 %mor: V|be:PAST:ST:SIDE.
 %com: p 15
 *SIL: and um from behind of the stone # a deer appeared.
 %mor: V|appear:PAST:ACH:FORWARD.
 *SIL: and took <the> [/] # the boy <on his head> [//] on its head.
 %mor: V|take:PAST:ACH:FORWARD.
 %com: p 16
 *SIL: and # began to run.
 %mor: V|begin_run:PAST:ACH:INCEPT:FORWARD.
 %com: p 17ab
 *SIL: until <it threw> [/] # it threw the boy # away.
 %mor: V|throw:PAST:ACH:FORWARD.
 *SIL: and he and the dog fell down <into> [/] # into a little lake # well
 into water.

%mor: V|fall:PAST:ACH:FORWARD.
 %com: p 18
 *SIL: well there was water.
 %com: p 19
 *SIL: and the boy seemed <to> [/] to hear something.
 *SIL: maybe it was the frog.
 *SIL: and told the dog.
 %mor: V|tell:PAST:ACC:FORWARD.
 *SIL: to shut up.
 %com: p 20
 *SIL: and then they heard the frog.
 %mor: V|hear:PAST:ST:FORWARD.
 *SIL: they were very happy.
 %mor: V|be:PAST:ST:FORWARD.
 %com: p 21
 *SIL: and looked um behind <the> [///] um a trunk of a tree.
 %mor: V|look:PAST:ACT:FORWARD.
 *SIL: that was near the water.
 %com: p 22
 *SIL: and they found # um # a mummy frog and a daddy frog.
 %mor: V|find:PAST:ACH:FORWARD.
 %com: p 23
 *SIL: which were taking care of their little froggies.
 %mor: V|take_care:PAST:PROG:ACT:SIDE.
 *SIL: and the boy and the dog were very happy.
 %mor: V|be:PAST:ST:FORWARD.
 *SIL: because they finally found the frog.
 %mor: V|find:PAST:ACH:BACK.
 *SIL: that had escaped.
 %mor: V|escape:PAST:PERF:ACH:BACK:RT-MAINTENANCE.
 %com: p 24ab
 *SIL: and <they> [/] # they took it home again.
 %mor: V|take:PAST:ACC:FORWARD.
 *SIL: saying goodbye to the frog family.
 %mor: V|say:GER:ACC:SIDE.
 @End

2. CATENGT

@Begin
 @Languages: en
 @Participants: TER Teresa Adult
 @ID: en|frog|TER|21;1.18|female|adult||Target_Adult|undergraduate|20a01012
 @Birth of TER: 17-MAR-1966
 @Comment: data is 5-MAY-2005
 @Comment: born in Manresa
 @Coder: Alexandra Vraciu
 *TER: this is the story of a little boy.

%com: p 1
 *TER: who has <a> [/] a dog <a puppet> [//] a puppy and a frog.
 *TER: and the frog was inside # a glass bowl.

%com: p 2
 *TER: and one day at night the boy went to sleep.
 %mor: V|go_to_sleep:PAST:ACC:FORWARD.
 *TER: and during the night the frog went away through the window.
 %mor: V|go_away:PAST:ACH:FORWARD.

%com: p 3
 *TER: and the next morning www he started looking for the frog.
 %mor: V|start_looking:PAST:ACH:INCEPT:FORWARD
 *TER: when the boy woke up with his little dog.
 %mor: V|wake_up:PAST:ACH:FORWARD:SUBORD.
 *TER: because the glass bowl was empty.
 %mor: V|be:PAST:ST:SIDE.
 *TER: and he looked everywhere for his frog.

%com: p 4
 *TER: he looked inside his T shirt.
 %mor: V|look:PAST:ACT:FORWARD.
 *TER: inside his boots.
 *TER: under the bed.
 *TER: everywhere.
 *TER: but the frog was gone.
 %mor: V|be_gone:PAST:ST:SIDE.

%com: p 5
 *TER: then he opened the window.
 %mor: V|open:PAST:ACH:FORWARD.
 *TER: and started calling out for the frog.
 %mor: V|start_calling:PAST:PERIPH:INCEPT:FORWARD.
 *TER: +" <frog> [!] <where are you> [?] <where are you> [?].
 *TER: and at the same time the dog was being a bit naughty.
 %mor: V|be:PAST:PROG:ST:SIDE
 *TER: and was playing with the bowl.
 %mor: V|play:PAST:PROG:ACT:SIDE.

%com: p 6 and 7
 *TER: and of course the bowl broke yeah.
 %mor: V|break:PAST:ACH:FORWARD.
 *TER: 'cos it was glass.
 *TER: and the boy was very angry.
 %mor: V|be:PAST:ST:FORWARD.
 *TER: 'cos there was no house now for the little frog.

%com: p 8ab
 *TER: because he was very worried.
 %mor: V|be:PAST:ST:SIDE.
 *TER: he decided to go in search of his frog.
 %mor: V|decide_go:PAST:PERIPH:THEME-REINstantiation.
 *TER: so he left his house.
 %mor: V|leave:PAST:ACH:FORWARD.

*TER: they went to the forest.
%mor: V|go:PAST:ACC:FORWARD.
*TER: and he started calling out for his frog.
%mor: V|start_calling:PAST:PERIPH:INCEPT:FORWARD.
*TER: +" <frog> [!] <frog>[!]<where are you> [?] <where are you> [?].
*TER: and www they saw a beehive.
%mor: V|see:PAST:ST:FOWARD.
*TER: as they went inside the forest.
%mor: V|go:PAST:ACC:SIDE:SUBORD.
*TER: with lots of bees flying around.
%mor: V|fly:GER:ACT:SIDE.
*TER: and the dog became very interested about the bees.
%mor: V|become_interested:PAST:ACC:FORWARD.
%com: p 9
*TER: and he started chasing them.
%mor: V|start_chasing:PAST:PERIPH:INCEPT:FORWARD.
*TER: the boy in the meantime saw a hole <on the floor> [//] on the ground.
%mor: V|see:PAST:ST:SIDE.
*TER: and he thought.
%mor: V|think:PAST:ST:SIDE:FORWARD.
*TER: that maybe his frog would be in there.
*TER: so he put his nose next to the hole.
%mor: V|put:PAST:ACH:SIDE:FORWARD.
%com: p 10
*TER: and suddenly he was bitten.
%mor: V|bite:PAST:PASSIVE:ACH:FORWARD.
*TER: but it wasn t a frog of course.
*TER: it was a rat or a mouse or something like that.
%mor: V|be:PAST:ST:SIDE.
*TER: at the same time his dog he was playing with the bees.
%mor: V|play:PAST:PROG:ACT:SIDE.
%com: p 11ab and forward to p 12ab
*TER: until the beehive came down on the ground.
%mor: V|come_down:PAST:ACH:FORWARD.
*TER: which was of course a disaster.
*TER: and www the bees started chasing the dog.
%mor: V|start_chasing:PAST:PERIPH:INCEPT:FORWARD.
*TER: when that happened.
*TER: and at the same time the boy saw <a tree> [//] a huge tree with a
very big trunk.
%mor: V|see:PAST:ST:SIDE.
*TER: and there was another hole in the trunk of the tree.
*TER: so he thought.
%mor: V|think:PAST:ST:SIDE:FORWARD.
*TER: +" hmh maybe the frog is in there.
*TER: +" so I ll go.
*TER: +" and have a look.
%com: p 12ab

*TER: so he was looking inside the trunk.
 %mor: V|look:PAST:PROG:ACT:SIDE.
 *TER: when an owl came out.
 %mor: V|come_out:PAST:ACH:FORWARD:SUBORD.
 *TER: and of course the boy was very scared.
 %mor: V|be:PAST:ST:FORWARD.
 *TER: an owl with the wings open. [+ bch]
 %com: p 13
 *TER: and this owl started chasing him.
 %mor: V|start_chasing:PAST:PERIPH:INCEPT:FORWARD.
 *TER: and he was very scared.
 %mor: V|be:PAST:ST:SIDE.
 *TER: so he saw some stones.
 %mor: V|see:PAST:ST:FORWARD.
 *TER: and he tried to hide there.
 %mor: V|try_hide:PAST:PERIPH:FORWARD.
 %com: p 14
 *TER: and he was holding some branches.
 %mor: V|hold:PAST:PROG:ACT:FORWARD.
 *TER: what www were some branches.
 *TER: he thought.
 %com: p 15
 *TER: but of course they weren t any branches.
 *TER: it was an elk.
 %mor: V|be:PAST:ST:FORWARD.
 *TER: and suddenly www he was on top of an elk s head.
 %mor: V|be:PAST:ST:FORWARD.
 *TER: you know.
 %com: p 16
 *TER: and the elk started running running.
 %mor: V|start_running:PAST:PERIPH:INCEPT:FORWARD.
 *TER: and the dog was next to the elk.
 %mor: V|be:PAST:ST:SIDE.
 *TER: so it was all a bit noisy.
 %com: p 17ab
 *TER: and after so much running they fell down a little cliff.
 %mor: V|fall:PAST:ACH:FORWARD.
 *TER: the dog the boy.
 *TER: not the elk of course.
 %com: p 18
 *TER: and they fell down and down into a little pond.
 %mor: V|fall:PAST:ACH:FORWARD.
 *TER: so the boy and the dog were inside the pond.
 %mor: V|be:PAST:ST:SIDE.
 *TER: and suddenly they heard a noise.
 %mor: V|hear:PAST:ST:FORWARD.
 %com: p 20
 *TER: and the boy said.

%mor: V|say:PAST:ACC:FORWARD.
 *TER: +" <shh> [!] <hush> [!] I think.
 *TER: +" the frog might be there.
 *TER: and there was another tree trunk.
 *TER: which was empty inside.
 %com: p 19
 *TER: and again he could hear this sound.
 *TER: +" <there s a frog in here> [!] <there s a frog > [!].
 %com: p 21
 *TER: so they went to check inside this tree trunk.
 %mor: V|go:PAST:ACC:FORWARD.
 %mor: V|check:INF:ACC:FORWARD:RT-MAINTENANCE.
 *TER: and there was nothing inside.
 %com: p 22
 *TER: but on the other side there were two frogs.
 %mor: V|be:PAST:ST:FORWARD.
 %com: p 23
 *TER: and a whole family of frogs were there.
 *TER: and he thought.
 %mor: V|think:PAST:ST:FORWARD.
 *TER: +" wow this is my frog !
 *TER: +" where have you been ?
 *TER: +" I have been looking for you for a long time.
 %com: p 24ab
 *TER: and he was very happy to see his frog.
 %mor: V|be:PAST:ST:FORWARD.
 *TER: but he wanted to take his frog with him.
 %mor: V|want:PAST:ST:SIDE.
 *TER: so he said goodbye to the whole family of frogs.
 %mor: V|say:PAST:ACC:FORWARD.
 *TER: who stayed there in the pond on this tree trunk.
 %mor: V|stay:PAST:ST:SIDE.
 *TER: and he went home with his little frog and his little dog.
 %mor: V|go:PAST:ACC:FORWARD.
 *TER: and that s the end of the story. [+ bch]
 @End

French L1

@Begin
 @Languages: fr
 @Participants: ALI Alice Adult
 @ID: fr|frog|ALI|30;00.15|female|adult||Target_Adult|student|20a01006
 @Birth of ALI: 10-APR-1976
 @Comment: date is 25-APR-2006
 @Comment: born in Villeurbanne
 @Coder: Alexandra Vraciu

- *ALI: alors cette histoire c est l histoire d un petit garçon, de son chien et d une aventure.
- *ALI: qu ils vont vivre # à propos d une grenouille.
- %com: p 1
- *ALI: la première image décrit l enfant et le chien.
- *ALI: qui sont <contents> [//] satisfaits.
- *ALI: d avoir capturé une grenouille dans un bocal.
- *ALI: c est la fin de la journée.
- *ALI: je pense qu <ils vont> [/] ils vont aller se coucher.
- *ALI: avec le sentiment d avoir # acquis un trésor voilà leur grenouille #. [+ bch]
- %com: p 2
- *ALI: pendant que le chien et le petit enfant sont endormis.
- %mor: V|être_endormis:PRES:ST:SIDE:SUBORD.
- *ALI: la grenouille en profite pour s évader.
- %mor: V|profiter_pour:PRES:PERIPH:FORWARD:FORESTALLING.
- *ALI: elle sort de son bocal.
- %mor: V|sortir:PRES:ACH:SIDE.
- *ALI: et elle s en va.
- %mor: V|aller_s_en:PRES:ACH:SIDE:FORWARD.
- %com: p 3
- *ALI: et au petit matin le soleil s est levé.
- *ALI: et l enfant et le chien se rendent compte.
- %mor: V|rendre_se_compte:PRES:ACH:FORWARD.
- *ALI: que la grenouille est partie #.
- %mor: V|partir:PASSE:COMP:ACH:BACK:RT-MAINT.
- *ALI: ils sont surpris.
- %mor: V|être_surpris:PRES:ST:FORWARD.
- %com: p 4
- *ALI: ils la cherchent par tout.
- %mor: V|chercher:PRES:ACT:FORWARD:FORESTALLING.
- *ALI: à l intérieur des bottes.
- *ALI: le chien met sa tête dans le bocal.
- %mor: V|mettre:PRES:ACH:SIDE.
- *ALI: pour mieux vérifier.
- %mor: V|vérifier:INF:ACT:FORWARD:RT_MAINT.
- *ALI: qu elle est partie #.
- %mor: V|partir:PASSE:COMP:ACH:BACK:RT-MAINT.
- *ALI: il se coince la tête #.
- %mor: V|coincer_se:PRES:ACH:SIDE:FORWARD.
- %com: p 5
- *ALI: <ils cherchent> [//] ils appellent la grenouille par la fenêtre #.
- %mor: V|appeler:PRES:ACT:FORWARD.
- %com: p 6
- *ALI: le chien tombe par la fenêtre.
- %mor: V|tomber:PRES:ACH:FORWARD.
- *ALI: la tête coincée dans le bocal.
- %mor: V|coincer:PART:ACH:SIDE.

%com: p 7
 *ALI: et il brise le bocal.
 %mor: V|briser:PRES:ACH:FORWARD.
 *ALI: le petit garçon # est un peu en colère contre son chien xxx.
 %mor: V|être_en_colère:PRES:ST:FORWARD.
 %com: p 8 ab
 *ALI: le petit garçon www part avec son chien dans la forêt.
 %mor: V|partir:PRES:ACH:FORWARD.
 *ALI: qui a mis <ses bottes> [//] ses immenses bottes d adulte.
 %mor: V|mettre:PASSE:COMP:ACC:BACK:RT-MAINT.
 *ALI: chercher sa grenouille.
 %mor: V|chercher:INF:ACT:FORWARD:RT_MAINT.
 *ALI: donc il l appelle.
 %mor: V|appeler:PRES:ACT:FORWARD.
 %com: p 9
 *ALI: et il l appelle dans un terrier.
 %mor: V|appeler:PRES:ACT:FORWARD.
 *ALI: pendant que le chien lui s amuse <avec des abeilles> [//] avec un essaim d
 abeilles.
 %mor: V|amuser_s:PRES:ACT:SIDE:SUBORD.
 %com: p 10
 *ALI: il y aurait une mésaventure.
 *ALI: parce qu il se cogne le nez avec un marmotte.
 %mor: V|cogner_se:PRES:ACH:FORWARD.
 *ALI: qui sort du terrier.
 %mor: V|sortir:PRES:ACH:SIDE.
 *ALI: pendant que le chien est toujours en train de s amuser avec les abeilles.
 %mor: V|amuser_s:PROG:ACT:SIDE:SUBORD.
 %com: p 11 ab
 *ALI: ensuite le petit garçon voit.
 %mor: V|voir:PRES:ST:FORWARD.
 *ALI: que <dans un arbre> [//] dans un tronc d arbre il y a un trou.
 *ALI: donc il grimpe sur l arbre.
 %mor: V|grimper:PRES:ACC:FORWARD.
 *ALI: et essaie de chercher sa grenouille dans l arbre #.
 %mor: V|essayer_chercher:PRES:PERIPH:INCEPT:FORWARD.
 %com: p 12 ab
 *ALI: une chouette sort du tronc.
 %mor: V|sortir:PRES:ACH:FORWARD.
 *ALI: le fait tomber.
 %mor: V|faire_tomber:PRES:ACH:FORWARD.
 *ALI: pendant que le chien est en train de vivre une mésaventure.
 %mor: V|vivre_une_mésaventure:PROG:ACT:SIDE:SUBORD.
 *ALI: plein d abeilles le poursuivent.
 %mor: V|poursuivre:PRES:ACT:SIDE.
 *ALI: le terrorisent #.
 %mor: V|terroriser:PRES:ACT:SIDE.
 %com: p 13

*ALI: le petit garçon décide de grimper sur un tas de cailloux.
 %mor: V|décider:PRES:PERIPH:FORWARD.
 *ALI: pour appeler sa grenouille.
 %mor: V|appeler:INF:ACT:FORWARD:RT_MAINT.
 *ALI: pour prendre un peu d hauteur.
 *ALI: pour voir.
 *ALI: s il la voit ou pas.
 %com: p 14
 *ALI: il monte sur un tas de cailloux.
 %mor: V|monter:PRES:ACC:FORWARD.
 *ALI: il l appelle sous le regard de la chouette et du chien.
 %mor: V|appeler:PRES:ACT:FORWARD.
 *ALI: qui est toujours là en train de se promener.
 %mor: V|promener_se:PROG:ACT:SIDE:SUBORD.
 *ALI: <ou de> [///] on ne sait pas ce qu il fait. [+ bch]
 %com: p 15
 *ALI: il y a un cerf.
 %mor: V|y_avoir:PRES:ST:SIDE.
 *ALI: <qui> [/] qui déboule.
 %mor: V|débouler:PRES:ACH:FORWARD.
 *ALI: qui prend le petit garçon sur sa tête.
 %mor: V|prendre:PRES:ACH:FORWARD.
 %com: p 16
 *ALI: et qui l amène # quelque part.
 %mor: V|amener:PRES:ACC:FORWARD.
 *ALI: on ne sait pas où. [+ bch]
 *ALI: il court.
 *ALI: le chien leur court après # ou devant #.
 %mor: V|courir:PRES:ACT:SIDE.
 %com: p 17 ab
 *ALI: et puis le cerf freine.
 %mor: V|freiner:PRES:ACH:FORWARD.
 *ALI: et le chien et l enfant sont brusquement # expulsés.
 %mor: V|expulser:PRES:PASS:ACH:FORWARD:FORESTALLING.
 *ALI: donc le petit garçon tombe <de la> [/] de la tête du cerf.
 %mor: V|tomber:PRES:ACH:SIDE.
 *ALI: le chien aussi.
 *ALI: ils tombent dans une marre ##.
 %mor: V|tomber:PRES:ACH:FORWARD.
 %com: p 18
 *ALI: plouf !
 *ALI: ils sont tous les deux tombés dans la marre.
 %mor: V|tomber:PASSE:COMP:ACH:FORWARD.
 *ALI: <les fesses en premier> [///] le garçon la tête en premier.
 *ALI: puis le chien.
 *ALI: mais ça leur fait rien.
 *ALI: ça a plutôt l air de les amuser.
 %com: p 19

*ALI: et le petit garçon entend des coassements.
 %mor: V|entendre:PRES:ST:FORWARD.
 *ALI: ça le fait sourire.
 %mor: V|faire_sourire:PRES:ACT:FORWARD.
 *ALI: il a l air content #.
 %com: p 20
 *ALI: en faisant signe à son chien.
 %mor: V|faire_signe:GER:ACH:SIDE.
 *ALI: qu il fasse pas de bruit.
 *ALI: il se dirige doucement vers un tronc d arbre.
 %mor: V|diriger:PRES:ACC:FORWARD.
 %com: p 21
 *ALI: et ils regardent tous les deux de l autre côté du tronc d arbre.
 %mor: V|regarder:PRES:ACT:FORWARD.
 %com: p 22
 *ALI: qu est ce qu ils voient ? [+ bch]
 *ALI: un couple de grenouilles amoureux avec l air heureux.
 %com: p 23
 *ALI: et # en face d eux toute une petite famille de bébés grenouille #.
 *ALI: il y a <huit bébés> [/] neuf.
 *ALI: dont un <qui saute> [/] qui saute vers le petit garçon.
 %mor: V|sauter:PRES:ACH:SIDE.
 *ALI: comme s il avait envie #.
 *ALI: <de> [/] <de> [/] de connaître le petit garçon.
 %com: p 24 ab
 *ALI: et la dernière image décrit le petit garçon.
 *ALI: qui dit au revoir à la famille grenouille.
 *ALI: avec <le> [/] la petit grenouille dans la main.
 *ALI: donc je pense que c est celui. [+ bch]
 *ALI: qui avait sauté. [+ bch]
 *ALI: qui a envie d être prisonnier dans un bocal. [+ bch]
 *ALI: voilà la fin.
 @End

Catalan L1

@Begin
 @Languages: cat
 @Participants: LAI Laia Adult
 @ID: cat|frog|LAI|25;09.01|female||Target_Adult|graduate|20a01007
 @Birth of LAI: 05-APR-1979
 @Comment: born and resident in Barcelona
 @Comment: date is 06 JAN 2005
 @Coder: Elaine Yukie Higa
 *LAI: doncs vet aquí una vegada. [+ bch]
 %com: p 1
 *LAI: un nen que vivia amb els seus pares molt a prop del bosc.
 *LAI: i <un>[/] un bosc que tenia un rierol.

*LAI: una nit www se li va escapolir una granota a dins de casa.
 %mor: V|escapolir:PFV:PERI:ACH:FORWARD.
 *LAI: mentres estava dormit ell amb el seu gosset.
 %mor: V|estar_dormit:IPFV:ST:SIDE:SUBORD.
 %com: p 2
 *LAI: <l endemà al matí>[/] ## l endemà al matí es van trobar la granota
 dins d un pot.
 %com: p 3
 *LAI: ## però després de fer el mandra una bona estona.
 *LAI: va resultar.
 *LAI: que la granota se n havia anat.
 %mor: V|anar_se_n:PQP:ACH:BACK.
 *LAI: i ell i el seu gos estaven aquí tot marejats.
 %mor: V|estar:IPFV:ST:SIDE.
 *LAI: buscant la granota.
 %mor: V|buscar:GER:ACH:SIDE.
 %com: p 4
 *LAI: ## busca que busca # dins dels jerseis.
 %mor: V|buscar:PRES:ACT:FORWARD.
 *LAI: dins del got.
 *LAI: <dins>[/] sota el taburet.
 *LAI: tota la habitació regirada.
 %com: p 5
 *LAI: així que en un bon moment el gos es va posar dins el pot.
 %mor: V|posar_se:PFV:PERI:ACH:FORWARD.
 *LAI: on havia estat la granota.
 *LAI: ja em diràs tu perquè la granota no hi era.[+ bch]
 %com: p 6
 *LAI: i el gos corrent amb el pot amunt i avall.
 %mor: V|correr:GER:ACT:SIDE.
 *LAI: tot d una va.
 *LAI: i va caure de dalt a baix de la finestra.
 %mor: V|caure:PFV:PERI:ACH:FORWARD.
 %com: turns to p 7 after uttering trencat
 *LAI: gos pot tot trencat per terra.
 *LAI: i el nen ben preocupat.
 *LAI: per si s havia fet mal el seu gosset.
 %com: p 8ab
 *LAI: així que van decidir.
 %mor: V|decidir:PQP:PERIPH:FORWARD.
 *LAI: que ells no es volien quedar sense la <me>[/] seva amiga granota.
 *LAI: i se n van anar al bosc.
 %mor: V|anar_se_n:PFV:PERI:ACC:FORWARD.
 *LAI: que hi havia a prop de casa.
 *LAI: hi havia un munt d abelles.
 *LAI: que ja rondaven per allà.
 %mor: V|rondar:IPFV:ACT:SIDE.
 *LAI: i ells vinga a cridar.

%mor: V|venir:EXP:PERIPH:CONT:FORWARD.
 *LAI: i a olorar.
 %mor: V|olorar:EXP:PERIPH:CONT:SIDE.
 *LAI: i la granota no apareixia per enlloc.
 %com: p 9
 *LAI: mira.
 *LAI: si oloraven.
 *LAI: que el gos va escoltar la mel.
 %mor: V|escoltar:PFV:PERI:ACT:FORWARD.
 *LAI: i les abelles rondaven per allà.
 %mor: V|rondar:IPFV:ACT:SIDE.
 *LAI: i el gos vinga a cridar la mel.
 *LAI: i el nen anava buscant.
 %mor: V|buscar:PROG:ACT:SIDE.
 %com: p 10
 *LAI: anava buscant.
 *LAI: fins que algú li va mossegar <un>[//] el nas.
 %mor: V|mossegar:PFV:PERI:ACH:FORWARD.
 *LAI: saps què era? [+ bch]
 *LAI: era un talp.
 *LAI: un talp que havia sortit del seu cau.
 %mor: V|sortir:PQP:ACH:BACK.
 %com: p 11ab
 *LAI: recordes que el gos # estava olorant tot el dia? [+ bch]
 *LAI: així que va fer caure el niu d abelles <ostres>[!].
 %mor: V|fer_caure:PFV:PERI:ACH:FORWARD.
 %com: p 12ab
 *LAI: ### i mentres el gos feia caure el niu d abelles.
 %mor: V|fer_caure:IPFV:ACH:SIDE:SUBORD.
 *LAI: i havia de córrer.
 *LAI: el nen havia estat posant el nas <dins dels arbres>[/] dins dels arbres.
 %mor: V|posar:PQP:PROG:ACC:BACK.
 *LAI: buscant per tot arreu.
 %mor: V|buscar:GER:ACT:SIDE.
 *LAI: fins que al final xx va molestar els animals del bosc.
 %mor: V|molestar:PFV:PERI:ACC:FORWARD.
 *LAI: i li va sortir l òliba.
 %mor: V|sortir:PFV:PERI:ACH:FORWARD.
 *LAI: que mentre el gos corria.
 %mor: V|correr:IPFV:ACT:SIDE:SUBORD.
 *LAI: el va fer caure amb ell de dalt a baix de l arbre.
 %mor: V|fer:PFV:PERI:ACH:FORWARD.
 %com: p 13
 *LAI: ### el gos # s havia aconseguit desfer de les abelles.
 %mor: V|aconseguir:PQP:ACC:BACK:RT-SHIFT.
 *LAI: però el nen estava perseguit encara per l òliba.
 %mor: V|perseguir:IPFV:PASSIVE:ACT:SIDE.

%com: p 14
 *LAI: així que es van enfilear ben amunt.
 %mor: V|enfilear:PFV:PERI:ACC:FORWARD.
 *LAI: perquè l ocell els deixés en pau.
 %com: p 15
 *LAI: # amb la mala sort que es va enfilear d amunt del cap d un bambi.
 %mor: V|enfilear:PFV:PERI:ACC:FORWARD.
 %com: p 16
 *LAI: ## el bambi # se l va endur bosc enllà.
 %mor: V|endur_se:PFV:PERI:ACC:FORWARD.
 %com: turns to p 17 ab after the pause
 *LAI: bosc enllà bosc enllà # fins a fer lo caure a dins del riu.
 %mor: V|fer_caure:INF:ACH:FORWARD.
 *LAI: i evidentment el gos www va anar a parar dins del riu també.
 %mor: V|anar_a_parar:PFV:PERI:ACC:SIDE.
 *LAI: com que posava el nas a tot arreu.
 %com: p 18
 *LAI: <chof@o>[!] tots molls.
 %com: p 19
 *LAI: ## però # <saps què va ser lo bo de caure a dins del riu>[?]. [+ bch]
 *LAI: que com que les granotes hi viuen molt a prop.
 *LAI: van sentir els sorolls de les granotes <rec rec@o>[!].
 %mor: V|sentir:PFV:PERI:ST:FORWARD.
 %com: p 20
 *LAI: +" <sh calla>[!].
 *LAI: li va fer el nen al gos.
 %mor: V|fer:PFV:PERI:ACC:FORWARD.
 %com: p 21
 *LAI: i els dos xafarders com eren.
 *LAI: es van enfilear damunt del tronc.
 %mor: V|enfilear_se:PFV:PERI:ACC:FORWARD.
 *LAI: i al darrere <sabeu que hi van trobar>[?].
 %com: p 22
 *LAI: <ah>[!] una parella de granotes.
 %com: p 23
 *LAI: bueno@s i al cap d un moment la parella de granotes s havia
 convertit en un grup de granotes.
 %mor: V|convertir_se:PQP:ACC:BACK:RT-SHIFT.
 *LAI: i <sí>[!] la que saltava corrent cap a ell.
 %mor: V|saltar:IPFV:ACH:SIDE.
 *LAI: era la seva granoteta.
 %com: p 24ab
 *LAI: així que va agafar la seva granoteta.
 %mor: V|agafar:PFV:PERI:ACH:FORWARD.
 *LAI: es va despedir de la família de granotes.
 %mor: V|despedir:PFV:PERI:ACC:FORWARD.
 *LAI: i se n van anar cap a casa.
 %mor: V|anar_se_n:PFV:PERI:ACC:FORWARD.

*LAI: i vet aquí un gat i vet aquí un gos i aquest compte ja s ha fos.[+
bch]

@End

Appendix 4: Group Means for the Aspect Hypothesis

4.1 Predicate Tokens

4.1.1 FRENGS

Group	ST (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	6	66,67	4	0,00	0	33,33	2	0	0	0,00	0
FRENGS2	13	0,00	0	0,00	0	100,00	13	0	0	0,00	0
FRENGS3	11	81,82	9	0,00	0	18,18	2	0	0	0,00	0
FRENGS4	12	83,33	10	0,00	0	8,33	1	0	0	8,33	1
FRENGS5	10	100,00	10	0,00	0	0,00	0	0	0	0,00	0
FRENGS6	12	66,67	8	25,00	3	8,33	1	0	0	0,00	0
FRENGS7	9	11,11	1	0,00	0	77,78	7	0	0	11,11	1
FRENGS8	9	88,89	8	0,00	0	11,11	1	0	0	0,00	0
FRENGS9	8	0,00	0	0,00	0	87,50	7	12,5	1	0,00	0
FRENGS10	9	33,33	3	0,00	0	66,67	6	0	0	0,00	0
FRENGS11	6	0,00	0	0,00	0	100,00	6	0	0	0,00	0
FRENGS12	12	100,00	12	0,00	0	0,00	0	0	0	0,00	0
Group Mean		52,65	65,00	2,08	3,00	42,60	46,00	1,04	1,00	1,62	2

Table 4.1.1. States (FRENGS)

Group	ACT (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	13	30,77	4	30,77	4	15,38	2	23,08	3	0,00	0
FRENGS2	6	0,00	0	0,00	0	16,67	1	83,33	5	0,00	0
FRENGS3	14	78,57	11	21,43	3	0,00	0	0,00	0	0,00	0
FRENGS4	16	18,75	3	81,25	13	0,00	0	0,00	0	0,00	0
FRENGS5	11	18,18	2	81,82	9	0,00	0	0,00	0	0,00	0
FRENGS6	15	6,67	1	93,33	14	0,00	0	0,00	0	0,00	0
FRENGS7	9	0,00	0	0,00	0	55,56	5	44,44	4	0,00	0
FRENGS8	6	33,33	2	66,67	4	0,00	0	0,00	0	0,00	0
FRENGS9	8	0,00	0	0,00	0	50,00	4	50,00	4	0,00	0
FRENGS10	12	16,67	2	75,00	9	8,33	1	0,00	0	0,00	0
FRENGS11	6	0,00	0	0,00	0	66,67	4	33,33	2	0,00	0
FRENGS12	9	22,22	2	66,67	6	11,11	1	0,00	0	0,00	0
Group Mean		18,76	27,00	43,08	62,00	18,64	18,00	19,52	18,00	0,00	0

Table 4.1.2. Activities (FRENGS)

Group	ACC (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	5	40,00	2	0,00	0	60,00	3	0	0	0,00	0
FRENGS2	7	0,00	0	0,00	0	100,00	7	0	0	0,00	0
FRENGS3	5	100,00	5	0,00	0	0,00	0	0	0	0,00	0
FRENGS4	3	66,67	2	0,00	0	33,33	1	0	0	0,00	0
FRENGS5	6	50,00	3	50,00	3	0,00	0	0	0	0,00	0
FRENGS6	5	20,00	1	40,00	2	0,00	0	0	0	40,00	2
FRENGS7	8	0,00	0	0,00	0	100,00	8	0	0	0,00	0
FRENGS8	4	50,00	2	25,00	1	25,00	1	0	0	0,00	0
FRENGS9	8	0,00	0	0,00	0	100,00	8	0	0	0,00	0
FRENGS10	3	33,33	1	66,67	2	0,00	0	0	0	0,00	0
FRENGS11	5	0,00	0	0,00	0	60,00	3	0	0	40,00	2
FRENGS12	2	50,00	1	50,00	1	0,00	0	0	0	0,00	0
Group Mean		34,17	17,00	19,31	9,00	39,86	31,00	0,00	0,00	6,67	4

Table 4.1.3. Accomplishments (FRENGS)

Group	ACH (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	18	5,56	1	0,00	0	77,78	14	0	0	16,66	3
FRENGS2	22	0,00	0	0,00	0	95,45	21	0	0	4,55	1
FRENGS3	12	100,00	12	0,00	0	0,00	0	0	0	0,00	0
FRENGS4	12	66,67	8	8,33	1	25,00	3	0	0	0,00	0
FRENGS5	14	78,57	11	7,14	1	14,29	2	0	0	0,00	0
FRENGS6	18	33,33	6	16,67	3	33,33	6	0	0	16,67	3
FRENGS7	26	0,00	0	0,00	0	88,46	23	0	0	11,54	3
FRENGS8	16	75,00	12	0,00	0	25,00	4	0	0	0,00	0
FRENGS9	10	0,00	0	0,00	0	80,00	8	0	0	20,00	2
FRENGS10	16	31,25	5	25,00	4	43,75	7	0	0	0,00	0
FRENGS11	15	0,00	0	0,00	0	100,00	15	0	0	0,00	0
FRENGS12	14	78,57	11	0,00	0	14,29	2	0	0	7,14	1
Group Mean		39,08	66,00	4,76	9,00	49,78	105,00	0,00	0,00	6,38	13

Table 4.1.4. Achievements (FRENGS)

4.1.2 FRENGT

Group	ST (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	11	100,00	11	0,00	0	0,00	0	0	0	0,00	0
FRENGT2	7	100,00	7	0,00	0	0,00	0	0	0	0,00	0
FRENGT3	18	100,00	18	0,00	0	0,00	0	0	0	0,00	0
FRENGT4	4	100,00	4	0,00	0	0,00	0	0	0	0,00	0
FRENGT5	10	100,00	10	0,00	0	0,00	0	0	0	0,00	0
FRENGT6	13	69,23	9	0,00	0	30,77	4	0	0	0,00	0
FRENGT7	17	88,24	15	11,76	2	0,00	0	0	0	0,00	0
FRENGT8	20	55,00	11	30,00	6	5,00	1	0	0	10,00	2
FRENGT9	9	88,89	8	0,00	0	0,00	0	0	0	11,11	1
FRENGT10	8	0,00	0	0,00	0	100,00	8	0	0	0,00	0
FRENGT11	10	90,00	9	10,00	1	0,00	0	0	0	0,00	0
FRENGT12	43	0,00	0	0,00	0	93,02	40	0	0	6,98	3
Group Mean		74,28	102,00	4,31	9,00	19,07	53,00	0,00	0,00	2,34	6

Table 4.1.5. States (FRENGT)

Group	ACT (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	19	78,95	15	10,53	2	5,26	1	5,26	1	0,00	0
FRENGT2	11	63,64	7	36,36	4	0,00	0	0,00	0	0,00	0
FRENGT3	11	63,64	7	36,36	4	0,00	0	0,00	0	0,00	0
FRENGT4	15	46,67	7	46,67	7	0,00	0	6,67	1	0,00	0
FRENGT5	12	50,00	6	50,00	6	0,00	0	0,00	0	0,00	0
FRENGT6	22	4,55	1	95,45	21	0,00	0	0,00	0	0,00	0
FRENGT7	22	72,73	16	27,27	6	0,00	0	0,00	0	0,00	0
FRENGT8	25	12,00	3	84,00	21	0,00	0	0,00	0	4,00	1
FRENGT9	18	50,00	9	33,33	6	5,56	1	0,00	0	11,12	2
FRENGT10	13	0,00	0	30,77	4	30,77	4	38,46	5	0,00	0
FRENGT11	7	85,71	6	14,29	1	0,00	0	0,00	0	0,00	0
FRENGT12	12	0,00	0	0,00	0	83,33	10	16,67	2	0,00	0
Group Mean		43,99	77,00	38,75	82,00	10,41	16,00	5,59	9,00	1,26	3

Table 4.1.6. Activities (FRENGT)

Group	ACC (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	7	100,00	7	0,00	0	0,00	0	0	0	0,00	0
FRENGT2	19	78,95	15	5,26	1	5,26	1	0	0	10,52	2
FRENGT3	7	85,71	6	0,00	0	0,00	0	0	0	14,29	1
FRENGT4	4	75,00	3	0,00	0	0,00	0	0	0	25,00	1
FRENGT5	3	66,67	2	33,33	1	0,00	0	0	0	0,00	0
FRENGT6	7	28,57	2	42,86	3	14,29	1	0	0	14,29	1
FRENGT7	7	100,00	7	0,00	0	0,00	0	0	0	0,00	0
FRENGT8	4	25,00	1	50,00	2	0,00	0	0	0	25,00	1
FRENGT9	8	62,50	5	0,00	0	0,00	0	0	0	37,50	3
FRENGT10	9	11,11	1	0,00	0	88,89	8	0	0	0,00	0
FRENGT11	1	100,00	1	0,00	0	0,00	0	0	0	0,00	0
FRENGT12	12	0,00	0	0,00	0	100,00	12	0	0	0,00	0
Group Mean		61,13	50,00	10,95	7,00	17,37	22,00	0,00	0,00	10,55	9

Table 4.1.7. Accomplishments (FRENGT)

Group	ACH (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	18	72,22	13	0,00	0	22,22	4	0	0	5,56	1
FRENGT2	24	54,17	13	8,33	2	4,17	1	0	0	33,32	8
FRENGT3	21	85,71	18	0,00	0	4,76	1	0	0	9,52	2
FRENGT4	20	85,00	17	10,00	2	0,00	0	0	0	5,00	1
FRENGT5	13	92,31	12	0,00	0	0,00	0	0	0	7,69	1
FRENGT6	12	66,67	8	16,67	2	16,67	2	0	0	0,00	0
FRENGT7	19	68,42	13	5,26	1	0,00	0	0	0	26,30	5
FRENGT8	21	4,76	1	9,52	2	19,05	4	0	0	66,64	14
FRENGT9	16	93,75	15	0,00	0	6,25	1	0	0	0,00	0
FRENGT10	23	0,00	0	0,00	0	95,65	22	0	0	4,35	1
FRENGT11	3	66,67	2	0,00	0	0,00	0	0	0	33,34	1
FRENGT12	22	0,00	0	0,00	0	81,82	18	0	0	18,18	4
Group Mean		57,47	112,00	4,15	9,00	20,88	53,00	0,00	0,00	17,49	38

Table 4.1.8. Achievements (FRENGT)

4.1.3 CATENGS

Group	ST (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGS1	5	0,00	0	0	0	100	5	0,00	0	0	0
CATENGS2	9	0,00	0	0	0	100	9	0,00	0	0	0
CATENGS3	5	0,00	0	0	0	80	4	0,00	0	20	1
CATENGS4	5	0,00	0	0	0	100	5	0,00	0	0	0
CATENGS5	2	100,00	2	0	0	0	0	0,00	0	0	0
CATENGS6	16	0,00	0	0	0	100	16	0,00	0	0	0
CATENGS7	6	0,00	0	0	0	100	6	0,00	0	0	0
CATENGS8	8	0,00	0	0	0	87,5	7	0,00	0	12,5	1
CATENGS9	8	0,00	0	12,5	1	75	6	12,50	1	0	0
CATENGS10	3	0,00	0	0	0	100	3	0,00	0	0	0
CATENGS11	8	100,00	8	0	0	0	0	0,00	0	0	0
CATENGS12	3	66,67	2	0	0	0	0	33,33	1	0	0
Group Mean		22,22	12,00	1,04	1,00	70,21	61,00	3,82	2,00	2,71	2

Table 4.1.9. States (CATENGS)

Group	ACT (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGS1	8	25,00	2	0,00	0	50,00	4	25,00	2	0,00	0
CATENGS2	6	0,00	0	0,00	0	50,00	3	50,00	3	0,00	0
CATENGS3	7	0,00	0	0,00	0	28,57	2	71,43	5	0,00	0
CATENGS4	4	0,00	0	0,00	0	50,00	2	50,00	2	0,00	0
CATENGS5	9	77,78	7	22,22	2	0,00	0	0,00	0	0,00	0
CATENGS6	8	0,00	0	0,00	0	50,00	4	50,00	4	0,00	0
CATENGS7	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
CATENGS8	10	0,00	0	0,00	0	20,00	2	70,00	7	10,00	1
CATENGS9	9	22,22	2	0,00	0	44,44	4	33,33	3	0,00	0
CATENGS10	6	0,00	0	0,00	0	33,33	2	66,67	4	0,00	0
CATENGS11	10	70,00	7	30,00	3	0,00	0	0,00	0	0,00	0
CATENGS12	4	25,00	1	50,00	2	0,00	0	0,00	0	25,00	1
Group Mean		18,33	19,00	8,52	7,00	35,53	25,00	34,70	30,00	2,92	2

Table 4.1.10. Activities (CATENGS)

Group	ACC (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENG1	1	0,00	0	0,00	0	100,00	1	0,00	0	0	0
CATENG2	7	0,00	0	0,00	0	85,71	6	14,29	1	0	0
CATENG3	4	0,00	0	0,00	0	100,00	4	0,00	0	0	0
CATENG4	9	0,00	0	0,00	0	100,00	9	0,00	0	0	0
CATENG5	4	100,00	4	0,00	0	0,00	0	0,00	0	0	0
CATENG6	4	0,00	0	0,00	0	50,00	2	50,00	2	0	0
CATENG7	3	0,00	0	0,00	0	100,00	3	0,00	0	0	0
CATENG8	7	0,00	0	0,00	0	100,00	7	0,00	0	0	0
CATENG9	9	11,11	1	0,00	0	88,89	8	0,00	0	0	0
CATENG10	4	0,00	0	0,00	0	100,00	4	0,00	0	0	0
CATENG11	7	85,71	6	0,00	0	14,29	1	0,00	0	0	0
CATENG12	4	50,00	2	50,00	2	0,00	0	0,00	0	0	0
Group Mean		20,57	13,00	4,17	2,00	69,91	45,00	5,36	3,00	0,00	0

Table 4.1.11. Accomplishments (CATENGs)

Group	ACH (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENG1	8	12,50	1	0,00	0	87,50	7	0,00	0	0	0
CATENG2	21	0,00	0	0,00	0	85,71	18	0,00	0	14,29	3
CATENG3	12	0,00	0	0,00	0	100,00	12	0,00	0	0	0
CATENG4	22	4,55	1	0,00	0	90,91	20	0,00	0	4,55	1
CATENG5	12	91,67	11	0,00	0	0,00	0	0,00	0	8,33	1
CATENG6	13	0,00	0	0,00	0	84,62	11	7,69	1	7,69	1
CATENG7	10	0,00	0	0,00	0	100,00	10	0,00	0	0	0
CATENG8	14	0,00	0	0,00	0	85,71	12	0,00	0	14,29	2
CATENG9	12	16,67	2	0,00	0	83,33	10	0,00	0	0	0
CATENG10	8	12,50	1	0,00	0	87,50	7	0,00	0	0	0
CATENG11	11	81,82	9	0,00	0	18,18	2	0,00	0	0	0
CATENG12	12	75,00	9	8,33	1	8,33	1	0,00	0	8,33	1
Group Mean		24,56	34,00	0,69	1,00	69,32	110,00	0,64	1,00	4,79	9

Table 4.1.12. Achievements (CATENGs)

4.1.4 CATENGT

Group	ST (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGT1	12	0,00	0	0	0	100,00	12	0,00	0	0	0
CATENGT2	8	0,00	0	0	0	100,00	8	0,00	0	0	0
CATENGT3	9	77,78	7	0	0	22,22	2	0,00	0	0	0
CATENGT4	19	0,00	0	0	0	100,00	19	0,00	0	0	0
CATENGT5	11	0,00	0	0	0	100,00	11	0,00	0	0	0
CATENGT6	4	100,00	4	0	0	0,00	0	0,00	0	0	0
CATENGT7	6	0,00	0	0	0	100,00	6	0,00	0	0	0
CATENGT8	6	100,00	6	0	0	0,00	0	0,00	0	0	0
CATENGT9	13	0,00	0	0	0	100,00	13	0,00	0	0	0
CATENGT10	5	100,00	5	0	0	0,00	0	0,00	0	0	0
CATENGT11	21	0,00	0	0	0	95,24	20	4,76	1	0	0
CATENGT12	22	0,00	0	0	0	95,45	21	4,55	1	0	0
Group Mean		↓ 31,48	22,00	0,00	0,00	67,74	112,00	0,78	2,00	0,00	0

Table 4.1.13. States (CATENGT)

Group	ACT (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGT1	15	0,00	0	0,00	0	33,33	5	66,67	10	0	0
CATENGT2	10	0,00	0	0,00	0	30,00	3	70,00	7	0	0
CATENGT3	4	25,00	1	75,00	3	0,00	0	0,00	0	0	0
CATENGT4	17	0,00	0	0,00	0	23,53	4	76,47	13	0	0
CATENGT5	9	0,00	0	0,00	0	44,44	4	55,56	5	0	0
CATENGT6	10	50,00	5	40,00	4	0,00	0	0,00	0	10	1
CATENGT7	12	0,00	0	0,00	0	91,67	11	8,33	1	0	0
CATENGT8	4	100,00	4	0,00	0	0,00	0	0,00	0	0	0
CATENGT9	17	11,76	2	0,00	0	35,29	6	47,06	8	5,88	1
CATENGT10	5	80,00	4	0,00	0	0,00	0	20,00	1	0	0
CATENGT11	11	0,00	0	0,00	0	45,45	5	54,55	6	0	0
CATENGT12	5	0,00	0	0,00	0	20,00	1	80,00	4	0	0
Group Mean		↓ 22,23	16,00	9,58	7,00	26,98	39,00	39,89	55,00	1,32	2

Table 4.1.14. Activities (CATENGT)

Group	ACC (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGT1	13	0,00	0	0,00	0	84,62	11	7,69	1	7,69	1
CATENGT2	10	0,00	0	0,00	0	30,00	3	50,00	5	20,00	2
CATENGT3	4	75,00	3	0,00	0	0,00	0	25,00	1	0,00	0
CATENGT4	6	0,00	0	0,00	0	83,33	5	0,00	0	16,67	1
CATENGT5	10	0,00	0	0,00	0	80,00	8	0,00	0	20,00	2
CATENGT6	7	85,71	6	14,29	1	0,00	0	0,00	0	0,00	0
CATENGT7	8	0,00	0	0,00	0	100,00	8	0,00	0	0,00	0
CATENGT8	1	100,00	1	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT9	9	11,11	1	0,00	0	66,67	6	22,22	2	0,00	0
CATENGT10	9	100,00	9	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT11	20	0,00	0	0,00	0	100,00	20	0,00	0	0,00	0
CATENGT12	7	0,00	0	0,00	0	100,00	7	0,00	0	0,00	0
Group Mean		30,99	20,00	1,19	1,00	53,72	68,00	8,74	9,00	5,36	6

Table 4.1.15. Accomplishments (CATENGT)

Group	ACH (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGT1	26	0,00	0	0,00	0	100,00	26	0,00	0	0,00	0
CATENGT2	12	0,00	0	0,00	0	91,67	11	0,00	0	8,33	1
CATENGT3	16	93,75	15	0,00	0	0,00	0	0,00	0	6,25	1
CATENGT4	14	0,00	0	0,00	0	100,00	14	0,00	0	0,00	0
CATENGT5	12	0,00	0	0,00	0	83,33	10	0,00	0	16,67	2
CATENGT6	19	84,21	16	10,53	2	0,00	0	0,00	0	5,23	1
CATENGT7	10	0,00	0	0,00	0	100,00	10	0,00	0	0,00	0
CATENGT8	16	100,00	16	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT9	9	0,00	0	0,00	0	77,78	7	0,00	0	22,22	2
CATENGT10	15	73,33	11	0,00	0	0,00	0	0,00	0	26,67	4
CATENGT11	20	5,00	1	0,00	0	90,00	18	0,00	0	5,00	1
CATENGT12	11	0,00	0	0,00	0	100,00	11	0,00	0	0,00	0
Group Mean		29,69	59,00	0,88	2,00	61,90	107,00	0,00	0,00	7,53	12

Table 4.1.16. Achievements (CATENGT)

4.1.5 ENG

Group	ST (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	5	100,00	5	0,00	0	0,00	0	0,00	0	0,00	0
ENG2	9	88,89	8	11,11	1	0,00	0	0,00	0	0,00	0
ENG3	28	82,14	23	3,57	1	14,29	4	0,00	0	0,00	0
ENG4	7	0,00	0	0,00	0	100,00	7	0,00	0	0,00	0
ENG5	5	100,00	5	0,00	0	0,00	0	0,00	0	0,00	0
ENG6	5	100,00	5	0,00	0	0,00	0	0,00	0	0,00	0
ENG7	2	100,00	2	0,00	0	0,00	0	0,00	0	0,00	0
ENG8	10	90,00	9	10,00	1	0,00	0	0,00	0	0,00	0
ENG9	7	0,00	0	0,00	0	100,00	7	0,00	0	0,00	0
ENG10	5	100,00	5	0,00	0	0,00	0	0,00	0	0,00	0
ENG11	16	100,00	16	0,00	0	0,00	0	0,00	0	0,00	0
ENG12	12	83,33	10	0,00	0	16,67	2	0,00	0	0,00	0
Group Mean		78,70	88,00	2,06	3,00	19,25	20,00	0,00	0,00	0,00	0

Table 4.1.17. States (ENG)

Group	ACT (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	13	69,23	9	23,08	3	0,00	0	7,69	1	0,00	0
ENG2	11	27,27	3	72,73	8	0,00	0	0,00	0	0,00	0
ENG3	17	35,29	6	29,41	5	11,76	2	23,53	4	0,00	0
ENG4	6	0,00	0	0,00	0	50,00	3	50,00	3	0,00	0
ENG5	8	50,00	4	50,00	4	0,00	0	0,00	0	0,00	0
ENG6	18	66,67	12	33,33	6	0,00	0	0,00	0	0,00	0
ENG7	12	83,33	10	8,33	1	0,00	0	8,33	1	0,00	0
ENG8	19	47,37	9	52,63	10	0,00	0	0,00	0	0,00	0
ENG9	12	0,00	0	0,00	0	91,67	11	8,33	1	0,00	0
ENG10	15	53,33	8	20,00	3	6,67	1	20,00	3	0,00	0
ENG11	5	80,00	4	20,00	1	0,00	0	0,00	0	0,00	0
ENG12	10	40,00	4	60,00	6	0,00	0	0,00	0	0,00	0
Group Mean		46,04	69,00	30,79	47,00	13,34	17,00	9,82	13,00	0,00	0

Table 4.1.18. Activities (ENG)

Group	ACC (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	7	85,71	6	14,29	1	0,00	0	0,00	0	0,00	0
ENG2	10	60,00	6	40,00	4	0,00	0	0,00	0	0,00	0
ENG3	7	71,43	5	14,29	1	14,29	1	0,00	0	0,00	0
ENG4	8	0,00	0	0,00	0	100,00	8	0,00	0	0,00	0
ENG5	4	100,00	4	0,00	0	0,00	0	0,00	0	0,00	0
ENG6	12	58,33	7	25,00	3	8,33	1	0,00	0	8,33	1
ENG7	5	100,00	5	0,00	0	0,00	0	0,00	0	0,00	0
ENG8	7	42,86	3	28,57	2	14,29	1	0,00	0	14,29	1
ENG9	6	0,00	0	0,00	0	100,00	6	0,00	0	0,00	0
ENG10	10	90,00	9	0,00	0	10,00	1	0,00	0	0,00	0
ENG11	11	100,00	11	0,00	0	0,00	0	0,00	0	0,00	0
ENG12	6	83,33	5	16,67	1	0,00	0	0,00	0	0,00	0
Group Mean		65,97	61,00	11,57	12,00	20,58	18,00	0,00	0,00	1,88	2

Table 4.1.19. Accomplishments (ENG)

Group	ACH (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	13	69,23	9	7,69	1	15,38	2	0,00	0	7,69	1
ENG2	18	77,78	14	0,00	0	0,00	0	0,00	0	22,22	4
ENG3	28	35,71	10	7,14	2	57,14	16	0,00	0	0,00	0
ENG4	10	0,00	0	0,00	0	90,00	9	10,00	1	0,00	0
ENG5	16	75,00	12	0,00	0	18,75	3	0,00	0	6,25	1
ENG6	19	84,21	16	0,00	0	5,26	1	0,00	0	10,53	2
ENG7	19	78,95	15	0,00	0	15,79	3	0,00	0	5,26	1
ENG8	18	66,67	12	11,11	2	22,22	4	0,00	0	0,00	0
ENG9	19	0,00	0	0,00	0	100,00	19	0,00	0	0,00	0
ENG10	18	94,44	17	0,00	0	5,56	1	0,00	0	0,00	0
ENG11	13	100,00	13	0,00	0	0,00	0	0,00	0	0,00	0
ENG12	15	93,33	14	0,00	0	6,67	1	0,00	0	0,00	0
Group Mean		64,61	132,00	2,16	5,00	28,06	59,00	0,83	1,00	4,33	9

Table 4.1.20 Achievements (ENG)

4.2 Predicate Types

4.2.1 FRENGS

Group	ST (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGS1	5	80,00	4	0,00	0	20,00	1	0	0	0,00	0
FRENGS2	4	0,00	0	0,00	0	100,00	4	0	0	0,00	0
FRENGS3	5	60,00	3	0,00	0	40,00	2	0	0	0,00	0
FRENGS4	5	60,00	3	0,00	0	20,00	1	0	0	20,00	1
FRENGS5	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
FRENGS6	7	42,86	3	42,86	3	14,29	1	0	0	0,00	0
FRENGS7	4	25,00	1	0,00	0	50,00	2	0	0	25,00	1
FRENGS8	5	80,00	4	0,00	0	20,00	1	0	0	0,00	0
FRENGS9	4	0,00	0	0,00	0	75,00	3	25	1	0,00	0
FRENGS10	5	40,00	2	0,00	0	60,00	3	0	0	0,00	0
FRENGS11	3	0,00	0	0,00	0	100,00	3	0	0	0,00	0
FRENGS12	2	100	2	0	0	0	0	0	0	0,00	0
Group Mean		48,99		3,57		41,61		2,08		3,75	

Table 4.2.1 States (FRENGS)

Group	ACT (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGS1	10	40,00	4	30,00	3	10,00	1	20,00	2	0,00	0
FRENGS2	4	0,00	0	0,00	0	25,00	1	75,00	3	0,00	0
FRENGS3	7	71,43	5	28,57	2	0,00	0	0,00	0	0,00	0
FRENGS4	8	25,00	2	75,00	6	0,00	0	0,00	0	0,00	0
FRENGS5	8	25,00	2	75,00	6	0,00	0	0,00	0	0,00	0
FRENGS6	10	10,00	1	90,00	9	0,00	0	0,00	0	0,00	0
FRENGS7	5	0,00	0	0,00	0	40,00	2	60,00	3	0,00	0
FRENGS8	5	40,00	2	60,00	3	0,00	0	0,00	0	0,00	0
FRENGS9	6	0,00	0	0,00	0	33,33	2	66,67	4	0,00	0
FRENGS10	9	22,22	2	66,67	6	11,11	1	0,00	0	0,00	0
FRENGS11	5	0,00	0	0,00	0	60,00	3	40,00	2	0,00	0
FRENGS12	8	25,00	2	62,50	5	12,50	1	0,00	0	0,00	0
Group Mean		21,55		40,64		16,00		21,81		0,00	

Table 4.2.2 Activities (FRENGS)

Group	ACC (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGS1	4	50,00	2	0,00	0	50,00	2	0	0	0,00	0
FRENGS2	5	0,00	0	0,00	0	100,00	5	0	0	0,00	0
FRENGS3	5	100,00	5	0,00	0	0,00	0	0	0	0,00	0
FRENGS4	3	66,67	2	0,00	0	33,33	1	0	0	0,00	0
FRENGS5	4	75,00	3	25,00	1	0,00	0	0	0	0,00	0
FRENGS6	5	20,00	1	40,00	2	0,00	0	0	0	40,00	2
FRENGS7	4	0,00	0	0,00	0	100,00	4	0	0	0,00	0
FRENGS8	4	50,00	2	25,00	1	25,00	1	0	0	0,00	0
FRENGS9	5	0,00	0	0,00	0	100,00	5	0	0	0,00	0
FRENGS10	3	33,33	1	66,67	2	0,00	0	0	0	0,00	0
FRENGS11	4	0,00	0	0,00	0	75,00	3	0	0	25,00	1
FRENGS12	2	50,00	1	50,00	1	0,00	0	0	0	0,00	0
Group Mean		37,08		17,22		40,28		0,00		5,42	

Table 4.2.3 Accomplishments

Group	ACH (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGS1	14	7,14	1	0,00	0	71,43	10	0	0	21,43	3
FRENGS2	12	0,00	0	0,00	0	91,67	11	0	0	8,33	1
FRENGS3	7	100,00	7	0,00	0	0,00	0	0	0	0,00	0
FRENGS4	10	60,00	6	10,00	1	30,00	3	0	0	0,00	0
FRENGS5	7	71,43	5	14,29	1	14,29	1	0	0	0,00	0
FRENGS6	15	33,33	5	20,00	3	26,67	4	0	0	20,00	3
FRENGS7	16	0,00	0	0,00	0	81,25	13	0	0	18,75	3
FRENGS8	9	77,78	7	0,00	0	22,22	2	0	0	0,00	0
FRENGS9	8	0,00	0	0,00	0	75,00	6	0	0	25,00	2
FRENGS10	12	41,67	5	33,33	4	25,00	3	0	0	0,00	0
FRENGS11	12	0,00	0	0,00	0	100,00	12	0	0	0,00	0
FRENGS12	12	75,00	9	0,00	0	16,67	2	0	0	8,33	1
Group Mean		38,86		6,47		46,18		0,00		8,49	

Table 4.2.4 Achievements (FRENGS)

4.2.2 FRENGT

Group	ST (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGT1	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
FRENGT2	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
FRENGT3	5	100,00	5	0,00	0	0,00	0	0	0	0,00	0
FRENGT4	3	100,00	3	0,00	0	0,00	0	0	0	0,00	0
FRENGT5	3	100,00	3	0,00	0	0,00	0	0	0	0,00	0
FRENGT6	3	33,33	1	0,00	0	66,67	2	0	0	0,00	0
FRENGT7	8	87,50	7	12,50	1	0,00	0	0	0	0,00	0
FRENGT8	9	33,33	3	33,33	3	11,11	1	0	0	22,23	2
FRENGT9	3	66,67	2	0,00	0	0,00	0	0	0	33,33	1
FRENGT10	1	0,00	0	0,00	0	100,00	1	0	0	0,00	0
FRENGT11	6	83,33	5	16,67	1	0,00	0	0	0	0,00	0
FRENGT12	5	0,00	0	0,00	0	80,00	4	0	0	20,00	1
Group Mean		67,01		5,21		21,48		0,00		6,30	

Table 4.2.5 States (FRENGT)

Group	ACT (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGT1	16	75,00	12	12,50	2	6,25	1	6,25	1	0,00	0
FRENGT2	7	57,14	4	42,86	3	0,00	0	0,00	0	0,00	0
FRENGT3	7	57,14	4	42,86	3	0,00	0	0,00	0	0,00	0
FRENGT4	10	40,00	4	50,00	5	0,00	0	10,00	1	0,00	0
FRENGT5	10	50,00	5	50,00	5	0,00	0	0,00	0	0,00	0
FRENGT6	13	7,69	1	92,31	12	0,00	0	0,00	0	0,00	0
FRENGT7	15	60,00	9	40,00	6	0,00	0	0,00	0	0,00	0
FRENGT8	20	15,00	3	80,00	16	0,00	0	0,00	0	5,00	1
FRENGT9	15	40,00	6	40,00	6	6,67	1	0,00	0	13,33	2
FRENGT10	12	0,00	0	33,33	4	33,33	4	33,33	4	0,00	0
FRENGT11	7	85,71	6	14,29	1	0,00	0	0,00	0	0,00	0
FRENGT12	6	0,00	0	0,00	0	66,67	4	33,33	2	0,00	0
Group Mean		40,64		41,51		9,41		6,91		1,53	

Table 4.2.6 Activities (FRENGT)

Group	ACC (Total Observed Types)	Form									
		PRES		PROG		PAST		P PROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGT1	5	100,00	5	0,00	0	0,00	0	0	0	0,00	0
FRENGT2	8	62,50	5	12,50	1	12,50	1	0	0	12,50	1
FRENGT3	6	83,33	5	0,00	0	0,00	0	0	0	16,67	1
FRENGT4	4	75,00	3	0,00	0	0,00	0	0	0	25,00	1
FRENGT5	3	66,67	2	33,33	1	0,00	0	0	0	0,00	0
FRENGT6	6	33,33	2	33,33	2	16,67	1	0	0	16,67	1
FRENGT7	6	100,00	6	0,00	0	0,00	0	0	0	0,00	0
FRENGT8	4	25,00	1	50,00	2	0,00	0	0	0	25,00	1
FRENGT9	6	50,00	3	0,00	0	0,00	0	0	0	50,00	3
FRENGT10	6	16,67	1	0,00	0	83,33	5	0	0	0,00	0
FRENGT11	1	100,00	1	0,00	0	0,00	0	0	0	0,00	0
FRENGT12	5	0,00	0	0,00	0	100,00	5	0	0	0,00	0
Group Mean		59,38		10,76		17,71		0,00		12,15	

Table 4.2.7 Accomplishments (FRENGT)

Group	ACH (Total Observed Types)	Form									
		PRES		PROG		PAST		P PROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
FRENGT1	14	71,43	10	0,00	0	21,43	3	0	0	7,14	1
FRENGT2	15	46,67	7	13,33	2	6,67	1	0	0	33,33	5
FRENGT3	16	81,25	13	0,00	0	6,25	1	0	0	12,50	2
FRENGT4	13	84,62	11	7,69	1	0,00	0	0	0	7,69	1
FRENGT5	11	90,91	10	0,00	0	0,00	0	0	0	9,09	1
FRENGT6	11	63,64	7	18,18	2	18,18	2	0	0	0,00	0
FRENGT7	16	68,75	11	6,25	1	0,00	0	0	0	25,00	4
FRENGT8	15	6,67	1	13,33	2	20,00	3	0	0	60,00	9
FRENGT9	13	92,31	12	0,00	0	7,69	1	0	0	0,00	0
FRENGT10	15	0,00	0	0,00	0	93,33	14	0	0	6,67	1
FRENGT11	3	66,67	2	0,00	0	0,00	0	0	0	33,33	1
FRENGT12	14	0,00	0	0,00	0	85,71	12	0	0	14,29	2
Group Mean		56,07		4,90		21,61		0,00		17,42	

Table 4.2.8 Achievements (FRENGT)

4.2.3 CATENGS

Group	ST (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENGS1	3	0,00	0	0,00	0	100,00	3	0,00	0	0,00	0
CATENGS2	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
CATENGS3	2	0,00	0	0,00	0	50,00	1	0,00	0	50,00	1
CATENGS4	3	0,00	0	0,00	0	100,00	3	0,00	0	0,00	0
CATENGS5	2	100,00	2	0,00	0	0,00	0	0,00	0	0,00	0
CATENGS6	4	0,00	0	0,00	0	100,00	4	0,00	0	0,00	0
CATENGS7	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
CATENGS8	4	0,00	0	0,00	0	75,00	3	0,00	0	25,00	1
CATENGS9	6	0,00	0	16,67	1	66,67	4	16,67	1	0,00	0
CATENGS10	1	0,00	0	0,00	0	100,00	1	0,00	0	0,00	0
CATENGS11	2	100,00	2	0,00	0	0,00	0	0,00	0	0,00	0
CATENGS12	2	50,00	1	0,00	0	0,00	0	50,00	1	0,00	0
Group Mean		20,83		1,39		65,97		5,56		6,25	

Table 4.2.9 States (CATENGS)

Group	ACT (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENGS1	8	25,00	2	0,00	0	50,00	4	25,00	2	0,00	0
CATENGS2	6	0,00	0	0,00	0	50,00	3	50,00	3	0,00	0
CATENGS3	6	0,00	0	0,00	0	33,33	2	66,67	4	0,00	0
CATENGS4	2	0,00	0	0,00	0	50,00	1	50,00	1	0,00	0
CATENGS5	6	66,67	4	33,33	2	0,00	0	0,00	0	0,00	0
CATENGS6	5	0,00	0	0,00	0	40,00	2	60,00	3	0,00	0
CATENGS7	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
CATENGS8	9	0,00	0	0,00	0	22,22	2	66,67	6	11,11	1
CATENGS9	9	22,22	2	0,00	0	44,44	4	33,33	3	0,00	0
CATENGS10	4	0,00	0	0,00	0	25,00	1	75,00	3	0,00	0
CATENGS11	9	66,67	6	33,33	3	0,00	0	0,00	0	0,00	0
CATENGS12	4	25,00	1	50,00	2	0,00	0	0,00	0	25,00	1
Group Mean		17,13		9,72		34,58		35,56		3,01	

Table 4.2.10 Activities (CATENGS)

Group	ACC (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENG1	1	0,00	0	0,00	0	100,00	1	0	0	0,00	0
CATENG2	5	0,00	0	0,00	0	80,00	4	20	1	0,00	0
CATENG3	3	0,00	0	0,00	0	100,00	3	0	0	0,00	0
CATENG4	4	0,00	0	0,00	0	100,00	4	0	0	0,00	0
CATENG5	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
CATENG6	4	0,00	0	0,00	0	50,00	2	50	2	0,00	0
CATENG7	3	0,00	0	0,00	0	100,00	3	0	0	0,00	0
CATENG8	5	0,00	0	0,00	0	100,00	5	0	0	0,00	0
CATENG9	4	25,00	1	0,00	0	75,00	3	0	0	0,00	0
CATENG10	3	0,00	0	0,00	0	100,00	3	0	0	0,00	0
CATENG11	3	66,67	2	0,00	0	33,33	1	0	0	0,00	0
CATENG12	3	33,33	1	66,67	2	0,00	0	0	0	0,00	0
Group Mean		18,75		5,56		69,86		5,83		0,00	

Table 4.2.11 Accomplishments (CATENGs)

Group	ACH (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENG1	6	16,67	1	0,00	0	83,33	5	0,00	0	0,00	0
CATENG2	12	0,00	0	0,00	0	91,67	11	0,00	0	8,33	1
CATENG3	8	0,00	0	0,00	0	100,00	8	0,00	0	0,00	0
CATENG4	15	6,67	1	0,00	0	86,67	13	0,00	0	6,67	1
CATENG5	10	90,00	9	0,00	0	0,00	0	0,00	0	10,00	1
CATENG6	9	0,00	0	0,00	0	77,78	7	11,11	1	11,11	1
CATENG7	6	0,00	0	0,00	0	100,00	6	0,00	0	0,00	0
CATENG8	8	0,00	0	0,00	0	75,00	6	0,00	0	25,00	2
CATENG9	10	20,00	2	0,00	0	80,00	8	0,00	0	0,00	0
CATENG10	8	12,50	1	0,00	0	87,50	7	0,00	0	0,00	0
CATENG11	9	77,78	7	0,00	0	22,22	2	0,00	0	0,00	0
CATENG12	7	57,14	4	14,29	1	14,29	1	0,00	0	14,29	1
Group Mean		23,40		1,19		68,20		0,93		6,28	

Table 4.2.12 Achievements (CATENGs)

4.2.4 CATENGT

Group	ST (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENGT1	5	0,00	0	0,00	0	100,00	5	0,00	0	0,00	0
CATENGT2	3	0,00	0	0,00	0	100,00	3	0,00	0	0,00	0
CATENGT3	4	75,00	3	0,00	0	25,00	1	0,00	0	0,00	0
CATENGT4	5	0,00	0	0,00	0	100,00	5	0,00	0	0,00	0
CATENGT5	4	0,00	0	0,00	0	100,00	4	0,00	0	0,00	0
CATENGT6	3	100,00	3	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT7	3	0,00	0	0,00	0	100,00	3	0,00	0	0,00	0
CATENGT8	3	100,00	3	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT9	4	0,00	0	0,00	0	100,00	4	0,00	0	0,00	0
CATENGT10	3	100,00	3	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT11	7	0,00	0	0,00	0	85,71	6	14,29	1	0,00	0
CATENGT12	7	0,00	0	0,00	0	85,71	6	14,29	1	0,00	0
Group Mean		31,25		0,00		66,37		2,38		0,00	

Table 4.2.13 States (CATENGT)

Group	ACT (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENGT1	11	0,00	0	0,00	0	27,27	3	72,73	8	0,00	0
CATENGT2	5	0,00	0	0,00	0	40,00	2	60,00	3	0,00	0
CATENGT3	4	25,00	1	75,00	3	0,00	0	0,00	0	0,00	0
CATENGT4	10	0,00	0	0,00	0	10,00	1	90,00	9	0,00	0
CATENGT5	7	0,00	0	0,00	0	42,86	3	57,14	4	0,00	0
CATENGT6	9	55,56	5	33,33	3	0,00	0	0,00	0	11,11	1
CATENGT7	9	0,00	0	0,00	0	88,89	8	11,11	1	0,00	0
CATENGT8	2	100,00	2	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT9	10	10,00	1	0,00	0	20,00	2	60,00	6	10,00	1
CATENGT10	4	75,00	3	0,00	0	0,00	0	25,00	1	0,00	0
CATENGT11	9	0,00	0	0,00	0	55,56	5	44,44	4	0,00	0
CATENGT12	4	0,00	0	0,00	0	25,00	1	75,00	3	0,00	0
Group Mean		22,13		9,03		25,80		41,29		1,76	

Table 4.2.14 Activities (CATENGT)

Group	ACC (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENGT1	7	0,00	0	0	0	71,43	5	14,29	1	14,29	1
CATENGT2	8	0,00	0	0	0	37,50	3	37,50	3	25,00	2
CATENGT3	4	75,00	3	0	0	0,00	0	25,00	1	0,00	0
CATENGT4	5	0,00	0	0	0	80,00	4	0,00	0	20,00	1
CATENGT5	9	0,00	0	0	0	77,78	7	0,00	0	22,22	2
CATENGT6	5	80,00	4	20	1	0,00	0	0,00	0	0,00	0
CATENGT7	4	0,00	0	0	0	100,00	4	0,00	0	0,00	0
CATENGT8	1	100,00	1	0	0	0,00	0	0,00	0	0,00	0
CATENGT9	5	20,00	1	0	0	40,00	2	40,00	2	0,00	0
CATENGT10	3	100,00	3	0	0	0,00	0	0,00	0	0,00	0
CATENGT11	8	0,00	0	0	0	100,00	8	0,00	0	0,00	0
CATENGT12	3	0,00	0	0	0	100,00	3	0,00	0	0,00	0
Group Mean		31,25		1,67		50,56		9,73		6,79	

Table 4.2.15 Accomplishments (CATENGT)

Group	ACH (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
CATENGT1	12	0,00	0	0,00	0	100,00	12	0	0	0,00	0
CATENGT2	9	0,00	0	0,00	0	88,89	8	0	0	11,11	1
CATENGT3	11	90,91	10	0,00	0	0,00	0	0	0	9,09	1
CATENGT4	6	0,00	0	0,00	0	100,00	6	0	0	0,00	0
CATENGT5	10	0,00	0	0,00	0	80,00	8	0	0	20,00	2
CATENGT6	13	76,92	10	15,38	2	0,00	0	0	0	7,70	1
CATENGT7	7	0,00	0	0,00	0	100,00	7	0	0	0,00	0
CATENGT8	7	100,00	7	0,00	0	0,00	0	0	0	0,00	0
CATENGT9	5	0,00	0	0,00	0	60,00	3	0	0	40,00	2
CATENGT10	13	69,23	9	0,00	0	0,00	0	0	0	30,77	4
CATENGT11	13	7,69	1	0,00	0	84,62	11	0	0	7,69	1
CATENGT12	9	0,00	0	0,00	0	100,00	9	0	0	0,00	0
Group Mean		28,73		1,28		59,46		0,00		10,53	

Table 4.2.16 Achievements (CATENGT)

4.2.5 ENG

Group	ST (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
ENG1	3	100,00	3	0,00	0	0,00	0	0	0	0,00	0
ENG2	4	75,00	3	25,00	1	0,00	0	0	0	0,00	0
ENG3	9	55,56	5	11,11	1	33,33	3	0	0	0,00	0
ENG4	3	0,00	0	0,00	0	100,00	3	0	0	0,00	0
ENG5	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
ENG6	3	100,00	3	0,00	0	0,00	0	0	0	0,00	0
ENG7	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
ENG8	5	80,00	4	20,00	1	0,00	0	0	0	0,00	0
ENG9	3	0,00	0	0,00	0	100,00	3	0	0	0,00	0
ENG10	2	100,00	2	0,00	0	0,00	0	0	0	0,00	0
ENG11	4	100,00	4	0,00	0	0,00	0	0	0	0,00	0
ENG12	6	66,67	4	0,00	0	33,33	2	0	0	0,00	0
Group Mean		73,10		4,68		22,22		0,00		0,00	

Table 4.2.17 States (ENG)

Group	ACT (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
ENG1	9	66,67	6	22,22	2	0,00	0	11,11	1	0,00	0
ENG2	6	16,67	1	83,33	5	0,00	0	0,00	0	0,00	0
ENG3	16	31,25	5	31,25	5	12,50	2	25,00	4	0,00	0
ENG4	6	0,00	0	0,00	0	50,00	3	50,00	3	0,00	0
ENG5	6	33,33	2	66,67	4	0,00	0	0,00	0	0,00	0
ENG6	14	57,14	8	42,86	6	0,00	0	0,00	0	0,00	0
ENG7	9	77,78	7	11,11	1	0,00	0	11,11	1	0,00	0
ENG8	8	50,00	4	50,00	4	0,00	0	0,00	0	0,00	0
ENG9	7	0,00	0	0,00	0	85,71	6	14,29	1	0,00	0
ENG10	13	46,15	6	23,08	3	7,69	1	23,08	3	0,00	0
ENG11	5	80,00	4	20,00	1	0,00	0	0,00	0	0,00	0
ENG12	8	50,00	4	50,00	4	0,00	0	0,00	0	0,00	0
Group Mean		42,42		33,38		12,99		11,22		0,00	

Table 4.2.18 Activities (ENG)

Group	ACC (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
ENG1	4	75,00	3	25,00	1	0,00	0	0,00	0	0,00	0
ENG2	8	50,00	4	50,00	4	0,00	0	0,00	0	0,00	0
ENG3	5	60,00	3	20,00	1	20,00	1	0,00	0	0,00	0
ENG4	6	0,00	0	0,00	0	100,00	6	0,00	0	0,00	0
ENG5	4	100,00	4	0,00	0	0,00	0	0,00	0	0,00	0
ENG6	10	50,00	5	30,00	3	10,00	1	0,00	0	10,00	1
ENG7	3	100,00	3	0,00	0	0,00	0	0,00	0	0,00	0
ENG8	6	33,33	2	33,33	2	16,67	1	0,00	0	16,67	1
ENG9	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
ENG10	8	87,50	7	0,00	0	12,50	1	0,00	0	0,00	0
ENG11	8	100,00	8	0,00	0	0,00	0	0,00	0	0,00	0
ENG12	5	80,00	4	20,00	1	0,00	0	0,00	0	0,00	0
Group Mean		61,32		14,86		21,60		0,00		2,22	

Table 4.2.19 Accomplishments (ENG)

Group	ACH (Total Observed Types)	Form									
		PRES		PROG		PAST		PPROG		OTHER	
		%	Observed types	%	Observed types	%	Observed types	%	Observed types	%	Observed types
ENG1	10	60,00	6	10,00	1	20,00	2	0,00	0	10,00	1
ENG2	16	75,00	12	0,00	0	0,00	0	0,00	0	25,00	4
ENG3	22	40,91	9	9,09	2	50,00	11	0,00	0	0,00	0
ENG4	10	0,00	0	0,00	0	90,00	9	10,00	1	0,00	0
ENG5	14	71,43	10	0,00	0	21,43	3	0,00	0	7,14	1
ENG6	12	75,00	9	0,00	0	8,33	1	0,00	0	16,67	2
ENG7	16	75,00	12	0,00	0	18,75	3	0,00	0	6,25	1
ENG8	14	64,29	9	14,29	2	21,43	3	0,00	0	0,00	0
ENG9	13	0,00	0	0,00	0	100,00	13	0,00	0	0,00	0
ENG10	16	93,75	15	0,00	0	6,25	1	0,00	0	0,00	0
ENG11	13	100,00	13	0,00	0	0,00	0	0,00	0	0,00	0
ENG12	9	88,89	8	0,00	0	11,11	1	0,00	0	0,00	0
Group Mean		62,02		2,78		28,94		0,83		5,42	

Table 4.2.20 Achievements (ENG)

Appendix 5: Group Means for the Discourse Hypothesis

5.1 FRENGS

Group	FWD (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	26	34,62	9	7,69	2	57,69	15	0	0
FRENGS2	27	0,00	0	0,00	0	100,00	27	0	0
FRENGS3	27	100,00	27	0,00	0	0,00	0	0	0
FRENGS4	20	80,00	16	20,00	4	0,00	0	0	0
FRENGS5	20	85,00	17	15,00	3	0,00	0	0	0
FRENGS6	22	54,55	12	36,36	8	9,09	2	0	0
FRENGS7	33	3,03	1	0,00	0	93,94	31	3,03	1
FRENGS8	21	100,00	21	0,00	0	0,00	0	0	0
FRENGS9	21	0,00	0	0,00	0	100,00	21	0	0
FRENGS10	20	30,00	6	30,00	6	40,00	8	0	0
FRENGS11	20	0,00	0	0,00	0	100,00	20	0	0
FRENGS12	20	85,00	17	15,00	3	0,00	0	0	0
Group Mean		47,68		10,34		41,73		0,25	

Table 5.1. FWD moves (FRENGS)

Group	SIDE (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	14	21,43	3	14,29	2	42,86	6	21,43	3
FRENGS2	20	0,00	0	0,00	0	75,00	15	25,00	5
FRENGS3	14	71,43	10	21,43	3	7,14	1	0,00	0
FRENGS4	17	41,18	7	58,82	10	0,00	0	0,00	0
FRENGS5	18	44,44	8	55,56	10	0,00	0	0,00	0
FRENGS6	18	22,22	4	77,78	14	0,00	0	0,00	0
FRENGS7	15	0,00	0	0,00	0	80,00	12	20,00	3
FRENGS8	8	37,50	3	62,50	5	0,00	0	0,00	0
FRENGS9	11	0,00	0	0,00	0	54,55	6	45,45	5
FRENGS10	18	27,78	5	50,00	9	22,22	4	0,00	0
FRENGS11	9	0,00	0	0,00	0	77,78	7	22,22	2
FRENGS12	13	69,23	9	30,77	4	0,00	0	0,00	0
Group Mean		27,93		30,93		29,96		11,18	

Table 5.2. SIDE moves (FRENGS)

Group	BACK (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGS1	3	0,00	0	0,00	0	0,00	0	0	0	100,00	3
FRENGS2	1	0,00	0	0,00	0	0,00	0	0	0	100,00	1
FRENGS3	1	0,00	0	0,00	0	100,00	1	0	0	0,00	0
FRENGS4	6	0,00	0	0,00	0	83,33	5	0	0	16,67	1
FRENGS5	2	0,00	0	0,00	0	100,00	2	0	0	0,00	0
FRENGS6	10	0,00	0	0,00	0	50,00	5	0	0	50,00	5
FRENGS7	4	0,00	0	0,00	0	0,00	0	0	0	100,00	4
FRENGS8	6	0,00	0	0,00	0	100,00	6	0	0	0,00	0
FRENGS9	4	0,00	0	0,00	0	0,00	0	0	0	100,00	4
FRENGS10	2	0,00	0	0,00	0	100,00	2	0	0	0,00	0
FRENGS11	3	0,00	0	0,00	0	33,33	1	0	0	66,67	2
FRENGS12	4	0,00	0	0,00	0	75,00	3	0	0	25,00	1
Group Mean		0,00		0,00		53,47		0,00		46,53	

Table 5.3. BACK moves (FRENGS)

5.2 FRENGT

Group	FWD (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	31	96,77	30	0,00	0	3,23	1	0	0	0,00	0
FRENGT2	23	91,30	21	8,70	2	0,00	0	0	0	0,00	0
FRENGT3	38	94,74	36	5,26	2	0,00	0	0	0	0,00	0
FRENGT4	24	95,83	23	4,17	1	0,00	0	0	0	0,00	0
FRENGT5	25	84,00	21	16,00	4	0,00	0	0	0	0,00	0
FRENGT6	21	57,14	12	38,10	8	4,76	1	0	0	0,00	0
FRENGT7	32	84,38	27	12,50	4	0,00	0	0	0	3,13	1
FRENGT8	21	23,81	5	61,90	13	9,52	2	0	0	4,76	1
FRENGT9	28	82,14	23	10,71	3	3,57	1	0	0	3,57	1
FRENGT10	32	3,13	1	0,00	0	96,88	31	0	0	0,00	0
FRENGT11	8	87,50	7	12,50	1	0,00	0	0	0	0,00	0
FRENGT12	52	25,00	13	0,00	0	75,00	39	0	0	0,00	0
Group Mean		68,81		14,15		16,08		0,00		0,95	

Table 5.4. FWD moves (FRENGT)

Group	SIDE (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	19	84,21	16	10,53	2	0,00	0	5,26	1
FRENGT2	13	61,54	8	38,46	5	0,00	0	0,00	0
FRENGT3	14	85,71	12	14,29	2	0,00	0	0,00	0
FRENGT4	16	50,00	8	50,00	8	0,00	0	0,00	0
FRENGT5	12	75,00	9	25,00	3	0,00	0	0,00	0
FRENGT6	27	29,63	8	66,67	18	3,70	1	0,00	0
FRENGT7	28	82,14	23	17,86	5	0,00	0	0,00	0
FRENGT8	28	35,71	10	64,29	18	0,00	0	0,00	0
FRENGT9	17	82,35	14	17,65	3	0,00	0	0,00	0
FRENGT10	20	0,00	0	20,00	4	55,00	11	25,00	5
FRENGT11	12	91,67	11	8,33	1	0,00	0	0,00	0
FRENGT12	43	0,00	0	0,00	0	95,35	41	4,65	2
Group Mean		56,50		27,76		12,84		2,91	

Table 5.5. SIDE moves (FRENGT)

Group	BACK (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
FRENGT1	5	0,00	0	0,00	0	80,00	4	0,00	0	20,00	1
FRENGT2	12	0,00	0	0,00	0	16,67	2	0,00	0	83,33	10
FRENGT3	4	0,00	0	0,00	0	25,00	1	0,00	0	75,00	3
FRENGT4	3	0,00	0	0,00	0	0,00	0	33,33	1	66,67	2
FRENGT5	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
FRENGT6	7	0,00	0	0,00	0	71,43	5	0,00	0	28,57	2
FRENGT7	4	0,00	0	0,00	0	0,00	0	0,00	0	100,00	4
FRENGT8	20	0,00	0	0,00	0	15,00	3	0,00	0	85,00	17
FRENGT9	7	0,00	0	0,00	0	14,29	1	0,00	0	85,71	6
FRENGT10	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
FRENGT11	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
FRENGT12	7	0,00	0	0,00	0	0,00	0	0,00	0	100,00	7
Group Mean		0,00		0,00		18,53		2,78		78,69	

Table 5.6. BACK moves (FRENGT)

5.3 CATENGS

Group	FWD (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGS1	18	16,67	3	0,00	0	77,78	14	5,56	1
CATENGS2	27	0,00	0	0,00	0	100,00	27	0,00	0
CATENGS3	19	0,00	0	0,00	0	100,00	19	0,00	0
CATENGS4	31	3,23	1	0,00	0	96,77	30	0,00	0
CATENGS5	22	100,00	22	0,00	0	0,00	0	0,00	0
CATENGS6	25	0,00	0	0,00	0	96,00	24	4,00	1
CATENGS7	15	0,00	0	0,00	0	100,00	15	0,00	0
CATENGS8	23	0,00	0	0,00	0	91,30	21	8,70	2
CATENGS9	26	19,23	5	0,00	0	76,92	20	3,85	1
CATENGS10	16	6,25	1	0,00	0	93,75	15	0,00	0
CATENGS11	22	77,27	17	4,55	1	13,64	3	4,55	1
CATENGS12	14	78,57	11	21,43	3	0,00	0	0,00	0
Group Mean		25,10		2,16		70,51		2,22	

Table 5.7 FWD moves (CATENGS)

Group	SIDE (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGS1	4	0,00	0	0,00	0	75,00	3	25,00	1
CATENGS2	11	0,00	0	0,00	0	63,64	7	36,36	4
CATENGS3	8	0,00	0	0,00	0	37,50	3	62,50	5
CATENGS4	6	0,00	0	0,00	0	50,00	3	50,00	3
CATENGS5	4	50,00	2	50,00	2	0,00	0	0,00	0
CATENGS6	15	0,00	0	0,00	0	60,00	9	40,00	6
CATENGS7	4	0,00	0	0,00	0	100,00	4	0,00	0
CATENGS8	11	0,00	0	0,00	0	63,64	7	36,36	4
CATENGS9	11	0,00	0	9,09	1	63,64	7	27,27	3
CATENGS10	5	0,00	0	0,00	0	20,00	1	80,00	4
CATENGS11	16	81,25	13	12,50	2	0,00	0	6,25	1
CATENGS12	5	60,00	3	40,00	2	0,00	0	0,00	0
Group Mean		15,94		9,30		44,45		30,31	

Table 5.8 SIDE moves (CATENGS)

Group	BACK (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENG S1	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
CATENG S2	5	0,00	0	0,00	0	40,00	2	0,00	0	60,00	3
CATENG S3	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
CATENG S4	3	0,00	0	0,00	0	66,67	2	0,00	0	33,33	1
CATENG S5	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
CATENG S6	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
CATENG S7	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
CATENG S8	4	0,00	0	0,00	0	0,00	0	0,00	0	100,00	4
CATENG S9	1	0,00	0	0,00	0	100,00	1	0,00	0	0,00	0
CATENG S10	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
CATENG S11	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
CATENG S12	3	0,00	0	0,00	0	33,33	1	0,00	0	66,67	2
Group Mean		0,00		0,00		37,78		0,00		62,22	

Table 5.9 BACK moves (CATENG S)

5.4 CATENG T

Group	FWD (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENG T1	44	2,27	1	0,00	0	93,18	41	4,55	2	0,00	0
CATENG T2	19	0,00	0	0,00	0	84,21	16	10,53	2	5,26	1
CATENG T3	17	94,12	16	0,00	0	5,88	1	0,00	0	0,00	0
CATENG T4	25	0,00	0	0,00	0	100,00	25	0,00	0	0,00	0
CATENG T5	27	0,00	0	0,00	0	88,89	24	7,41	2	3,70	1
CATENG T6	24	91,67	22	8,33	2	0,00	0	0,00	0	0,00	0
CATENG T7	28	0,00	0	0,00	0	100,00	28	0,00	0	0,00	0
CATENG T8	24	100,00	24	0,00	0	0,00	0	0,00	0	0,00	0
CATENG T9	23	8,70	2	0,00	0	82,61	19	8,70	2	0,00	0
CATENG T10	25	100,00	25	0,00	0	0,00	0	0,00	0	0,00	0
CATENG T11	45	2,22	1	0,00	0	97,78	44	0,00	0	0,00	0
CATENG T12	31	0,00	0	0,00	0	96,77	30	3,23	1	0,00	0
Group Mean		33,25		0,69		62,44		2,87		0,75	

Table 5.10 FWD moves (CATENG T)

Group	SIDE (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGT1	22	0,00	0	0,00	0	59,09	13	40,91	9
CATENGT2	19	0,00	0	0,00	0	47,37	9	52,63	10
CATENGT3	14	71,43	10	21,43	3	7,14	1	0,00	0
CATENGT4	30	0,00	0	0,00	0	56,67	17	43,33	13
CATENGT5	11	0,00	0	0,00	0	81,82	9	18,18	2
CATENGT6	13	61,54	8	38,46	5	0,00	0	0,00	0
CATENGT7	7	0,00	0	0,00	0	85,71	6	14,29	1
CATENGT8	3	100,00	3	0,00	0	0,00	0	0,00	0
CATENGT9	20	5,00	1	0,00	0	55,00	11	40,00	8
CATENGT10	5	80,00	4	0,00	0	0,00	0	20,00	1
CATENGT11	26	0,00	0	0,00	0	73,08	19	26,92	7
CATENGT12	14	0,00	0	0,00	0	71,43	10	28,57	4
Group Mean		26,50		4,99		44,78		23,74	

Table 5.11 SIDE moves (CATENGT)

Group	BACK (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
CATENGT1	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
CATENGT2	2	0,00	0	0,00	0	0,00	0	0,00	0	100,00	2
CATENGT3	2	0,00	0	0,00	0	0,00	0	50,00	1	50,00	1
CATENGT4	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
CATENGT5	3	0,00	0	0,00	0	0,00	0	33,33	1	66,67	2
CATENGT6	2	0,00	0	0,00	0	0,00	0	0,00	0	100,00	2
CATENGT7	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT8	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
CATENGT9	5	0,00	0	0,00	0	40,00	2	0,00	0	60,00	3
CATENGT10	4	0,00	0	0,00	0	0,00	0	0,00	0	100,00	4
CATENGT11	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
CATENGT12	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
Group Mean		0,00		0,00		4,44		9,26		86,30	

Table 5.12 BACK moves (CATENGT)

5.5 ENG

Group	FWD (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	21	95,24	20	4,76	1	0,00	0	0,00	0
ENG2	23	91,30	21	8,70	2	0,00	0	0,00	0
ENG3	35	68,57	24	5,71	2	25,71	9	0,00	0
ENG4	22	0,00	0	0,00	0	90,91	20	9,09	2
ENG5	19	89,47	17	10,53	2	0,00	0	0,00	0
ENG6	31	96,77	30	3,23	1	0,00	0	0,00	0
ENG7	25	100,00	25	0,00	0	0,00	0	0,00	0
ENG8	27	74,07	20	18,52	5	7,41	2	0,00	0
ENG9	28	0,00	0	0,00	0	100,00	28	0,00	0
ENG10	27	100,00	27	0,00	0	0,00	0	0,00	0
ENG11	32	96,88	31	3,13	1	0,00	0	0,00	0
ENG12	26	88,46	23	11,54	3	0,00	0	0,00	0
Group Mean		75,06		5,51		18,67		0,76	

Table 5.13 FWD moves (ENG)

Group	SIDE (Total observed tokens)	Form							
		PRES		PROG		PAST		PPROG	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	13	69,23	9	30,77	4	0,00	0	0,00	0
ENG2	21	47,62	10	52,38	11	0,00	0	0,00	0
ENG3	33	57,58	19	21,21	7	12,12	4	9,09	3
ENG4	9	0,00	0	0,00	0	77,78	7	22,22	2
ENG5	10	80,00	8	20,00	2	0,00	0	0,00	0
ENG6	18	55,56	10	44,44	8	0,00	0	0,00	0
ENG7	10	70,00	7	10,00	1	10,00	1	10,00	1
ENG8	23	56,52	13	43,48	10	0,00	0	0,00	0
ENG9	15	0,00	0	0,00	0	93,33	14	6,67	1
ENG10	17	70,59	12	17,65	3	0,00	0	11,76	2
ENG11	14	100,00	14	0,00	0	0,00	0	0,00	0
ENG12	15	66,67	10	26,67	4	6,67	1	0,00	0
Group Mean		56,15	112,00	22,22	50,00	16,66	27,00	4,98	9,00

Table 5.14 SIDE moves (ENG)

Group	BACK (Total observed tokens)	Form									
		PRES		PROG		PAST		PPROG		PERF/PPERF	
		%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens	%	Observed tokens
ENG1	4	0,00	0	0,00	0	50,00	2	25,00	1	25,00	1
ENG2	4	0,00	0	0,00	0	0,00	0	0,00	0	100,00	4
ENG3	11	0,00	0	0,00	0	90,91	10	9,09	1	0,00	0
ENG4	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00	0
ENG5	4	0,00	0	0,00	0	75,00	3	0,00	0	25,00	1
ENG6	5	0,00	0	0,00	0	40,00	2	0,00	0	60,00	3
ENG7	3	0,00	0	0,00	0	66,67	2	0,00	0	33,33	1
ENG8	3	0,00	0	0,00	0	100,00	3	0,00	0	0,00	0
ENG9	1	0,00	0	0,00	0	100,00	1	0,00	0	0,00	0
ENG10	4	0,00	0	0,00	0	75,00	3	25,00	1	0,00	0
ENG11	1	0,00	0	0,00	0	0,00	0	0,00	0	100,00	1
ENG12	2	0,00	0	0,00	0	100,00	2	0,00	0	0,00	0
Group Mean		0,00		0,00		63,42		5,37		31,21	

Table 5.15 BACK moves (ENG)

