

## **On Aspectual Shifts in L2 Spanish \***

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The outcome of first language acquisition is always a success: at about 5 or 6 year of age, normally developing children have mostly acquired the grammar of the language that surrounds them. By contrast, adult second language acquisition results in different degrees of success, with some speakers performing on a variety of linguistic tasks like native speakers and others diverging considerably from these. This contrast between L1 and L2 acquisition has led some researchers to support the view that L1 and L2 acquisition are different epistemological phenomena: L1 acquisition is regulated by UG while L2 acquisition utilizes general-learning inductive procedures (Bley-Vroman 1989, Meisel 1997).

Taking into account the fundamental distinction between competence (unconscious knowledge of a grammatical system) versus performance (how linguistic knowledge is used), other researchers have claimed that failure of learners to perform in experimental tasks like native speakers is not necessarily a direct indication that the learners' linguistic competence is deviant as well. In L1 acquisition research, Avrutin (1999) discusses how children respect grammatical principles of binding but may fail to understand the pragmatic conditions for the operation of those principles. In L2 acquisition research, Juffs and Harrington (1995) have suggested that L2 processing should be distinguished from L2 competence. In their study of subjacency violations, like the native speakers the L2 learners have been shown to respect linguistic constraints, while the learners' processing of sentences and their responses was slower, more labored and problematic. Continuing this line of inquiry, in this paper we explore whether

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explanations for competence/performance discrepancies in the L2 acquisition of syntax and semantics may also lie in the utilization of pragmatic knowledge. By focusing on the L2 acquisition of predicates that shift aspectual class under different pragmatic conditions in Spanish we ask whether L2 learners' deviating linguistic behavior is due to pragmatic processing abilities or to differences in the operation of grammatical principles.

### **1. Pragmatic versus grammatical knowledge**

Grammatical competence is the unconscious, implicit knowledge that a speaker has about language, and that comes from the module of the mind associated with the human language faculty (Chomsky 1965, Lenneberg 1967). Generative linguists and psycholinguists accept that this domain-specific linguistic structure, Universal Grammar, may be due to our genetic endowment. Pragmatics, on the other hand, is informally defined as the real-world knowledge that speakers bring to the use of language. It is not innate. Rather, it is a result of the non-language-specific abilities and changes over the course of infant-to-adult cognitive development. For example, compare the sentence sequences below.

- (1) Mary looked at Bill. He smiled.
- (2) Mary looked at Bill. He was smiling.

The sentence in (1) suggests that Bill smiled after Mary looked at him. The sentence in (2), on the other hand, describes Bill as already smiling when Mary looked at him. Nothing in the overt grammatical form of these sentences suggests that in the case of (1) the two events are sequential while in (2) one event in progress overlaps with the first-mentioned momentary event. Still, native speakers of English are aware of the pragmatic implications of (1) and (2). This awareness is due to their knowledge of the world, more specifically, to the knowledge that a prolonged event in progress may temporarily include the immediately preceding event, while two instantaneous events usually happen in succession. Recent investigations of child language development (Avrutin, 1999) suggest that this pragmatic knowledge is absent in 3-year-old children and appears at about 5 or 6 years of age.

### **2. Aspect and Pragmatics**

The term 'aspect' refers to the internal temporal structure of events as described by verbs and phrases (Comrie 1976, Chung & Timberlake 1985, Smith 1997). It is the property that makes it possible for a sentence to denote a complete or an incomplete event. Predicates in human language can be viewed as reflecting either a state or an event. A state (e.g., *be*, *have*, *seem*) is defined as a stable condition of some entity for a period of time, where no change appears from Time 1 to Time 2. Events, on the other hand, are dynamic situations where

some change or changes obtain from Time 1 to Time 2. Some events are classified as activities. The verb *run* in the sentence *John is running in the park* denotes a homogeneous process going on in time with no inherent goal. A second type of event is an accomplishment, a situation that involves a process going on in time and an inherent culmination point, after which the event can no longer continue, as in *John ran a mile*. Thus an accomplishment is a complex event containing an activity and the culmination of that activity. Finally, an achievement is similar to an accomplishment in that it also has an inherent endpoint, but in this class the process that leads to the culmination is instantaneous. Such a momentary event is represented by sentences like *John found a wallet*.

However, aspectual interpretations are not fixed because lexical aspect interacts in curious ways with pragmatic knowledge. Predicates can shift aspectual class (from activity to accomplishment, from state to achievement, etc.) depending on other grammatical or pragmatic elements in the sentence or discourse. Semanticists working within the Discourse Representation Theory label these transitions “aspectual coercion”. Coercion is a contextual reinterpretation process for which there is no overt morphological signal (de Swart, 1998).

Grammatically-induced shifts signal aspectual transitions by means of overt grammatical elements. In Spanish, for example, aspectual shifts can be marked by a tense operator, as in (3), an object, as in (4), or the reflexive clitic *se*, as in (5):

- |        |                                   |                  |
|--------|-----------------------------------|------------------|
| (3) a. | Juan sabía la verdad.             | (state)          |
|        | Juan knew (imperf) the answer     |                  |
|        | b. Juan supo la verdad.           | (achievement)    |
|        | Juan knew (pret) the answer       |                  |
| (4) a. | Juan corrió en el parque.         | (activity)       |
|        | Juan ran in the park              |                  |
|        | b. Juan corrió una milla.         | (accomplishment) |
|        | Juan ran a mile.                  |                  |
| (5) a. | Juan leyó el libro (por una hora) | (activity)       |
|        | Juan read the book (for an hour)  |                  |
|        | b. Juan se leyó el libro.         | (accomplishment) |
|        | Juan se read the book             |                  |

Aspectual shifts can also be triggered by other discourse-pragmatic elements, such as adverbials. For example, accomplishments and achievements can be coerced into activities:

- |        |                                    |                  |
|--------|------------------------------------|------------------|
| (6) a. | Juan leyó un libro.                | (accomplishment) |
|        | Juan read a book                   |                  |
|        | b. Juan leyó un libro por un rato. | (activity)       |
|        | Juan read a book for a while       |                  |

- (7) a. El tren llegó tarde. (achievement)  
The train arrived late  
b. Por meses, el tren llegó tarde. (habitual activity)  
For months, the train arrived late

Finally, the animacy of subject NPs with certain verbs also induces aspectual changes, as in (8):

- (8) a. Juan corría por la montaña (eventive)  
b. El río corría por la montaña (stative)

In the examples (6), (7), and (8), there is a clash between the unmarked aspectual interpretation of the predicate and the context, in this case the adverbial. As a result of this clash, the unmarked meaning shifts to the meaning imposed by the context. The main difference between grammatical processes and coercion is that coercion is syntactically and morphologically invisible. Furthermore, while grammatical aspectual operators like tense always denote a specific aspectual change, coercion may signal different possible aspectual transitions, as illustrated in (6) and (7). de Swart (1998) argues that coercion is regulated by pragmatic knowledge while aspectual operators are part of the grammatical system of a language and purportedly supplied by UG.

### 3. Previous Findings and Research Question

In recent years, the acquisition of tense/aspect morphology and the question of how learners come to map form and meaning in the aspectual domain has enjoyed considerable attention in L1 and L2 acquisition. Of particular interest in L2 acquisition has been to trace the emergence and development of aspectual morphology with the four predicate types proposed by Vendler (1967) (see Bardovi-Harlig, 1999 for a comprehensive overview of these studies). In a previous experimental study investigating the interaction of grammatical and lexical aspect in Spanish by English-speaking learners (Montrul and Slabakova, in press; Slabakova and Montrul, in press), we found that intermediate and advanced learners showed depressed performance in judging achievement verbs in the imperfect tense, as in the following example:

- (9) Los González vendían la casa pero nadie la compró.  
the González sold (Imp) the house but nobody bought it  
'The González family were selling the house but nobody bought it.'

The learners' performance in judging contradiction with similar sentences in the Preterite (*#Los González vendieron la casa pero nadie la compró*) was much more accurate, especially for the advanced learners.

Achievements like *notice*, *find*, *realize*, express momentary instantaneous change of states; other achievements like *win a game*, *sell a house*, etc. also

denote instantaneous changes, but the process leading to the moment of change can be extended. Although the imperfect tense in Spanish denotes an unbounded eventuality, it is possible for some achievement verbs to appear in the Imperfect tense. In these cases, this mechanism of extending the process part of the event leading to the change of state in achievements is a matter of pragmatics. Aspectual coercion resolves the conflict between the aspectual class of the predicate and the tense meaning. We were surprised by the fact that, while English native speakers are perfectly capable of using this pragmatic mechanism in their own language, they do not readily transfer it to the L2, even when Spanish native speakers use similar mechanisms. We came to the tentative conclusion that pragmatics may be outside of UG-regulated linguistic competence, and acquisition of pragmatic contrasts is not guided by the same principles that guide the acquisition of grammatical contrasts.

Our explanation for these findings is indeed supported by recent proposals in linguistic theory, particularly by Reuland's (2001) economy perspective on interpretation. Assuming that syntactic objects and their discourse values belong to different linguistic modules (Chomsky, 1972), Reuland (2001) argues that processes that apply at the syntax-semantics interface are less costly than processes relating the latter with the discourse representation and hence easier to process. Similarly, Piñango, Zurif, and Jackendoff (1999), defining aspectual coercion as a combinatorial semantic operation requiring computation over and above that provided by combining lexical items through expected syntactic processes, conducted an experiment to investigate whether or not parsing of a string requiring coercion (in addition to syntactic composition) is more computationally costly than parsing its syntactically transparent counterpart. Their prediction of higher computational cost for coercion is borne out by the results.

In light of these findings, the research question motivating our study is whether aspectual shifts triggered by grammatical aspectual operators like direct objects, the telicity marker *se*, and tense inflection are easier to acquire than aspectual shifts triggered by discourse pragmatic signals, such as adverbials, for English-speaking learners of Spanish. Assuming Reuland's (2001) economy perspective on interpretation we hypothesized that L2 learners would be more accurate with the grammatically induced shifts than with the pragmatically induced shifts.

#### **4. Experimental Study**

##### **4.1. Participants and Materials**

Sixty English-speaking learners of Spanish and 27 native speaker controls participated in the experimental study. The learners were divided into Advanced (n=27) and Intermediate (n=33) on the basis of an independent proficiency measure consisting of a vocabulary test and a cloze test.

The main test was a meaning judgment task comprising 70 pairs of grammatically and pragmatically induced activity-accomplishment and stative-

eventive aspectual shifts. Sentences were presented in pairs because we were interested in the perceived semantic contrast between the two sentences. Participants had to judge on a scale from 1 (unacceptable, I would never say this) to 5 (perfect, I would say this) whether the sentences were logical, odd, or contradictory, as presented below.

(10) Pedro leyó el capítulo anoche pero le faltan leer 2 párrafos.  
 Pedro read the chapter last night but has 2 more paragraphs left to read.

1 2 3 4 5

(11) Pedro *se* leyó el capítulo anoche pero le faltan leer 2 párrafos.  
 Pedro *SE* read the chapter last night but has 2 more paragraphs left to read.

1 2 3 4 5

Sentence (10) could be logical if *read the book* is construed as an activity. Sentence (11) is contradictory because the clitic *se* makes the predicate an accomplishment, but the second clause denies the reaching of the endpoint. We included 3 conditions testing grammatically induced shifts and other 3 testing pragmatically induced shifts

#### 4.2. Results

4.2.1. *Grammatically induced shifts.* The first condition tested sentences like these in (12) and (13), where an activity shifts to accomplishment by the presence of a direct object and a clitic.

(12) El artista dibujó en el parque y todavía está dibujando. (act.) *logical*

The artist drew in the park and he is still drawing.

(13) El artista dibujó **un círculo** y todavía **lo** está dibujando. (acc.) *illogical*

The artist drew a circle and he is still drawing it.

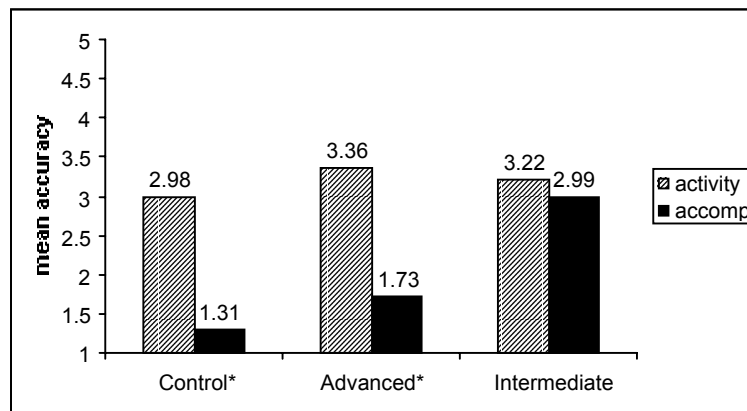
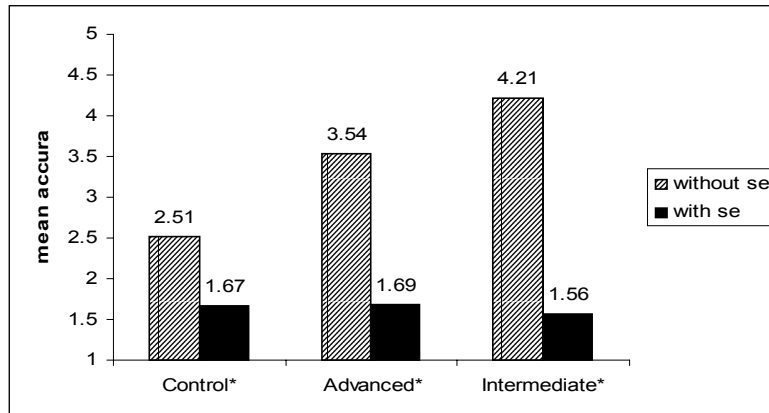


Figure 1. Grammatical contrast: Activity shifts to accomplishment by object

The controls and the advanced learners distinguished reliably between the two types of sentences, while the contrast was not significant for the intermediate learners. In the figures that follow, a star after the group label indicates that the relevant contrast is significant according to ANOVA.

As discussed above, Spanish uses an optional telicity marker *se* in order to signal that the sentence denotes an accomplished event. Without this telicity marker, sentences with accomplishment predicates could be construed as activities. The second condition tested this grammatical shift.

- (14) Sebastián leyó el libro pero le faltan leer dos capítulos. *?logical*  
 Sebastian read the book but he still has two chapters to read.
- (15) Sebastián *se* leyó el libro pero le faltan leer dos capítulos. *illogical*  
 Sebastian *SE* read the book but he still has two chapters to read.



**Figure 2. Grammatical contrast: Accomplishment with and without telicity marker *se***

While the native speakers are aware of the marginality of example (14), they still consider examples like (15) significantly worse. The same is true for the advanced learners, albeit to a lesser extent. Although the intermediate learners seem to be aware of the contrast—even more than the native speakers—this result may be misleading. We suspect that these learners have not acquired *se* as a telicity marker and that is why they simply judge (15) to be ungrammatical.

The third grammatical aspectual shift involves the use of the Imperfect and Preterite aspectual tenses. With an inanimate subject, only the Imperfect tense produces a logical sentence, since it evokes a stative interpretation. The eventive interpretation contributed by the Preterite tense makes sentences as in (17) illogical. The native speakers and the advanced learners are aware of this contrast, unlike the intermediate learners.

- (16) El río **corría** (Imp.) por la montaña. (stative) *logical*  
 The river ran through the mountain.
- (17) El río **corrió** (Pret.) por la montaña. (eventive) *illogical*  
 The river ran through the mountain.

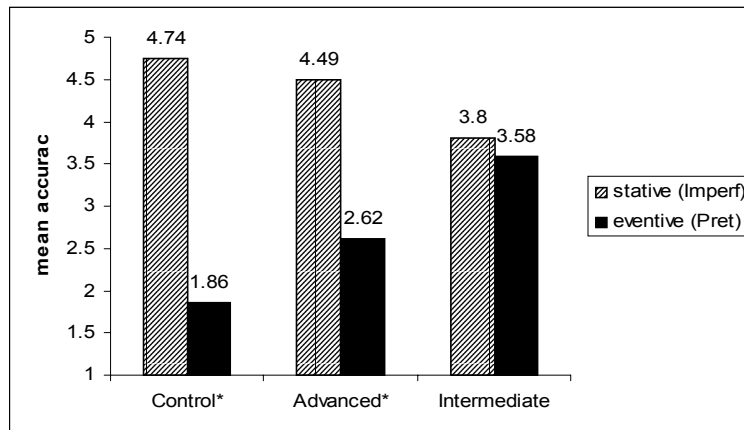


Figure 3. Grammatical contrast: Stative/eventive shift signalled by tense

4.2.2. *Pragmatically induced contrasts.* The following coercion process is brought forward by the time-frame adverbial. The adverbial clashes with the (grammatical) meaning of one-time finished event that is brought forward by the Preterite tense and the achievement predicate. Thus, the adverbial forces the interpretation into a habitually repeated activity within a time frame.

- (16) Ayer el tren del mediodía llegó tarde. (achievement) *logical*  
 Yesterday the 12 o'clock train arrived late.
- (17) **Durante muchos meses** el tren del mediodía llegó tarde. (hab.) *logical*  
 For many months the 12 o'clock train arrived late.

Although all three groups of participants showed a significant contrast between sentences as in (16) and (17), it is clear from Figure 4 that the native speakers coerce achievements into habitual activities much more easily. The English natives do not have clear intuitions about the felicity of this coercion process, which is surprising, since the same process is available in English.

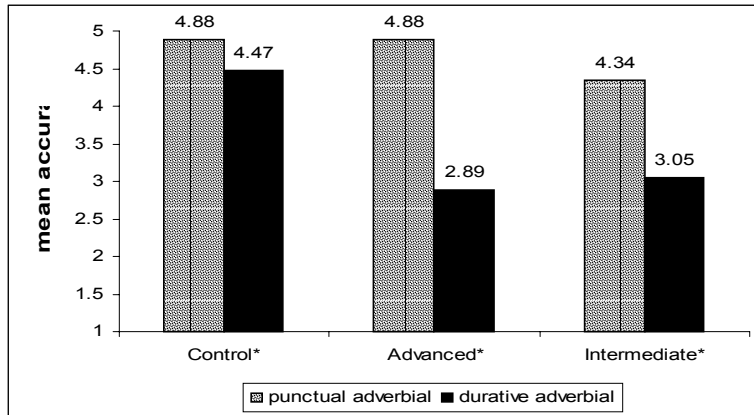


Figure 4. Pragmatic contrast: Achievement coerced into habitual by adverbial

The second pragmatic coercion has to do with subject animacy. An inanimate subject like *the river* is infelicitous with the eventive interpretation evoked by the Preterite tense, while an animate subject is perfectly fine.

- (18) **El río** corrió por la montaña. (stative) *illogical*  
 The river ran through the mountain.
- (19) **Roberto** corrió por la montaña. (eventive) *logical*  
 Roberto ran through the mountain.

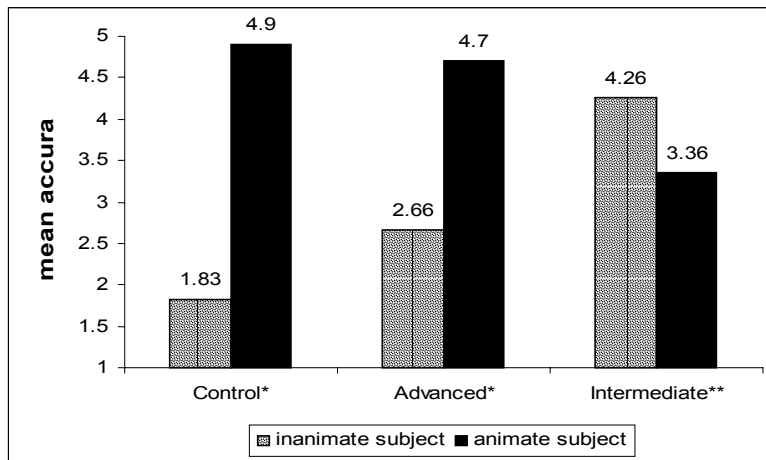


Figure 5. Pragmatic contrast: Animate vs. inanimate subject with eventive predicate

As Figure 5 illustrates, both the native speakers and the advanced learners demonstrate reliable knowledge of the contrast, while the intermediate speakers also show a significant contrast, but in the wrong direction.

Finally, the third pragmatic coercion is effected by ‘for X time’ or ‘in X time’ adverbials:

- (20) El jardinero cortó el pasto **en una hora** y todavía lo sigue cortando.  
The gardener mowed the lawn in an hour and he is still mowing it  
*illogical*
- (21) El jardinero cortó el pasto (**por**) **una hora** y todavía lo sigue cortando.  
The gardener mowed the lawn for an hour and he is still mowing it  
*logical*

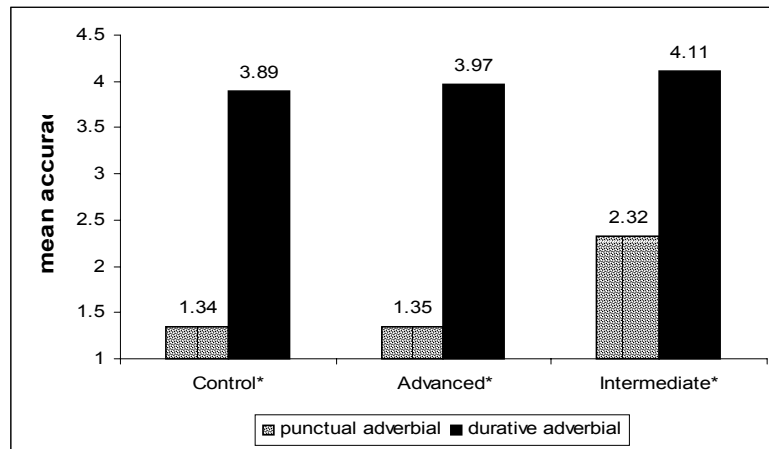


Figure 6. Pragmatic contrast: Accomplishment coerced into activity by adverbial

All three participant groups are clearly aware of this pragmatic coercion process.

## 5. Discussion

We can summarize the results of the intermediate L2 learners of Spanish as follows: They do not recognize aspectual shifts induced by grammatical or pragmatic devices, with one crucial exception. No obvious primacy of grammatical over pragmatic clues can be observed for these learners. The only kind of aspectual shift the intermediate learners have acquired is the one signaled by overt ‘in/for X time’ adverbials. Quantized objects, subject animacy, and aspectual tenses fail to trigger aspectual shifts for these learners. It seems that it is actually overt aspectual shifters that are easier to acquire than the “covert” signals of aspectual shift, at the initial stages of L2 acquisition. Similar findings are widely attested in the L1 acquisition of aspectual properties of

language (see for example van Hout, 1998; Wagner, 1999). In this sense, our study confirms the Transparency Principle (van Hout, 1998) for L2 acquisition, which states that "[L]earning is easier for overt and unambiguous cognitive-linguistic mappings than for covert and/or conflated ones."

The advanced learners, on the other hand, displayed patterns of response similar to that of native speakers' in the three grammatical conditions and in two out of three pragmatic conditions. The only condition in which their performance differed markedly from that of the native speakers is in the case of the most difficult pragmatic coercion: that of an achievement into a habitual activity (see Figure 4). This (slight) deviation of the advanced speakers' competence from native pragmatic computation is even more surprising, given that their native language coerces similarly to the target language. This result is a tentative indication that pragmatic and grammatical knowledge may differ in interlanguage grammar.

Our study has at least two limitations that deserve comment. It is still difficult to tell from group results whether grammatical contrasts were learned before pragmatic contrasts. An individual-subject analysis will allow us to determine whether group results mask other developmental stages, especially in the intermediate group. Secondly, in many test sentences, it was difficult to tease apart clear cases of grammatically-induced aspectual shifts versus pragmatically-induced shifts. Since all the test sentences (and most natural language sentences, for that matter) contain (non-)quantized objects, and aspectual tense cues, it is hardly possible to tease apart their contribution from the contribution of the pragmatic cues, especially in the conditions testing pragmatic contrasts.

To conclude, we can state that as far as the intermediate group's knowledge of aspectual shifts is concerned, van Hout's (1998) Transparency Principle is supported. Results of the advanced group allow us to argue that aspect interpretations are acquirable in a second language. Non-native speakers can attain similar competence as native speakers in this domain (cf. Montrul & Slabakova, 2001).

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