Tense and Aspect in Romance Languages

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Tense and Aspect in Romance Languages:
Theoretical and applied perspectives
Edited by Dalila Ayoun and M. Rafael Salaberry

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in Romance Languages

Theoretical and applied perspectives

Edited by

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Acknowledgments

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The development of L2 tense-aspect
in the Romance languages

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The goal of this chapter is to substantiate the relevance and importance of studying tense/aspect systems in order to gain a better understanding of the acquisition of a second language (L2). To this end, we review some of the most prevalent hypotheses about tense-aspect development, and critically assess the outcome of the empirical studies carried out to provide support for each specific theoretical approach. The chapter is organized as follows. In the first section, we present an overview of tense-aspect marking in English and the Romance languages. In Section 2, we present a brief description of six major theoretical approaches to the development of L2 past tense verbal morphology. We divide the approaches according to the importance they place on the effect of the following factors: Pragmatic, semantic, textual, input, cognitive, and syntactic. We provide a critical review of empirical findings relevant for each hypothesis associated with each one of these factors. Finally, in Section 3, we selectively identify some potential theoretical and methodological challenges to the understanding of the L2 development of tense-aspect markers in the Romance languages.

1. The acquisition of tense-aspect morphology
in the Romance languages

1.1 The problem space

L1 English speakers learning a Romance language quickly realize that the morphological inflectional endings illustrating the perfective/imperfective distinc-

tions for past tense "have essentially the same meaning, but [...] do not seem to be used in the same way" (Binnick 1991:371; see also Lunn 1985). Whereas tense distinctions are easily identified and comprehended by native speakers of English, aspectual distinctions are less transparent. This is mostly because aspectual distinctions in English are not as consistently or explicitly marked on inflectional morphology as they are in Romance languages. In effect, the most important aspectual contrast in English is between the progressive and the perfective with the use of past progressive and simple past tense. The following example (from Comrie 1976) shows the clear aspectual contrasts in the use of the same verbal predicate:

(1)   John read that book yesterday; while he was reading it, the postman came.

In this sample sentence, the event of reading is represented in two different ways in each clause: 'read' represents the perfective past, while 'was reading' represents the past progressive. In contrast, the most important aspectual distinction in the Romance languages is between the perfective and the imperfective, as illustrated by French *passé composé* and *imparfait*, for instance. On the basis of the example in (1), we can conclude that English speakers have a basic conceptual knowledge of past tense aspectual distinctions and could, in principle, transfer that conceptual understanding to their evolving representation of a Romance language grammar. As a caveat, however, we need to point out that English speakers' conceptualization of aspectual distinctions in past tense is a more limited concept than the one embodied by Romance languages. For instance, Smith (1997:73) explains that "the two most common imperfectives are the general imperfective and the progressive. The former focuses intervals of all situation types; the latter applies only to non-statives [...]. The French *imparfait* exemplifies the general imperfective viewpoint; it is a past tense with imperfective aspectual value." Essentially, English speakers cannot typically use the progressive (the only marker of imperfectivity available to them) with statives (unmarked). In addition, combinations of aspectual meanings given by the use of the [+/–progressive] and [+/–perfective] meanings are more transparently expressed in Romance languages than in English. For instance, the following sentence in Spanish illustrates the conflation of the perfective and progressive aspectual meanings (from Comrie 1976):

(2)   *Toda la tarde   estuvieron entrando visitas.*
      All   the afternoon were-PERF arriving   visits
      'All afternoon long visitors kept arriving.'

Therefore, we cannot necessarily assume that all meanings conveyed by aspectual distinctions in the Romance languages (e.g., habitual versus progressive) will be readily apprehended by an English speaker learning any of the Romance languages. Nevertheless, it remains true that English speakers have a basic aspectual contrast represented by the simple past-past progressive contrast.

1.2 Defining and delimiting the concept of aspect

1.2.1 *Lexical aspect, Aktionsart and grammatical aspect*

Comrie (1976:3) defines aspect as the "way of viewing the internal temporal constituency of a situation": Beginning, middle, and end. Comrie argues further that aspect is concerned with situation-internal time, whereas tense is relative to situation-external time. Alternatively, Klein (1994) defines aspect as the contrast between Topic Time and Situation Time, whereas tense is defined as the contrast between Situation Time, and Time of the Utterance. Aspectual distinctions can be marked overtly (grammatical aspect and Aktionsart) or covertly (lexical aspect). Table 1 presents a summary of the main features of each one of these categories (based on Binnick 1991).

Lexical aspect represents the inherent lexical meaning of the verb as determined by the temporal features intrinsic in the semantics of the verbal predicate, including the semantic contribution of internal and external arguments and, according to some authors (e.g., Chung & Timberlake 1985; Smith 1997; Verkuyl 1999), adjuncts as well (see Section 3 below for an extended analysis). Vendler (1967) classified predicates into four types: States, activities, accomplishments and achievements. The following definitions of these categories are based on Comrie's (1976) reanalysis of Vendler's definitions:[1]

> States: no input of energy, undifferentiated period
> Activities: arbitrary beginning and end point (process), successive stages
> Accomplishments: durative and inherent end point
> Achievements: inherent end point, but no duration (punctual)

Table 1. Three different classifications of aspectual distinctions

Lexical aspect	Aktionsart	Grammatical aspect
Lexical	Lexical	Grammaticized
Unsystematic	Unsystematic	Systematic
Obligatory	Optional	Obligatory
Universal	Language specific	Language specific
Covert	Overt	Overt

Table 2. Classification of verbal predicates based on lexical aspectual class (from Andersen 1991)

States	Activities	Accomplishments	Achievements
have	run	paint a picture	recognize (sth.)
possess	walk	make a chair	realize (sth.)
desire	swim	build a house	find (sth.)
like	breathe	write a novel	win the race
want	pull	grow up	lose (sth.)

A few verbal predicates typically associated with specific lexical aspectual classes are listed in Table 2.

Aktionsart, the second category from Table 1 above, is represented by secondary modifications of basic verb meanings (Klein 1994:17), usually with the use of affixes and sometimes periphrastics. For instance, English predicates may be qualified aspectually by adding prepositions that do not alter the verb form and that are optional: 'Eat up', 'read through', etc. (Binnick 1991:207). German has similar examples: *Erblühen* (to start flowering: inchoative aspect), *blühen* (flowering) and *verblühen* (to wither: resultative aspect) (from Klein 1994). In the Romance languages, only Spanish uses a telic particle, *se*, to change the basic meaning of a verb overtly (Nishida 1994). For instance, in the following pair of sentences in Spanish the particle *se* introduces the same type of aspectual nuance of meaning exemplified in Germanic languages (examples are from Nishida 1994:426, 430):

(3) a. *Juan **se***   ***tomó***   *una copa de vino*
          Juan 3rd sg-particle took-PERF a glass of wine
          antes de acostarse.
          before to go to bed
          'Juan **drank up** a glass of wine before going to bed'.
     b. *Juan*   ***tomó***   *una copa de vino*
          Juan 3rd sg-particle took-PERF a glass of wine
          antes de acostarse.
          before to go to bed
     c. 'Juan **drank** a glass of wine before going to bed'.

The examples in (4) show that Spanish extends the use of the particle *se* to basic stative verbs as well:

(4) a. *Mi hermana y yo ya **nos** **sabemos** la*
         My sister and I already 2nd plu-particle know-PRES the
         lección.
         lesson
         'My sister and I already **know** the lesson'.
     b. *Mi hermana y yo ya **sabemos** la lección.*
         My sister and I already know-PRES the lesson
     c. 'My sister and I already **know** the lesson'.

(5) a. **Juan se tomó **vino** antes de acostarse*
         Juan 3rd sg-particle took-PERF wine before to go to bed
     b. **Mi hermana y yo ya nos sabemos **el***
         My sister and I already 2nd plu-particle know-PRES the
         español.
         Spanish

Finally, grammatical aspect (the third category in Table 1) is obligatorily en-
coded in the form of auxiliaries plus participles (e.g., *passé composé* in French),
inflectional morphology (*imperfecto-pretérito* in Spanish), periphrastics (pro-
gressive in English, French and Spanish), etc. Languages with rich inflectional
morphology such as Romance languages consistently carry obligatory markers
of tense-aspect contrasts in past tense illustrating the perfective-imperfective
contrast. It is important to mention that grammatical aspect is not necessarily
determined by the inherent lexical semantics of the verbal predicate because
more than one ending may be used with the same predicate. Thus in Span-
ish, *correr* 'to run' could be marked with perfective *corrió* or with imperfective
corría. Smith (1997) defines the selection of aspectual marking as a process
incorporating two distinct levels that are independent from each other: The sit-
uation type (verb + arguments + adverbials), and point-of-view aspect (POV).
The situation type represents the way humans perceive and categorize situa-
tions. It constitutes a covert category of grammar instantiated in all languages
(cf., cognitive concepts such as telicity). On the other hand, viewpoint aspect
refers to the partial or full view of a particular situation type as marked by an
overt grammatical morpheme (e.g., preterite and imperfect). Smith argues that
aspectual categories (i.e., lexical aspectual classes) are not language dependent,
but based on human cognitive abilities. Hence, aspect may be characterized
as a general cognitive phenomenon: Situation type (e.g., Reinhart 1984), or as
a language dependent phenomenon: Point-of-view aspect (e.g., Smith 1983,
1991; Smith & Weist 1986). This distinction is important to account for what
Dowty (1979) has called the 'Imperfective Paradox' (for further details see

Depraetere 1995; Landman 1992). For instance, whereas *cruzar la calle* 'to cross the street' may be defined as a telic event with a clear inherent end point (i.e., reaching the other end of the street), we could, in principle, think of a sentence that would make the actual reaching of the other end of the street impossible as in (6):

(6)   *La   mujer   cruzaba   la   calle   cuando fue   atropellada*
      The   woman   crossed-IMP   the   street   when   was-PERF   ran over
      por   un   camión
      by   a   truck
      'The woman was crossing the street when she was ran over by a truck.'

This paradox can be explained if we separate these two levels of compositionality: Telicity becomes a feature associated with lexical aspect, whereas boundedness is represented in grammatical aspect.

1.2.2 *Components of lexical aspectual values*

The concept of a division of verbal predicates into lexical aspectual classes has been adopted by researchers from a wide variety of backgrounds: From syntacticians (e.g., Tenny 1991) to semanticists (e.g., Dowty 1979) or philosophers (e.g., Verkuyl 1989). However, temporality is not only encoded in the lexical semantics of the verbal predicate, but also in components beyond the head of the verb phrase such as particles (e.g., 'to eat' vs. 'to eat up'), adverbials (e.g., 'Suddenly I was asleep'), etc. As a consequence, it is important to distinguish the combined effects of each of the elements that make up the temporal framework of verb phrases. For example, when the internal argument of an atelic verbal predicate is a count noun, the predicate is changed from atelic to telic.

(7)   a.   Mary smoked [cigarettes].   (–count noun: atelic)
      b.   Mary smoked [a cigarette].   (+count noun: telic)
      c.   He played sonatas.   (–count noun: atelic)
      d.   He played a sonata.   (+count noun: telic)

For the purpose of our analysis then, telic events correlate with countable nouns, whereas atelic events correlate with uncountable nouns (mass nouns and bare plurals). Finally, even the nature of the subject of the utterance (the external argument) may affect the inherent semantic aspectual value of the verb (e.g., Depraetere 1995; Langacker 1982; Maingueneau 1994). This is shown in the two classic examples in (8) and (9) borrowed from Smith (1997:4) and Mainguenau (1994:71), for English and French, respectively.

(8) a. [*Luc*] *a franchi le pont toute la matinée.* (TELIC)
          Luc has crossed-PERF the bridge all the morning
          'Luc crossed the bridge all morning long.'

   b. [*La foule*] *a franchi le pont toute la*
          the crowd has crossed-PERF the bridge all the
          matinée. (ATELIC)
          morning
          'The crowd crossed the bridge all morning long.'

(9) a. [A famous movie star] discovered that little spa for years. (TELIC)
   b. [Famous movie stars] discovered that little spa for years. (ATELIC)

For instance, in (8a), one may use world knowledge to surmise that Luc crossed the bridge several times during the morning, not that it took him the whole morning to cross the bridge. In example (8b), in contrast, it is reasonable to assume that it took a whole morning for the crowd to cross the same bridge (again, this is based on our knowledge of the world; see Klein 1994). The latter case represents the single crossing of many people, while the former case represents many crossings of a single person (see below for further analysis of distinctions between lexical and world knowledge).

1.2.3 *Semantic features*

The classification of lexical aspectual classes can also be made in terms of three basic semantic features: *Dynamicity, durativity* and *telicity*. In terms of telicity (from Greek *telos* meaning limit, end, or goal), states and activities are atelic because they do not have an inherent end point, whereas accomplishments and achievements are characterized as telic because they have an inherent end point. In turn, dynamicity contrasts stative versus non-stative verbs (activities, accomplishments and achievements), whereas durativity distinguishes non-durative punctual events (achievements) from durative events. For instance, Smith (1997: 22) explains that the feature "[Static] denotes an undifferentiated period; [Dynamic] denotes successive stages." These distinctions can be presented graphically as follows:

Schematization of semantic features

————————	[+Static]
. . . .	[+Dynamic]
. . . . X	[+Telic, +Durative]
X	[+Telic, +Punctual]

We need to point out, however, that the relevance of the distinction according to durativity is the most debatable of all three. For instance, in Mourelatos' (1981:193) classification, the major semantic feature that separates accomplishments from achievements is durativity although he adds that accomplishments and achievements should be integrated because "both are actions that involve a product, upshot, or outcome." Klein (1994) provides further theoretical justification for such a claim: Time is not discrete but dense. In this respect, no situation can be 'punctual' in the sense of being instantaneous (no duration) (see also Verkuyl 1989). Similarly, Dowty (1986) argues that achievements are punctual only in the framework of a narrative in which sequenced events in a story are not interrupted, but that nothing prevents accomplishments from becoming sequenced events in the story. At most, the punctual nature of achievements may be obtained as a matter of conventional interpretation of world knowledge, as argued above. Finally, recent L2 empirical data contradict the proposed theoretical distinction between accomplishment and achievement verbs as two separate categories of telic events (e.g., Bardovi-Harlig & Bergström 1996; Hasbún 1995; Ramsay 1990; Salaberry 1998).

While the distinction between accomplishments and achievements may be unsubstantiated, it does not seriously compromise the findings of previous studies because both categories share two important semantic features (i.e., dynamicity and telicity). A more problematic situation arises in the potential misclassification of achievements as statives. For instance, compare the sentences in (10a) and (10b):

(10) a. *En ese momento Juan supo   la   verdad*
          at that moment Juan knew-PERF the truth
          'At that moment Juan found out the truth.'   (*knew*, inceptive)
      b. *Juan sabía   la   verdad*
          Juan knew-IMP the truth
          'Juan knew the truth.'   (*knew*, imperfective)

The English translations show two alternative lexical choices: 'To find out' versus 'to know'. As noted by Bull (1965:170) "the Spaniard's [sic] way of organizing reality is [...] thoroughly disguised by the English translations." The use of the appropriate operational test for stative determines that the first instance of *saber* fails to qualify as a stative, whereas the second case of *saber* does represent a stative. The difference lies in the semantic contribution of the adverbial phrase 'at that moment' in (10a) but not in (10b). The adverbial in (10a) marks the topic time as the inception of the state (see Klein 1994, 1995). Its absence in (10b) renders the default reading of a stative (see above). Most importantly,

notice that the classification of lexical aspectual classes was not made based on morphological marking (*supo* versus *sabía*), but, rather, on the adjunct phrase that qualifies the basic form of the verbal predicate.

Finally, it appears that the telic-atelic distinction is the most stable semantic feature to determine lexical aspect (e.g., Dowty 1986; Hopper 1982; Maingueneau 1994; Olsen 1997; Smith 1991; Tenny 1991; Verkuyl 1993). Thus, Hopper (1982) argues that "the potential or real bounding of events in (this) discourse is a significant parameter in the strategies for formulating an utterance" (p. 6).[2] Similarly, Smith (1991:19) claims that the fact that "telicity is generally not open to aspectual choice is that humans see it as an essential property. Telicity is not, therefore, a property that can be shifted for purposes of emphasis and point of view."

(11) a. Mary walked [in the park].   (locative: atelic)
      b. Mary walked [to the park].   (directional: telic)

For example, if we interchange the prepositional phrase in sentence (11a), illustrating a locative PP, with the one of (11b), displaying a directional PP, the aspectual nature of the verb constellation will be fundamentally changed in terms of the telic nature of the verb, that is, from an activity to an accomplishment.

1.2.4 *The multivalence of lexical aspectual categories*

To make matters more complicated, verbal predicates may belong to more than one single lexical aspectual class depending on various contextual factors: The semantic multivalence of verbs. Mourelatos (1981) mentions how the verb *to understand,* commonly classified as a state, may also be categorized as an activity or as a telic event. Thus, in example (12) 'I'm understanding' functions as an activity verb (homogenous):

(12) I'm understanding more about quantum mechanics as each day goes by.

More dramatically, it may also become a telic event: It is punctual in example (15a), and it may be used as part of an imperative construction in (13b):

(13) a. Once Lisa understood (grasped) what Henry's intentions were, she
          lost all interest in him.
      b. Please understand (get the point)!

Despite Vendler's assertion that sensory verbs (e.g., 'to see') may not be characterized as processes (the question 'What are you doing?' renders an ungrammatical sentence in English: * 'I am seeing'), Mourelatos maintains that sensory occurrences may shift aspectual class depending on the context in which they

are embedded. We may have visual or auditory states (e.g., 'I see dimly'), visual or auditory processes (e.g., 'I'm hearing buzzing sounds'), and visual or auditory occurrences (e.g., 'I caught a glimpse of him'). That is to say, sensory occurrences – contra Vendler – may be classified in any type of aspectual class: State, activity or telic event. Therefore, a bottom-up approach may help researchers analyze how verbs dynamically contribute to, but not determine, the build-up of temporal structure. In other words, the argumental structure of the predicate does not determine the final grammaticized form of aspectual value.

Chung and Timberlake (1985: 214–218) propose that the shift in aspectual classes is determined by two main factors: (i) Dynamicity and (ii) telicity. First, any verb may be represented as dynamic or non-dynamic. For instance, to convert a process (14a, 15a) to a state, one needs to remove the sense of change or successive stages (14b), or present the verb as a property of its arguments (15b) (all examples are from Chung & Timberlake 1985: 214, 218):

(14)   a.   John is opening the window.
       b.   The window opens onto the garden.
(15)   a.   John is running a mile in six minutes.
       b.   John runs a six-minute mile.

On the other hand, to convert a stative verb (16a, 17a, 18a) to a process, one must add a sense of actual or possible change as in (16b), or present the subject of the sentence as an agent as in (17b), or modalize the concept of change as in (18b):

(16)   a.   I understand my problems.
       b.   I am understanding my problems more clearly every day.
(17)   a.   You are obnoxious.
       b.   You are being obnoxious.
(18)   a.   John lives with his parents.
       b.   John is living with his parents until he finds a place of his own.

Verbal predicates may also be presented as closed (telic event or inception and termination of state) or open (atelic event or stative). With respect to statives, Comrie (1976: 48–51) mentions that the start or end of a state is dynamic, "since for a state to be started or stopped something must come about to bring about the change into or out of the state." Similarly, Smith (1986) considers the inception of a state as an achievement verb, whereas Robison (1995) distinguishes the inceptive value of a stative from the stative itself with the introduction of a grid of six types of lexical aspectual classes. In Robison's clas-

Table 3. Classification of theoretical hypotheses

Underlying approach	Representative hypothesis
Pragmatic-communicative	Basilang speech hypothesis
Input-driven	Distributional bias hypothesis
Semantic factor	Aspect hypothesis
Narrative-contextual factor	Discourse hypothesis
Cognitive processes	Default past tense hypothesis
Syntactic factor	Minimalist hypothesis

sification, the inceptive value of states is considered to be a punctual stative.[3] In essence, the inception and termination of a state represent closed events. Finally, with respect to events (activities versus accomplishments and achievements), Dowty (1986) claims that he could not find any atelic verb which could not be interpreted as a telic verb in at least some special sense of the context.

2. Theoretical approaches to the analysis of aspect in L2 acquisition

The study of the development of aspectual distinctions in the Romance languages (and other languages for that matter) has been conducted according to a number of hypotheses that are continually revised and adapted as more empirical data become available. In this section we will review the following six well-known hypotheses that have been tested with empirical data (Table 3).

We hasten to stress that the division of hypotheses according to various theoretical criteria does not necessarily make them incompatible with each other. As a matter of fact, all the above-mentioned hypotheses could be in complementary distribution when we factor in specific research design criteria such as age of acquisition, learning setting, types of task, mode of production, etc. We leave the discussion of possible interaction among hypotheses for the last section of this paper. The following brief summary of the above mentioned hypotheses, while not exhaustive, is intended to provide readers with a basic framework of analysis of the state-of-the-art research on tense-aspect development in the Romance languages.

2.1 Pragmatic factors: Non-morphological marking of past tense aspect

The analysis of data from the majority of studies with naturalistic learners reveals that most learners mark temporality by means of linguistic and extralinguistic devices during the beginning stages of acquisition. More specif-

ically, learners immersed in a naturally communicative environment generally do not mark tense and aspectual contrasts through verbal morphology (e.g., Dietrich, Klein, & Noyau 1995; Meisel 1987; Perdue & Klein 1992; Sato 1990; Schumann 1987; Trévise 1987; Véronique 1987). This is not unexpected since "adults [. . .] do not deliberately attend to form, especially redundant and communicatively less important grammatical features" (Schmidt 1990: 145; see also Bley-Vroman 1991; Schmidt 1995; Zalewski 1993). When the encoding of temporal reference is not explicitly represented with morphological markers (e.g., preterite or imperfect in Spanish), the learner may rely on pragmatic devices of two types: (a) Discourse organization principles, and (b) Implicit reference. The discourse organization principles are represented by the principle of chronological order: The order of reported events reflects the order of actual events (Labov 1972); and the bracketing principle: Temporal embeddings which are not elements of the temporal discourse organization, that is, background information. On the other hand, temporality may also be conveyed by means of implicit reference: Inherent temporal reference (lexical semantics), and associative temporal reference. Perdue and Klein (1992), for instance, argue that during the first stages of L2 acquisition learners develop a basic variety of the target language that represents an equilibrium between semantic, pragmatic and phrasal constraints. More importantly, Perdue and Klein point out that some natural language learners fossilize at this stage, while others develop further their basic variety to make it conform to target language standards. The learners who continue developing their L2 system are the ones who perceive lexical and structural inadequacies between the basic variety and the target language forms. In essence, naturalistic learners seem to be especially affected by the particular contextual features of natural discourse: The use of verbal morphology is not necessary to establish communication in the L2.

Many of the empirical studies of naturalistic L2 acquisition follow a concept-oriented methodology. The main advantage of this approach is that researchers can analyze what learners can do with the limited, but growing, linguistic resources they have at their disposal. For instance, Noyau (1984, 1990) and Trévise (1987) analyzed narratives in French produced by 7 Spanish speakers and showed that learners with little or no verbal morphology could build highly complex narrative structures (summary, background, foreground, reported speech, plot, and backmove) by using both linguistic and nonlinguistic devices. Among the earlier studies on the acquisition of verbal morphology conducted with naturalistic learners, Schumann (1987) documented the lack of morphological marking of aspectual distinctions during what he labels as the basilang stage. Schumann analyzed the interlanguage of five speakers of

three different languages (one Chinese, one Japanese and three Spanish) who had been living in the United States for at least 10 years at the time of the study. The subjects had learnt English without formal instruction. Despite their lengthy residence in the United States, the interlanguage of these nonnative speakers was quite marginal, if comprehensible at all. Schumann argues that basilang speech "is acquired through the pragmatic functions of the mind's general cognitive mechanisms and therefore does not attain morphosyntactic regularity" (p. 39). Basilang speech constitutes a system of communication: The formal linguistic features of the interlanguage will develop to the extent that communication does not break down. For instance, morphosyntactic aspectual markers will not be a necessary feature of this type of interlanguage insofar as other temporal markers fulfill the function of marking aspect in some other way. Schumann proposes that learners at the basilang stage mark temporal reference with four basic linguistic tools: (1) Adverbials, (2) Serialization (sequence of utterances reflects actual temporal order of events), (3) Calendric reference, and (4) Implicit reference (temporal reference is inferred from context). Schumann's data show that ten or more years of residence in the United States are not enough to learn to use past tense inflectional morphology in English. In relative terms, classroom learners learn faster than natural learners do.

A more dramatic example of the lack of development of morphosyntactic features is demonstrated in the case of a combination of source and target language that share similar morphosyntactic means. For example, Trévise (1987) documented the case of Spanish native speaker who after three and a half years living in France used "a single past tense form, /e/, which is not an *imparfait* or *passé composé*," and […] only two verbs – *donner* (to give) and *payer* (to pay) – that were used in the two forms of past tense (*passé composé* and *imparfait*). The Spanish speaker avoided use of past tense morphological marking in French by using periphrastics such as *venir de* – a strategic move which "does not hamper comprehension at all" (p. 235). *Venir de* is literally translated as 'to arrive from (doing something).' That is, Trevise's subject conveyed tense and aspectual information with the use of adverbials, periphrastics, sequential information, interviewer scaffolding, etc. To further investigate this topic, Salaberry (this volume) analyzes empirical data on the acquisition of L3 Portuguese among English-Spanish bilinguals, whereas Comajoan (this volume) reviews data from L2 Spanish speakers learning Catalan as an L3.

2.2   Semantic factors: The Lexical Aspect Hypothesis

The theoretical proposal that has generated, directly or indirectly, the most amount of L2 empirical research among instructed learners to date, is the Lexical Aspect Hypothesis (LAH), also labeled as the Aspect Hypothesis, the Primacy of Aspect Hypothesis (e.g., Robison 1990, 1995), or the Redundant Marking Hypothesis (e.g., Shirai & Kurono 1998). To the best of our knowledge, no principled difference distinguishes the above-mentioned labels. Hence, they will all be considered to be a single theoretical proposal. The LAH is based on arguments initially made for the evolution of linguistic systems across time and the development of L1 acquisition. For instance, Bybee (1985), Bybee and Dahl (1989), and Frawley (1992) observed that in emergent linguistic systems, aspect markers precede the appearance of tense markers. Further evidence for this developmental trend comes from the early L1 acquisition studies carried out during the 70s and 80s (e.g., Antinucci & Miller 1976; Bloom, Lifter, & Hafitz 1980; Bronkart & Sinclair 1973; Brown 1973; Rispoli & Bloom 1985; Smith & Weist 1986). Following up on that line of research, Andersen (1986, 1991) was the first researcher to use the classification of lexical aspectual classes as the theoretical framework for the analysis of the development of verbal morphology among second language learners. Andersen's analysis was based on data collected from adolescent natural language learners (two siblings) two years apart. For instance, during the first time of data collection, Andersen noted that 50% of the verbs used by one of the learners in contexts requiring obligatory past tense perfective marking were correctly marked with the preterite. In contrast, none of the verbs requiring imperfective carried any mark of grammatical aspect. During the second stage of data collection, two years later, the same learner used the preterite in 88% of all obligatory cases which required perfective aspect, whereas the imperfect was used in 43% of all obligatory cases.

Out of this research emerged the LAH, which attempts to explain the observed correlation between tense/aspect morphemes and lexical aspectual classes according to the *Relevance Principle* (i.e., aspect is more relevant to the meaning of the verb than tense, mood, or agreement are) and the *Congruence Principle* (i.e., learners choose the morpheme whose aspectual meaning is most congruent with the aspectual meaning of the verb). Essentially, the LAH states that, in early stages of acquisition, verbal morphology encodes only inherent aspectual distinctions (i.e., it does not encode tense or grammatical aspect). Furthermore, Andersen proposed a sequence of eight developmental stages for the acquisition of Spanish as a second language although he cautioned other researchers that he obtained confirmatory empirical evidence for only four of

the eight proposed stages of development (his original study, briefly described above, was based on the analysis of data from two adolescent native English speakers learning Spanish in an untutored setting). The system of eight developmental stages predicts that perfective markers will appear first and spread from punctual verbs (when achievements are first marked with preterite in stage 2) to stative verbs, whereas the use of imperfective markers will appear later and spread from stative verbs (starting during stage 3) to punctual verbs. Although the LAH has been supported by several empirical studies crosslinguistically (e.g., Bardovi-Harlig & Reynolds 1995; Robison 1995 for English; Hasbún 1995 for Spanish; Salaberry 1998 for French; Shirai & Kurono 1998 for Japanese), a number of questions have been raised, sometimes in the same studies that appear to support it. These questions range from theoretical issues (e.g., the notion of the spread of morphological markers remains a somewhat metaphorical and not properly substantiated concept) to methodological ones (written narratives appear to be more likely to support the claims of the hypothesis than oral narratives).

For instance, Hasbún's (1995) findings cast some doubts on the validity of the Lexical Aspect Hypothesis. She analyzed written data from 80 L1 English speakers enrolled in four different levels of Spanish instruction (first to fourth year). Students watched an excerpt from the film *Modern Times* twice and they were later asked to narrate the video in writing, by starting with the phrase 'Once upon a time…' to avoid the use of the historical present. Native speakers, however, used the historical present, and did so to a larger extent than advanced nonnative speakers. Furthermore, Hasbún's results showed that among native and nonnative speakers, the distribution of preterite-imperfect with accomplishments and achievements remained proportional. Finally, the data did not show a spread of past tense marking (preterite) from telic (achievements and accomplishments) to atelic events (activity verbs) and later to stative verbs. In fact, the marking of tense distinction occurred in group 2 across all categories of aspectual classes. Finally, the first uses of past tense marking (in group 1) did not occur with achievements, but mostly with statives (followed by accomplishments and activities). Given that the LAH was the harbinger of the study of the development of tense-aspect marking (at least in research conducted by U.S.-based researchers), most chapters in this volume will make direct or indirect reference to it.

2.3 Contextual factors: The Discourse Hypothesis

In addition to the effect of lexical aspect, some researchers have proposed that the choice of past tense verbal morphology is highly influenced by contextual factors above the sentence level such as text type, and, especially, narrative grounding. For instance, Hopper (1982:16) argues that the nature of aspectual distinctions cannot be characterized by semantics in a consistent way; the adequate reference may only come from a *global discourse function*. Some L2 studies provide empirical support for this claim. García and vanPutte (1988), for instance, claimed that nonnative speakers seem to rely on more local cues for the selection of aspectual markers of past tense in Spanish, whereas native speakers are more attentive to the overall context of the narrative. García and vanPutte asked learners and native speakers to transform several sentences from present to past tense as in (19):

(19) *Otálora se embarca,   la   travesía es tormentosa y   crujiente;*
      Otálora   embarks-PERF, the crossing is stormy   and creaky;
      al   otro   día vaga   por   las calles   de Montevideo.
      the other day drifts-3rd sg-PERF through the streets of Montevideo
      'Otálora embarks, the crossing **is** stormy and creaky; the next day he drifts along the streets of Montevideo.'

For example, for the verb *ser* 'to be', the nonnative speakers used mostly the imperfect (45%) in agreement with the lexical aspectual value of the verb (and perhaps the misleading background nature of a predicative proposition as well). Among native speakers, however, only 7% of the responses showed preference for the imperfect. In other words, the majority of native speakers preferred the use of the non-prototypical preterite *fue*. Given that the verb *ser* is normally marked with imperfect according to the distributional bias that obtains in both native and nonnative speakers (see Andersen 1994; Andersen & Shirai 1994; Ramsay 1990), it follows that the preterite is used to move it to the foreground of the narrative. In sum, native speakers are more willing to accept the non-prototypical use of tense-aspect morphology (i.e., preterite with the verb *ser*) – rather than the inherent lexical aspectual value of the verbal predicate – due to the effect of the larger piece of discourse evidenced in the text (see also Andersen 1994; Andersen & Shirai 1994; Lunn 1985; Silva-Corvalán 1983; Wiberg 1996). García and van Putte's results are even more compelling if we consider that their subjects should probably be considered near-native speakers based on their background profiles.

The most influential hypothesis about the role of discursive context in the development of tense-aspect morphology is the Interactional Discourse Hypothesis (IDH), which, according to Bardovi-Harlig (1994: 43) predicts that "learners use emerging verbal morphology to distinguish foreground from background in narratives." It is important to note that the correlation of aspectual differences and perceptual contrasts associated with figure and ground (Givón 1982; Reid 1980; Wallace 1982) finds justification and support among theoretical approaches such as cognitive grammar (Langacker 1999). This particular theoretical framework provides important support for the IDH, to the extent that the hypothesis can be substantiated as part of a well developed linguistic theory. Several studies provide empirical support for the claims of the discourse hypothesis. For instance, Lafford (1996) analyzed narrative retellings of *The Sorcerer's Apprentice* (from the movie *Fantasia*; Disney 1940) produced by 15 English-speaking learners of Spanish at the intermediate ACTFL level (2 intermediate-low, 6 intermediate-middle, and 7 intermediate-high). The data analyses showed that morphology use was different according to grounding: Preterite was more common in the foreground. The intermediate-low group did not produce any imperfect forms, and the preterite forms that were produced occurred in the foreground. The intermediate-mid group did not produce any imperfect forms, and the distribution of preterite forms was almost even in the foreground (16 tokens) and the background (14 tokens). Finally, the intermediate-high group produced imperfect forms exclusively in the background, and preterite forms in higher amounts in the foreground (52 tokens) than in the background (15 tokens). In another study, Güell (1998) analyzed preterite and imperfect use by 26 native speakers of Spanish and 86 learners (aged 20–30) with different L1 backgrounds at the university level in Spain. The participants were distributed into four main proficiency levels, as determined by a grammar test, and they performed four tasks. The data from the cloze passage task showed that use of preterite in the foreground and imperfect in the background increased with level of proficiency, as use of imperfect in the foreground and preterite in the background decreased.

Interestingly, data from naturalistic learners also seem to support the claims of the discourse hypothesis. We summarize results from three studies based on the learning of French, Italian and Spanish in a natural environment. Véronique (1987) analyzed conversational data from 7 learners of French L2 (2 low-level, 3 intermediate, and 2 advanced) in a natural environment and found that all subjects contrasted base forms (V stem) with perfective forms ([Auxiliary] V + e), but that the distribution of these forms into foreground and background were not uniform. One low-level subject marked the back-

ground with perfective and left the foreground unmarked. One intermediate
learner used both forms (base and perfective) in the background and base
forms in the foreground, whereas another intermediate learner used base forms
for the background, while most of the perfective forms were in the foreground.
The advanced learners, however, marked the foreground mostly with perfective
forms. Véronique notes, however, that the independent variable of grounding
interacted with what he calls "local constraints." For instance, calendrical time
expressions (e.g., *un jour* 'one day', *en cinquante-deux* 'in 1952') co-occurred
with perfective forms, whereas adverbials (e.g., *après* 'after', *avant* 'before')
co-occurred with base forms. In another study within the same approach,
Giacalone Ramat (2002) reported on data from four L1 English speakers who
had studied Italian for 2 years in England and 8 months in Italy. These learn-
ers' use of *passato prossimo* (perfective) in the foreground was approximately
70% whereas in the background it was about 25%. In contrast, their use of
imperfect in the foreground was about 5%, and 50% in the background. Fi-
nally, López-Ortega (2000) analyzed the use of L2 Spanish morphology in oral
personal narratives elicited from 4 Moroccan (French/Moroccan Arabic L1)
immigrants living in Spain. Three of the informants had been living in Spain
for 5–6 years, and the other learner had been in the country for 2 years. The
analysis of the data showed that there was a significant relationship between use
of perfective-imperfective morphology and discourse grounding for all three
learners. The data from the above-mentioned studies provide evidence for the
role of discourse grounding in the use of morphology, but since the studies
were based on different types of learners and tasks, different outcomes are ex-
pected. Furthermore, none of the studies was longitudinal. Comajoan's chapter
(this volume) takes the previous studies as a point of departure and presents
longitudinal data in order to examine how past forms emerge and develop from
the point of view of the discourse hypothesis.[4]

2.4 Input-based factors: The Distributional Bias Hypothesis

The above-mentioned effect of lexical aspect and narrative grounding on the
marking of tense and aspect morphology seems to interact with distribu-
tional biases present in the input learners receive from native speakers or the
type of data they have available to them (Andersen 1994; Andersen & Shirai
1994, 1996). For instance, native speakers of American English use mostly
-ing endings with activity verbs and mostly simple past tense forms with
achievement and accomplishment verbs. Based on these frequency patterns,
Andersen and Shirai argue that L2 learners perceive as absolute the association

activity verbs-progressive morphology as well as the correlation accomplishment/achievement verbs-perfective morphology. It is important to note that distributional biases may be associated with specific cultural conventions that vary across dialects. Smith (1991:12), for instance, argues that "conventions involve standard and marked choices, shared information between speaker and receiver, and other pragmatic considerations. The conventions are principles for language use rather than rules." In essence, native speakers may conventionally prefer certain marked choices of verbal morphology over unmarked ones. Indeed, there is variation across languages with respect to the preferred association of lexical aspectual class and verbal morphology. For instance, Yousseff (1988, 1990) argues that the aspectual status of perception verbs may differ in creole languages as compared to English and Japanese. Similarly, Rispoli and Bloom (1985) claim that "a stative predicate in English need not be a stative predicate in Japanese" (p. 472). In fact, the categorization of verbs according to inherent lexical aspect varies within the same language as well as crosslinguistically. Thus, Kachru (1995) claims that in Indian English the stative-dynamic categorization of verbs may be less relevant than a classification of verbs in terms of *volitionality* as is the case in Hindi, Marathi, Kashmiri, etc. Because of this difference, the treatment of verbs such as 'know', 'see', 'hear', etc., as dynamic verbs is more conventional in South Asian varieties of English (as reported by Yousseff 1988:452).

It could be argued that another type of distributional bias may be found in the association of aspectual marking associated with different text types or even across sections within any single type of discursive text. Indeed, not all narrative texts (e.g., personal versus movie narratives), nor different sections of a text (e.g., orientation versus complicating action) are on an equal footing. Silva-Corvalán (1986) proposes that verbal forms in isolation (cf., aspectual morphology) do not have specific meanings, but rather general referential meaning which becomes specific in accordance with the type of speech event in which they are embedded. For instance, the structure of a narrative may be composed of the following elements: Abstract, orientation, complicating action, evaluation, resolution and coda (Labov 1972). The distribution of aspectual markers will vary from section to section of the narrative. In general, the distribution of the perfective is higher in the abstract, the complicating action, the resolution and the coda, whereas the imperfective is more common in the orientation and evaluation sections (pp. 235–241). For instance, in the orientation section, "the imperfect frequently conveys the meaning of coexistence with narrative events rather than that of repeated habitual actions" (p. 240).

Very few studies have analyzed the effect of distributional biases in L2 development (e.g., Andersen 1994; Coppieters 1987; Salaberry 1998), even though it could be argued that any study that analyzes the effect of the LAH will implicitly take into consideration distributional biases. More importantly, among the studies that present data relevant to the analysis of input-based distributional biases, we have clear differences according to learning environment. For instance, naturalistic learners such as Anthony (Andersen 1986, 1991) show a gradual spread of past tense marking starting with the prototypical forms towards the non-prototypical ones because natural learners are building the system of past tense aspect in a (highly) contextualized linguistic environment. Classroom students, on the other hand, do not have enough access to the type of (extended) non-classroom discourse that may help them recognize when it is appropriate to reject the prototypical marker of aspect in favor of the non-prototypical one (see also Coppieters 1987). For instance, Salaberry argued that even though second semester French students used the *passé composé* and *imparfait* in proportions similar to native speakers, a more detailed analysis revealed some confounding of data when unmarked versus marked choices were teased out (prototypical versus non-prototypical). The net effect was that classroom students present a very different profile from native speakers in the selection of the marked (non-prototypical) use of *passé composé* with statives (the contrast analyzed in the above-mentioned study).

2.5 Cognitive processing factors: The Default Past Tense Hypothesis

The default past tense hypothesis predicts that, during the first stages of L2 development, learners will attempt to mark tense distinctions rather than aspectual distinctions, and in so doing will initially rely on a single marker of past tense, most typically the perfective form (Salaberry 1999, 2003; Wiberg 1996). From the point of view of a strictly linguistic analysis, this hypothesis can be labelled as the unmarked past tense hypothesis given that the conceptualization of the perfective-imperfective distinction (a linguistic contrast) may be the relevant factor that leads learners to rely on a single marker of past tense. For example, Comrie (1985: 121) argues that in the Past tense, the perfective aspect is the unmarked member of the dichotomy. Similarly, Fleischman (1990) argues that in narratives the perfective is the unmarked form and the imperfective, the marked form (for more details on the notion of markedness, see Waugh 1990). Furthermore, Guitart (1978: 142), while making reference to the preterite-imperfect Spanish contrast, claims that the perfective form "states that an occurrence took place before the moment of speaking," whereas the

imperfective form tells about an occurrence which happened before the time of speaking "in which some other situation took place or was taking place." On the other hand, one can also focus on strictly cognitive processing factors and argue that learners may be cognitively constrained in the marking of complex temporality forms and start out with the marking of tense contrasts, and later complexify their interlanguage production when they show signs of contrasting tense and aspect morphologically.

From the latter perspective, the causal factor that can account for possible developmental stages of L2 acquisition of verbal morphology is the role of the perceptual saliency of verbal endings (i.e., regular-irregular morphology), their frequency in the input, and also whether the L1 conveys past tense aspectual contrasts morphologically (e.g., Bayley 1994; Giorgi & Pianesi 1997; Klein et al. 1995; Lafford 1996; Salaberry 2000b; Wolfram 1985). For instance, Lafford (1996:16) proposed the saliency-foregrounding hypothesis: "Phonologically salient verb forms are used to reflect salient (foregrounded) actions in L2 narrative discourse." In terms of phonological saliency, both Spanish past tense regular preterites with final stress and irregular preterites with internal vowel changes stand out phonologically in comparison with verbs that carry penultimate stress and that have only three irregular forms (i.e., the imperfect). With respect to frequency, Klein et al. (1995:271) claim that "irregular verbs are typically frequent, and the morphological differences are perceptually salient, compared to a regular ending such as -*ed*, which may be hard to process for many learners" (see also Salaberry 2000b; and Housen 2002). In the first study to test the potential role of a default past tense marker in the beginning stages of development of L2 Spanish among adult classroom learners, Salaberry (1999) analyzed oral narratives collected at two different times of language learning (two months apart) from sixteen students from four different levels of proficiency. The analysis of the findings revealed that the learners at the lowest proficiency level never used the imperfect (even after having received explicit instruction and practice on its use during the two weeks prior to data collection). Moreover, the data showed that the effect of lexical aspectual classes increased constantly as a function of proficiency and experience with the language. Salaberry proposed that L1 English speakers might be using the Spanish preterite as a default marker of past tense across lexical aspectual classes in L2 Spanish. Salaberry (2002) extended that investigation with the use of a written a cloze-type fill-in-the-blank test, a task which, although less spontaneous than the oral narratives, allowed for the use of more powerful statistical procedures. The main participants in this study were students from two college-level Spanish language courses: 25 students from a third-semester course and 24 stu-

dents from a sixth-semester course. A group of 32 monolingual native speakers of Spanish residing in their native country acted as a control group. The data from the advanced students revealed a clear relationship between lexical aspectual classes and past tense verbal endings: The use of imperfect was associated with stative verbs (63%) and the use of preterite with the telic event category (82%). In contrast, the morphological marking of verbs among the intermediate learners was not necessarily correlated with lexical aspectual types: The use of the preterite was represented in all lexical aspectual categories (a default marker of past tense across lexical aspectual categories).

A more recent study, Salaberry (2003), however, reveals that the default marker of past tense may be affected by the textual features of the narrative. Salaberry analyzed the use of past tense verbal morphology in L2 Spanish among 105 L1 English speakers divided into three levels of proficiency. The analysis used two multiple-choice tasks based on two different texts of similar lengths: One text was based on a fictional narrative and the other one on a personal narrative. The objective was to determine whether text type (operationalized as fictional or personal narrative in the form of a fixed text) had any significant effect in the choice of inflectional markers of past tense. The analysis of the data based on the fictional narrative test confirmed the findings reported in the previous studies to the extent that the preterite was used more often than the imperfect with statives in all but the highest level of proficiency (against the claim of the LAH). This finding confirms the trend of increasing reliance on lexical aspect to mark past tense in correlation with increasing L2 proficiency. The analysis of the data from the text based on the personal narrative, however, revealed a dramatic contrast: Among the lowest level of proficiency, the imperfect was used more often than the preterite with statives (46.1% versus 21.2% respectively), with atelic events (46.1% versus 29.1% respectively), and even, surprisingly, with telic events as well (41.7% versus 31.4% respectively). Finally, it is worth noting that, in more recent studies, researchers who offered strong support for the lexical aspect hypothesis have started to view the default past tense hypothesis as worthy of consideration, at least with regards to the developmental process of some learners, more specifically, adults in classroom settings (Shirai 2004). New empirical evidence on the relevance of this hypothesis will be presented in Salaberry (this volume) and the concluding chapter.

2.6 Syntactic factors: The UG-Minimalist Hypothesis

Among strictly syntactic approaches, the UG/Minimalist-based hypothesis has been used as the main theoretical framework of several recent studies. The Minimalist hypothesis predicts that the semantic nuances of aspectual phenomena can be explained in syntactic terms. Starting with de Miguel (1992), UG-based proposals have assumed that information about lexical and grammatical aspect respectively are located in different positions within the clause structure. De Miguel, in particular, proposed that information about aspect is incorporated in the lexical entry of the predicate by means of a special covert argument: Davidsonian argument <e> (event argument).[5] The projection of the eventive argument provides information that is not subsumed under the TENSE node; instead, it projects a new functional category: AspP with the binary feature [+/–perfective]. More recently, Giorgi and Pianesi (1997:164) argue that, in English, verbs are always perfective (i.e., they denote bounded events) because "this is the only way for [them] to get the correct categorial features and for allowing the derivation to converge." In contrast, in the Romance languages (Giorgi & Pianesi substantiate their case with examples from Italian), the verb does not need to use the aspectual feature of the verb ([+perfective]) because of Italian's rich inflectional morphology (unambiguous association with relevant categorial features). More importantly, lexical aspect is represented in a lower functional category AspP, where the semantic features [±telic] are checked. In contrast, grammatical aspect is assumed to be located in a higher AspP, above the VP and below the TP, where the features [±perfective] are checked through overt tense/aspect morphology (i.e., preterite and imperfect in Spanish).

Following Giorgi and Pianesi's argument, authors working within the purview of the minimalist program (e.g., Montrul & Slabakova 2002, 2003; Schell 2000; Slabakova & Montrul 2002) have concluded that under the assumption that knowledge of the existence of the functional category of aspect is transferred, the main challenge for L1 English speakers is to (a) learn to disassociate the feature [+perfective] used with English eventive verbs, (b) recognize that Spanish verbs are morphologically complex and learn appropriate distinction preterite/imperfect, and (c) map formal features [+/–perfective] with preterite/imperfect morphophonology, respectively. For instance, Schell (2000) investigated the development of past tense markers in Spanish among five students during a nine-month study-abroad program in Spain. By the time the students traveled abroad, two learners had already completed two years of Spanish courses at the university level and three had completed three years