Lexical and discourse factors in the second language acquisition of Spanish word order

Tammy Jandrey Hertel  Juniata College, Huntingdon, PA

This study investigates the acquisition of Spanish word order by native speakers of English. Specifically, it considers the development of sensitivity to the distinct interpretations of subject–verb (SV) vs. verb–subject (VS) order, as determined by lexical verb class (unaccusative and unergative verbs) and discourse structure. Participants included a native speaker control group and learners at four proficiency levels. Results from a contextualized production task indicate that beginning learners transferred the SV order of English for all structures. Intermediate learners showed a gradual increase in the production of lexically and discourse-determined inversion, although their data was also characterized by indeterminacy and variability. The advanced learners demonstrated a sensitivity to the word order effects of unaccusativity and discourse factors, but also tended to overgeneralize inversion to unergative verbs in a neutral discourse context.

I Introduction

The purpose of this study is to examine the acquisition of Spanish word order by native English speakers. In Spanish the word order of intransitive sentences, specifically subject–verb (SV) vs. verb–subject (VS) order, is determined by two factors: lexical verb class and information structure. The interaction of these factors is subtle, and inappropriate word order does not lead to ungrammaticality, but to pragmatic anomaly. In addition, these aspects of Spanish word order are rarely, if ever, addressed in the second language (L2) classroom. This study aimed to better understand the acquisition of lexically and discourse-determined Spanish word order. My goal was to ascertain what learners know and what they need to learn about the different interpretations of SV and VS order in Spanish.

One factor influencing Spanish word order is verb class. It has been proposed that there are two classes of intransitive verbs,
unaccusatives and unergatives (Perlmutter, 1978). While unaccusatives (e.g., *to arrive, to appear, to enter*) select an internal theme or patient argument in direct object position, unergatives (e.g., *to sneeze, to yell, to dance*) select an external agent argument in subject position. This proposal, known as the Unaccusative Hypothesis, has generated a wealth of research. Syntactic diagnostics for unaccusativity have been proposed in various languages (see Burzio, 1986; Torrego, 1989; Bonet, 1990; Levin and Rappaport Hovav, 1995). One of these diagnostics in Spanish-type languages is word order. As noticed earlier by Hatcher (1956), Contreras (1976) and Suñer (1982), there is a class of ‘presentational’ verbs in Spanish that elicit VS order in neutral, or ‘out of the blue’ contexts. The role of presentational verbs is to introduce, or ‘present’ the subject into the discourse. This class of verbs corresponds to the class now known as unaccusatives. In contrast, the discourse neutral word order for unergative verbs in Spanish is SV. An example of the neutral order of unaccusatives is shown in (1a) and of unergatives in (1b).

1) a. Llegó mi nieto.  
   ‘My grandson arrived.’

   1) b. Mi nieto gritó.  
   ‘My grandson yelled.’

Although the same verb classes exist in English (i.e., they are universal), their word order does not vary because English has a relatively fixed SV order. Unlike Spanish, English displays few, if any, syntactic reflexes of unaccusativity (Levin and Rappaport Hovav, 1995). Thus, the distinct word order behaviour of unaccusative verbs needs to be acquired by English-speaking L2

---

1Only nonalternating unaccusatives are considered in the present study (e.g., *to arrive, to appear, to escape*).

2Example (1a) also illustrates that in Spanish, unlike languages such as Italian, the appearance of postverbal subjects is not regulated by the Definiteness Effect (Belleli, 1988), although definiteness often indicates that the subject has already been introduced into the discourse and thus tends to be placed before the verb in Spanish.

3Levin and Rappaport Hovav (1995) explore the possibility of constructions such as expletive *there*-insertion and locative inversion being syntactic diagnostics of unaccusativity in English. However, the distribution of these constructions is not as wide as inversion in Spanish; for example, verbs of disappearance are less acceptable with them (Burzio, 1986; Levin and Rappaport Hovav, 1995). Also problematic is the fact that both constructions do appear with a wide range of unergative verbs as well (Burzio, 1986; Napoli, 1988; Hoekstra and Mulder, 1990; Levin and Rappaport Hovav, 1995). Thus, given the scarcity of unambiguous, overt syntactic evidence in English, it is doubtful that English-speaking, beginning learners of Spanish will possess sensitivity to the syntactic reflexes of unaccusativity present in Spanish, word order variation in particular.
learners of Spanish. To produce native-like word order, learners must find out how the two verb classes are syntactically represented in Spanish.

The second factor involved in Spanish word order is discourse structure. Informationally focused elements (i.e., ‘new’ information in the discourse) are in sentence-final position in Spanish (Reinhart, 1995; Zubizarreta, 1998). While in Spanish informational focus is represented syntactically, in English it is realized only phonologically, by stressing the focused element in-situ. English and Spanish answers to the question ‘Who called while I was gone?’ are shown in (2a) and (2b).  

2) a. Llamó tu hermana.  
   called your sister
   ‘Your sister called.’
   
b. Your sister called.

The subject receives prosodic prominence in both languages, but only in Spanish is word order affected. Thus, English learners of Spanish must realize that informational focus is realized syntactically in their L2.

When the verb is informationally focused, the subject of both unergative and unaccusative verbs is placed preverbally in Spanish, as is also the case in English. Thus, the answer to a question such as ‘What about Susana?’ is seen with an unaccusative verb in (3a) and an unergative verb in (3b). Because Spanish allows null subjects, the answer could also include only the verb.

3) a. (Susana) salió.
   ‘Susana left.’
   
b. (Susana) estornudó.
   ‘Susana sneezed.’

A second type of focus is contrastive focus, which has been defined as the negation or reassertion of the presupposition introduced by a previous statement. Either an explicit or an implicit negative tag is associated with contrastive focus (Zubizarreta, 1998). While in English SV order is necessary with a contrastively focused subject, in Spanish both SV and VS order are possible (Kiss, 1998; Zubizarreta, 1998). See examples (4), (5a) and (5b).

I use underlining for informational focus and capital letters for contrastive focus (which is explained shortly).
4) JUAN yelled (not Pedro).
5) a. JUAN gritó (no Pedro).
   b. Gritó JUAN (no Pedro).

So while examples such as (5a) in Spanish must be interpreted as having a contrastively focused subject, the English equivalent in (4), like the Spanish (5b), is ambiguous unless framed by a discourse context. Both may be either a case of contrastive stress or of an informationally focused subject (in answer to a question like ‘Who yelled?’).

**II Second language acquisition of Spanish word order**

I *Universal Grammar and the Minimalist Program*

This study of the acquisition of Spanish word order is carried out within the Universal Grammar (UG) framework of Chomsky’s (1995) Minimalist Program (MP). It has been proposed that UG is an innate, domain-specific body of knowledge of linguistic principles and parameters common to all natural languages (Chomsky, 1986). Values of parameters must be fixed based on linguistic experience. UG has been used to explain both first language acquisition and second language acquisition (SLA), although its role in SLA is more controversial, due in part to the variable levels of success L2 learners attain. There are those who claim that L2 learners have no access to UG (see Clahsen and Muysken, 1986; Clahsen, 1988), partial access (see Ritchie, 1983; Bley-Vroman, 1989; Schachter, 1989; Strozer, 1992; Herschensohn, 1999; Yusa, 1999) and full access (see Flynn, 1987, 1991, 1993, 1996; Flynn and Martohardjono, 1994; Epstein et al., 1996). I assume that UG does play a role in SLA. Specifically, I assume that the distinct lexical representation of unaccusatives and unergatives and the resultant word order differences in Spanish is a domain where awareness of the surface data available underdetermines what the learner must acquire. Hence, successful L2 learners must rely on their UG-determined knowledge of verb classes to constrain their L2 structural representations.

Principles of economy play an integral role in the MP, with strong features of functional categories (requiring overt movement in the syntax) being less economical than weak features (involving covert movement in LF). In this study I explore the question of whether L2 learners initially assume that all features are weak (in which case no movement should take place in the syntax) or whether they initially transfer a strong first language (L1) feature. If they assume a weak value, beginning learners will initially assume SV order for
unergatives and VS order for unaccusatives, regardless of context, since that is the order in which constituents are assumed to be base-generated. However, if the strong L1 feature is transferred by learners, they should produce SV order regardless of verb type, given that in English movement of an argument to the specifier of TP is obligatory in the syntax. The syntax of the target structures are further illustrated in the next section.

2 The structure of focus

I now outline the structures I assume to underlie neutral and informational focus for unaccusative and unergative verbs in Spanish. Neutral focus structures for unaccusatives and unergatives are illustrated in (6a) and (6b), respectively.

6) a. [TP e [T llegó [VP t_i mi nieto]]] arrived my grandson

b. [TP Mi nieto [T gritó [VP t_i t_j]]] my grandson yelled

In (6a) the internal argument of the unaccusative verb has not raised to [Spec, TP], whereas the external argument of the unergative verb in (6b) has. I assume that the nominative Case features of the unaccusative ‘subject’ are checked \textit{in situ}, and that the subject of unergatives must raise to [Spec, TP] to check Case features. In English, however, the subject of both verb types must move to [Spec, TP] to check strong Case features, resulting in SV order.

Unaccusatives whose subject is informationally focused will require no additional movement, because the focused element is already in the prosodically prominent position at the end of the sentence. For unergatives, informational focus involves further movement. I join Zubizarreta (1998), assuming that in Spanish, defocalized constituents may undergo leftward movement (Kayne, 1994) in order to leave the informationally focused constituent at the rightmost edge of a phrase, the position that is assigned main prominence. Ordóñez (1999) agrees that in cases of inversion with informational focus, the verb must raise to a projection higher than the subject (which he assumes to be in the Spec of a lower projection, such as AgrSP). Zubizarreta argues that this theory is preferable to others because it requires the least syntactic structure (i.e., no FocP), a desirable trait in Minimalism (Chomsky, 1995).

Example (7) illustrates the structure for an informationally focused subject of an unergative verb. The verb moves to T (to check V features) and then moves to a higher position to allow the
focused subject to receive prominence. The subject moves to [Spec, TP] as usual to check Case features.

7) \[
\text{XP gritó [TP Sara [T t_i [VP t_j t]]]}
\]
shouted \text{Sara}.

\text{‘Sara shouted.’}

Since English does not allow such prosodically motivated movement, [–focus] constituents are rendered metrically invisible and thus cannot be assigned main prominence (Zubizarreta, 1998). The informationally focused element receives prosodic prominence without further leftward movement of the verb, resulting in SV order regardless of the information structure of the sentence.\(^5\)

Thus, L2 learners of Spanish with English as their L1 must not only possess knowledge of the syntax of verb classes to achieve native-like acquisition of Spanish word order, but they must also know how focus and prosody interact to produce distinct word orders in Spanish.

3 Acquisition of inversion as a property of the pro-drop parameter

The acquisition of inversion (or the impossibility of inversion) by L2 learners has primarily been investigated as a property of the pro-drop parameter. Languages such as Italian and Spanish are [+pro-drop] and display properties of the parameter. Three of the properties commonly attributed to the parameter include: the ability to omit subject pronouns, free inversion of subject and verb in declarative sentences and that-trace effects (i.e., the subject can be extracted out of a clause with an overt complementizer) (Chomsky, 1981; Jaeggli, 1982). These properties are illustrated in examples (8–10) below.\(^6\) Because English is a [–pro-drop] language the English equivalents are ungrammatical.

8) Null subjects
   Anda muy ocupada.
   * Is very busy.
   ‘She is very busy.’

9) Inversion
   Vino Juan.
   * Came Juan.
   ‘Juan came.’

\(^5\)For a discussion of the structure of focus in Portuguese, see Kato and Raposo, 1996.
\(^6\)Examples are taken from White (1985), who originally took the Spanish sentences from Jaeggli (1982).
10) ‘That’ trace ¿Quién dijiste que vino?  
* Who did you say that came?  
‘Who did you say came?’

Data from studies by Goss et al. (1994), Lantolf (1990), Liceras (1988; 1989), de Miguel (1993) and White (1985; 1986) suggest that English-speaking L2 learners of Spanish have difficulties achieving native-like acquisition of inversion, while Spanish-speaking L2 learners of English realize relatively early on that inversion is impossible in English. In addition, all of these studies show a lack of clustering of inversion with other properties of the pro-drop parameter. A lexical view of parametric change such as that adopted by Herschensohn (1999; 2000) mitigates this problem by suggesting that parameterization is a gradual process rather than the instantaneous acquisition of all properties of a parameter’s cluster. Herschensohn (1999; 2000), following Borer (1984) and Wexler and Manzini (1987), suggests that parameterization is essentially lexical, and that the incompleteness often characteristic of SLA can be attributed to difficulties in acquiring the subtleties of particular lexical items rather than to difficulties in acquiring parametric values of the L2.

Herschensohn (2000) presents a model of SLA called Constructionism, which includes the following three-stage acquisition process:

- initial stage: transfer of L1 settings (Schwartz and Sprouse, 1996);
- intermediate stage: underspecification of morphological features (Eubank, 1996) and subsequent gradual acquisition of L2 constructions, characterized by variability and indeterminacy;
- final stage: near-native acquisition, but with the potential for residual indeterminacy because of incomplete acquisition of peripheral lexicon and morphology.

In other words, the interlanguage of L2 learners is constrained by UG, but they must begin the acquisition process with the grammatical template of their L1. There is then a stage of indeterminacy during which L2 parameters are set progressively, construction by construction. This stage is characterized by uneven performance due to an incomplete mastery of the L2 lexicon. And, finally, the most advanced L2 learners may achieve native-like attainment. Herschensohn notes that incompleteness observed in final-state grammars is only found in semantic subtleties of particular lexical items.

A Constructionist account of the present investigation would predict that beginning learners of Spanish with an English L1 would
transfer the SV order of their L1, regardless of verb class or discourse structure. Intermediate learners would exhibit variability, showing signs of gradual acquisition, but producing both SV and VS order where VS order is predicted. Finally, advanced learners could be expected either to reach native-like levels of acquisition or to display residual indeterminacy. Because of the complex and ambiguous nature of Spanish word order, which does entail lexical verb class distinctions, incomplete acquisition would not be unexpected.

4 Acquisition of discourse structure

The crucial role that discourse factors (i.e., presupposition/focus) play in determining Spanish word order was not systematically considered in the aforementioned pro-drop studies. While little research has examined the acquisition of discourse phenomena such as focus in Spanish, some research has suggested that discourse factors may be more difficult to acquire than grammatical ones (Ioup et al., 1994; Polio, 1995; Pérez-Leroux and Glass, 1997; 1999). I assume that discourse context sets up the interpretation of an utterance, that is, discourse phenomena such as focus have syntactic consequences. Recall that while in English focus is marked phonologically with stress, in Spanish it is marked syntactically with word order. More specifically, focused information is sentence-final in Spanish, while in English word order remains constant and sentence-internal constituents may be prosodically prominent.

To my knowledge, only one study has investigated the SLA of Spanish word order as it relates to discourse context. Ocampo (1990) examined the acquisition of verb–direct-object and direct-object–verb order by learners of Spanish with an English L1. He found that intermediate learners, speaking spontaneously, always produced verb–direct-object order, regardless of the discourse context. That is to say, they were unable to use different word orders to convey particular focus relations.

In addition to word order, focus in Spanish is manifested in the overt/null subject pronoun distinction. Overt subjects are used only in focused or ambiguous discourse contexts. Pérez-Leroux and Glass (1997; 1999) examined the acquisition of Spanish null subjects by L1 English speakers. They note that for focus the L1 parallels the L2 structure; in English the distribution of stressed/unstressed pronouns is used instead of the overt/null subject alternation (Luján, 1986). The prediction that the distinction should therefore be learnable is borne out in their studies. L2 learners of all levels discriminated in the production of null pronouns in focused and
unfocused environments, although advanced learners and native speakers differed significantly from beginning and intermediate learners, exhibiting a more marked difference between the two contexts. The authors conclude that, ‘Knowledge of the marking of the topic/focus distinction is acquired over time and experience’ (Pérez-Leroux and Glass, 1999: 242).

Both Polio (1995) and Pérez-Leroux and Glass (1997; 1999) also found that L2 learners have more difficulty acquiring the null/overt pronoun distinction at the discourse level as compared to when there is a syntactic or semantic restriction on pronoun use. In other words, results from both studies seem to indicate that grammatical competence is attained more readily than discourse competence.

If the implications of the studies mentioned above hold true in the present study, two predictions are possible:

- Learners should successfully acquire the word order of focus constructions, but this will happen gradually, with progressive improvement across proficiency levels.
- Learners should have more difficulties acquiring word order with focus structure than with the unaccusative–unergative distinction (which is found in neutral discourse contexts).

5 The SLA of unaccusativity

Much recent research has focused on the role of the lexicon in SLA, due in part to the importance given to the lexicon in the MP. Specifically, this research has examined whether learners display behaviour evidencing knowledge of L2 argument structure and whether structural generalizations made by L2 learners are constrained by knowledge of verb classes.

A number of recent studies have focused on the marking of argument structure in SLA (Zobl, 1989; Moore, 1993; Hirakawa, 1995; Yip, 1995; Juffs, 1996; Balcom, 1997; Oshita, 1997; Montrul, 1999; 2000; 2000; Ju, 2000). In these studies, L2 learners from various L1 backgrounds have demonstrated knowledge that unaccusative verbs, unlike unergative verbs, select for a theme argument in direct object position. Knowledge of the argument structure of intransitive verbs is evidenced in learners’ overgeneralization of passive and causative constructions with unaccusatives. Evidence that the UG-governed mapping between syntactic structures and lexical–semantic interpretation guides L2 development has also been found in numerous studies (Rutherford, 1989; Zobl, 1989; Sorace, 1995; Juffs, 1996; Dekydtspotter et al., 1997; Yuan, 1997; 1999; Hertel and Pérez-Leroux, 1998; 1999; Hirakawa, 2000; Toth, 2000). Much
of this research has focused on the unaccusative–unergative distinction.

Toth (2000) found that beginning learners of Spanish with an English L1 overgeneralized anticausative *se* significantly more for unaccusatives than for unergatives. The learners showed sensitivity to the thematic similarities between the arguments of unaccusative verbs and those of single-argument alternators, which do appear with *se*. Toth suggests that access to universal semantic knowledge constrained the interlanguage grammars of the learners, given that the L1 could not be a source of knowledge.

Similarly, Sorace (1995) found a UG-derived sensitivity to the semantics of unaccusative and unergative verbs in the grammars of English L2 learners of Italian. Even the beginning learners (along with intermediate, advanced and near-native learners) in her study were able to distinguish unergatives from unaccusatives, using the correct overt morphology of Italian (i.e., auxiliary choice and the distribution of *ne*-cliticization). They showed a growing sensitivity to the relative influence of lexical–semantic factors on its syntactic manifestations.7

Sensitivity to verb class as evidenced in the syntax was also exhibited by learners in Hertel and Pérez-Leroux (1998; 1999). Results of a grammaticality judgement task indicated that all groups (native Spanish speakers, beginning learners and advanced learners) exhibited sensitivity to verb class, preferring inversion with unaccusative verbs to inversion with unergative verbs. Rather than full transfer of strict SV order from English, learners seemed to possess knowledge of L2 syntax–semantics correspondences that are not salient in the input, suggesting access to UG. Results from an oral narration task also revealed that the distribution of tokens across verb classes and word order was similar for all groups (native speakers, intermediate learners and advanced learners). Most cases of inversion occurred with unaccusatives, while inversion with unergatives was rare. The results of both of these tasks suggest that L2 learners do possess knowledge of verb classes and of how these relate to Spanish inversion.

Unaccusative verbs in Chinese may also appear with VS order, while unergatives never do so. Examining the acquisition of the Chinese word order of unaccusative and unergative sentences by native English speakers, Yuan (1997; 1999) found that only his most

---

7Herschensohn (2000) reviews Sorace’s studies and claims that they show evidence in favour of Constructionism, given that they document the gradual development of grammatical constructions through specific lexical items. In addition, the syntactic behaviour of core unaccusatives was acquired before that of peripheral ones (for a description of her semantic hierarchy of unaccusativity, see Sorace, 1993a; 1993b; 1995).
advanced participants behaved like native speakers, distinguishing between the two verb classes. Using both an acceptability judgement task and a production task, he found that acquisition did not proceed in a linear fashion. Stages included:

1) rejection and lack of production of VS order with unaccusatives and unergatives; 
2) increasingly more acceptance and production of VS order, but overgeneralization of VS order to unergatives; 
3) return to rejection and lack of production of VS order; 
4) native-like judgements and production.

Contrary to Yuan’s finding that L2 inversion of unaccusatives was acquired only by very advanced learners, Rutherford (1989) and Zobl (1989) both found that L2 learners of English from a range of proficiency levels and L1 backgrounds preferred inversion with unaccusatives, even though it is not possible in the L2. Because this sensitivity to verb class and word order choices could not be attributed to transfer, it again appears that knowledge of the lexicon influenced their L2 grammars.

Oshita (2001) examines much of the previously cited phenomena related to the acquisition of unaccusativity and proposes a developmental account called the Unaccusative Trap Hypothesis. He proposes that in early SLA, both unaccusatives and unergatives are syntactically represented as unergatives. The single argument of both verb classes is interpreted as the external argument and SV order results. Then in the next stage, passivization of unaccusatives, VS order and other nontarget structures result when learners recognize that the single argument of unaccusatives is an internal argument. Finally, learners may achieve native-like acquisition of unaccusatives.

The literature reviewed here suggests that L2 learners’ development is constrained by knowledge of correspondences between the lexicon and syntax; that is to say, learners are able to map lexical representations to syntactic representations in SLA. Knowledge of the argument structure of intransitive verbs is also evidenced by behaviour not attributable to either the L1 or the L2, namely the overgeneralization of unaccusative verbs in passive and causative constructions.

III Experiment: goals, assumptions and research questions

To test the acquisition of lexical and discourse-related Spanish word order, a contextualized written production task was administered to
English-speaking learners of Spanish at four proficiency levels, as well as to a native speaker control group.

Before stating my research questions I give three assumptions on which I base my research. First, I assume that awareness of the surface data available underdetermines what the learner must acquire (compare Chomsky, 1965; Hornstein and Lightfoot, 1981). On the surface unaccusative verbs seem to be no different from unergative verbs, both verbs taking a single argument in subject position. Although inversion is more frequent with unaccusatives in Spanish, both unaccusatives and unergatives appear with VS and SV order, depending on the discourse context. Recall that focused subject contexts evoke VS order for both verb classes, while focused verb contexts result in (S)V order.

Secondly, I assume that explicit classroom instruction on Spanish word order is insufficient for acquisition. The word order of declarative sentences is rarely, if at all, discussed in Spanish classes or textbooks. A review of top-selling beginning, intermediate and advanced textbooks revealed that very few textbooks mentioned inversion in declarative sentences, and when they did reference was made only to the flexible nature of Spanish word order. No textbooks discussed the specific effects of verb classes or discourse factors on word order. In addition, the majority of Spanish instructors are not aware of the unaccusative–unergative distinction and its structural effects.

Thirdly, it is highly doubtful that negative evidence is provided for nonnative word order, since it rarely impedes comprehensibility and is not ‘ungrammatical,’ but only the less preferred order in a given discourse context. I maintain that no feedback is given either for oral or written production. Thus, the principal, if not only, sources of information about Spanish word order must be input and UG-constrained knowledge of the lexicon.

Given the challenges that L2 learners face when acquiring these subtle aspects of Spanish word order, my research questions are the following:

- To what extent do lexical to syntax mappings guide the stages of L2 development? Specifically, do learners demonstrate knowledge of the distinct word order of unaccusative verbs (as opposed to unergative verbs) in a neutral discourse context?
- At what stage are L2 learners sensitive to how focus interacts with word order in Spanish, as evidenced by their ability to acquire discourse-related word order preferences?
IV Method

1 Participants

The production task designed to answer these questions was administered to participants from five groups: four learner groups (beginner, low intermediate, high intermediate and advanced) and one native speaker control group. Twenty-four beginner, 15 low intermediate, 18 high intermediate and 24 advanced learners, as well as 18 native speakers of Spanish completed this task. All learners were native speakers of English. The beginner group was made up of undergraduate students enrolled in a third semester Spanish course. I chose these learners for the lowest proficiency level group rather than true beginners because it is unlikely that first or second semester students would be familiar with the relevant lexical items included in the task. The low intermediate group consisted of undergraduate students enrolled in fourth and fifth semester Spanish courses, typically referred to as ‘bridge’ courses, just beyond the basic language sequence. The high intermediate group was made up of undergraduate students enrolled in advanced fourth year Spanish classes, typically taken by Spanish majors and minors. The advanced group was selected from the most experienced L2 learners available, including graduate students and instructors in Spanish. Finally, the native speakers were from a variety of Spanish-speaking countries.

2 Nature of the task

Participants completed a contextualized paper and pencil production task. English was used for both the contexts and the instructions to ensure that the less proficient learners understood them. Another benefit of presenting only the test sentence in the target language was the impossibility of participants attempting to use the surface grammatical form of the contexts as a source of help in judging the sentences (Dekydtspotter et al., 1997). The native Spanish-speaking participants were living and studying/working in the USA when they participated in the study and possessed an advanced level of English proficiency. Thus, they did not experience any problems understanding the situations.

The goal of the stories was to manipulate information structure. Each situation involved a lack of knowledge on the part of one character about something that happened in his or her absence, and the reader, also a character in the story, was to answer the other

---

8Here I followed the methods used by Dekydtspotter et al. (1997).
character’s question about what happened. This scenario enabled the information available to participants to be controlled. Each situation was carefully designed to contain the following basic structure: two people (one of whom is the reader) are doing something (e.g., wrapping a present, talking at a party) when one of them either (1) leaves for a brief time period and upon returning notices that something has happened in his or her absence, or (2) notices that something must have happened before the two of them got together. In both cases the character asks the subject a question about what happened. Target structures included unaccusative and unergative verbs. Only nonalternating unaccusatives were used. See Table 1 for a list of the unaccusative and unergative verbs targeted. Relatively high frequency vocabulary items were chosen for the task and learners were instructed to write words in English if necessary.

The questions focused either the entire sentence (as in 11a) or the subject (11b). For example, if the situation involves someone arriving at a party, the questions in (11a) and (11b) set up different expectations for the information structure in the answer.9

11) a. ¿Qué pasó? ‘What happened?’
b. ¿Quién llegó? ‘Who arrived?’

Because global questions such as (11a) invoke a discourse-neutral interpretation, VS order was expected for native speakers with unaccusatives, while SV order was expected with unergatives. Questions such as (11b) focus the subject, so VS order should be preferred for both verb classes. The word orders expected for the two target verb classes with each type of question are summarized in Table 2.

<table>
<thead>
<tr>
<th>Unaccusatives</th>
<th>Unergatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>desaparecer (‘disappear’)</td>
<td>bailar (‘dance’)</td>
</tr>
<tr>
<td>entrar (‘enter’)</td>
<td>cantar (‘sing’)</td>
</tr>
<tr>
<td>escapar (‘escape’)</td>
<td>dormir (‘sleep’)</td>
</tr>
<tr>
<td>llegar (‘arrive’)</td>
<td>estornudar (‘sneeze’)</td>
</tr>
<tr>
<td>nacer (‘be born’)</td>
<td>gritar (‘shout’)</td>
</tr>
<tr>
<td>salir (‘leave’)</td>
<td>llorar (‘cry’)</td>
</tr>
<tr>
<td>venir (‘come’)</td>
<td>nadar (‘swim’)</td>
</tr>
</tbody>
</table>

Pérez-Leroux and Glass (1997; 1999) used a similar approach for testing null subjects.
An example situation is given in (12):

12) You and your friend Sergio are at a party. Sergio leaves to use the bathroom. While he is in the bathroom, Sara, the life of every party, arrives. When Sergio returns he notices that everyone seems much more festive.
   Sergio asks you: ¿Qué pasó?
   What do you answer? _________________________

The target answer, shown in (13), included VS order, given that llegar (‘to arrive’) is an unaccusative verb and the question asked is a global question.¹⁰

13) Llegó Sara.
    arrived Sara.
   ‘Sara arrived.’

Pilot testing revealed that the weak NP nadie (‘nobody’) merited special attention. During pilot testing native speakers often answered global unaccusative questions with SV order, although they also accepted VS order when asked. The word order of negative NP subject answers to a global unergative question also varied more than answers to global questions with other types of NPs. Thus, negated subject NPs were included in the instrument under a separate category and only with global questions.

Six tokens of global and six of subject questions were used for each verb class. Only two negative NP global situations were included for each verb class since that was not the central focus of the present study and limiting the length of the task was an important consideration. Six distractor tokens were also included. They followed the same basic structure of the other situations, and included transitive verbs, predicate questions, and adjunct questions, such as ¿por qué . . .? (‘why?’). The order of the situations was randomized.

Table 2  Expected Spanish word order preferences for question type and verb class

<table>
<thead>
<tr>
<th>Verb class</th>
<th>Global question</th>
<th>Subject question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaccusative</td>
<td>VS</td>
<td>VS</td>
</tr>
<tr>
<td>Unergative</td>
<td>SV</td>
<td>VS</td>
</tr>
</tbody>
</table>

¹⁰ Situations that might have evoked contrastive/identificational focus were avoided. That is, the domain of identification of ‘who’ did something was not a closed set of individuals known to the participants of the discourse (Kiss, 1998). Had such situations been included it would have been impossible to determine if, for example, an SV answer to a subject question was actually a case of identificational focus rather than an inappropriate word order.
Each context was presented, one at a time, on an overhead transparency and the participants were instructed to write the first response that came to mind. After reading each context and question they were given only 20 seconds to answer. They were also instructed not to correct or change their first answer in any way. This procedure ensured that the task elicited the participants’ intuitions rather than other metalinguistic knowledge of the targeted structures.

Participants were also instructed to answer the questions in complete sentences. While this may not be completely natural with focused subject questions, complete sentence answers were essential in order to determine word order preferences. Production of partial constituent responses would have weakened the amount of analysable results.

3 Data analysis

Responses were recorded and categorized as SV, VS or ‘other’. Only sentences that included a subject and an unaccusative or unergative verb were considered for statistical analysis. ‘Other’ responses were excluded. Given the relatively open-ended nature of the task, many responses were categorized as ‘other’. The most common ‘other’ responses included verbless sentences (primarily for the subject questions) and sentences that did not include an unergative or unaccusative verb.

The independent variables were:

- proficiency level: beginner, low intermediate, high intermediate, advanced and native speaker;
- question type: global, subject and global with negative NP; and
- verb class: unaccusative and unergative.

The dependent variable was the percentage of word order (SV or VS) produced by participants. Scores were calculated for each subject for each question type/verb class combination. These scores consisted of the proportion of VS sentences out of the total SV and VS sentences produced. For example, if a subject produced three VS sentences and three SV sentences for global questions with unaccusative verbs, the score would be 50% (3 VS responses out of a total of six responses).

A one between-subjects and two within-subjects repeated measures ANOVA was performed to assess whether there were differences in the proportion of inversion produced due to the independent variables. The between-subjects factor was proficiency level, while the within-subjects factors were question type and verb
class. In the case of significant omnibus F values with the ANOVA, specific differences were identified using post hoc Tukey’s tests and paired t-tests with Bonferroni corrections. The level of significance was preset at 0.05 for all analyses.

V Results

The ANOVA revealed a significant question type by verb class by group interaction \( (F(8,188) = 2.61, p = 0.01) \). Significant two way interactions were also found for verb class by group \( (F(4,94) = 5.01, p = 0.001) \) and question type by verb class \( (F(2,93) = 4.11, p = 0.018) \). Significant main effects were found for question type \( (F(2,93) = 5.69, p = 0.004) \), verb class \( (F(1,94) = 30.74, p < 0.0005) \) and group \( (F(4,94) = 22.10, p < 0.0005) \).

1 Global questions

The source of these interactions can better be understood by examining group means as well as results of post hoc tests. The means for the global questions, as seen in Table 3, show that inversion was produced primarily by the native speaker and the advanced learner groups, while lower proficiency learners produced little or no VS order with either verb class.

Post hoc testing revealed that with unaccusative global questions, there was no significant difference between the native speaker and advanced learner groups \( (p > 0.05) \). In addition, the native speaker and advanced learner groups produced significantly more VS sentences than the other groups \( (p < 0.05) \). The high and low intermediate groups produced relatively low percentages of inversion with unaccusatives and the beginners produced no inverted sentences. For global questions with unergative verbs, post hoc tests showed that advanced learners produced significantly more inverted sentences with unergatives than the other learner groups and the native speakers \( (p < 0.05) \).

The global question means demonstrate that the native speakers and the three learner groups that produced VS sentences (the beginner group did not produce any) all did so more with unaccusatives than with unergatives. However, post hoc tests demonstrated that only the native speaker and the advanced learner groups produced significantly more inversion with unaccusatives as compared to unergatives \( (p < 0.05) \).
## Table 3
Mean percentage and standard deviation of VS sentences produced for global questions with unaccusative and unergative verbs.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean (sd)</th>
<th>Raw tokens (VS/total SV+/VS)</th>
<th>Mean (sd)</th>
<th>Raw tokens (VS/total SV+/VS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>0.00% (0.00)</td>
<td>0/84</td>
<td>0.00% (0.00)</td>
<td>0/118</td>
</tr>
<tr>
<td>Low intermediate</td>
<td>5.73% (12.20)</td>
<td>3/54</td>
<td>0.00% (0.00)</td>
<td>0/75</td>
</tr>
<tr>
<td>High intermediate</td>
<td>9.11% (15.34)</td>
<td>6/68</td>
<td>1.39% (5.89)</td>
<td>1/87</td>
</tr>
<tr>
<td>Advanced</td>
<td>55.54% (36.87)</td>
<td>45/83</td>
<td>33.17% (30.71)</td>
<td>33/110</td>
</tr>
<tr>
<td>Native</td>
<td>38.83% (31.25)</td>
<td>21/53</td>
<td>6.56% (11.22)</td>
<td>5/76</td>
</tr>
</tbody>
</table>

Note that the raw token proportions are not the exact equivalent of the mean percentages, given that the percentages are calculated according to individual data and the raw proportions are based on group data.
2 Focused subject questions

The second question type focused the subject of unaccusative and unergative verbs. Group means for subject questions with unaccusative and unergative verbs are given in Table 4. These means show that beginner and low intermediate learners again transferred English SV order, displaying no apparent sensitivity to the relationship between information structure and word order in Spanish. High intermediate and advanced learners produced increasingly more VS order with both verb classes.

Post hoc tests showed that for questions focusing the subject of unaccusative verbs, native speakers produced significantly more VS sentences than beginning and low intermediate learners ($p < 0.05$), but not high intermediate learners ($p > 0.05$). The advanced learners produced VS order significantly more than the three other learner groups ($p < 0.05$), but not significantly more than native speakers ($p > 0.05$).

Results from post hoc tests for questions focusing the subject of unergative verbs revealed similar differences between groups. Again, the native speaker group differed significantly from the low intermediate and beginner groups ($p < 0.05$), while the advanced group means were significantly different from all other learner groups ($p < 0.05$), but not from the native speaker group ($p > 0.05$). Within each group, no significant differences were found in the way participants treated unaccusatives with focused subjects and unergatives with focused subjects ($p > 0.05$).

Table 4  Mean percentage and standard deviation of VS sentences produced for focused subject questions with unaccusative and unergative verbs

<table>
<thead>
<tr>
<th>Group</th>
<th>Unaccusatives</th>
<th></th>
<th>Unergatives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (sd)</td>
<td>Raw tokens (VS/total SV+VS)</td>
<td>Mean (sd)</td>
<td>Raw tokens (VS/total SV+VS)</td>
</tr>
<tr>
<td></td>
<td>VS order</td>
<td></td>
<td>VS order</td>
<td></td>
</tr>
<tr>
<td>Beginner (n = 24)</td>
<td>0.00% (0.00)</td>
<td>0/118</td>
<td>0.00% (0.00)</td>
<td>0/108</td>
</tr>
<tr>
<td>Low interm (n = 15)</td>
<td>5.00% (14.02)</td>
<td>2/59</td>
<td>0.00% (0.00)</td>
<td>0/58</td>
</tr>
<tr>
<td>High interm (n = 18)</td>
<td>14.67% (24.14)</td>
<td>13/84</td>
<td>13.17% (24.07)</td>
<td>9/67</td>
</tr>
<tr>
<td>Advanced (n = 24)</td>
<td>53.60% (42.68)</td>
<td>50/93</td>
<td>36.26% (37.05)</td>
<td>33/84</td>
</tr>
<tr>
<td>Natives (n = 18)</td>
<td>36.42% (33.74)</td>
<td>17/48</td>
<td>32.87% (37.17)</td>
<td>11/36</td>
</tr>
</tbody>
</table>
3 Negative NP questions

The last question type to be examined is global with a negative NP subject. The means for unaccusative and unergative inversion, seen in Table 5, demonstrate different patterns of behaviour from those seen with global questions with other types of NP subjects. The beginner and high intermediate groups produced no inverted sentences, the low intermediate group produced them only with unaccusatives, and the advanced learners did so to the same extent with both verb classes. The native speakers appear to have again distinguished between unaccusative and unergative verbs.

Results from post hoc tests indicate that for the negative NP unaccusative responses, the native speakers and advanced learners produced significantly more VS sentences than the high intermediate and beginning learners (\( p < 0.05 \)), but not the low intermediate group (\( p > 0.05 \)). For the negative NP responses with unergative verbs, native speaker performance was not statistically different from that of any of the other groups (\( p > 0.05 \)). Advanced learners, again producing the highest percentage of inversion, were significantly greater than all groups (\( p < 0.05 \)) except the native speakers (\( p > 0.05 \)). The three lowest learner groups performed identically, producing zero cases of VS order. None of the five groups produced significantly more VS order with unaccusatives than with unergatives. Although the native speaker means seem to indicate a preference for inversion with unaccusatives, that preference did not reach significance.

**Table 5** Mean percentage and standard deviation of VS sentences produced for global questions with a negative NP subject for unaccusative and unergative verbs

<table>
<thead>
<tr>
<th>Group</th>
<th>Unaccusatives</th>
<th>Unergatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (sd)</td>
<td>Raw tokens</td>
</tr>
<tr>
<td></td>
<td>VS order (VS/total SV+VS)</td>
<td></td>
</tr>
<tr>
<td>Beginner (n = 24)</td>
<td>0.00% (0.00)</td>
<td>0/29</td>
</tr>
<tr>
<td>Low interm (n = 15)</td>
<td>11.11% (25.12)</td>
<td>1/12</td>
</tr>
<tr>
<td>High interm (n = 18)</td>
<td>0.00% (0.00)</td>
<td>0/22</td>
</tr>
<tr>
<td>Advanced (n = 24)</td>
<td>29.54% (38.05)</td>
<td>13/39</td>
</tr>
<tr>
<td>Natives (n = 18)</td>
<td>29.41% (38.57)</td>
<td>10/32</td>
</tr>
</tbody>
</table>
VI Discussion

1 Global questions: sensitivity to the syntactic effects of verb class

As predicted, the native speaker group produced significantly more VS sentences with unaccusative verbs (39%) as compared to unergative verbs (11%) in answer to global questions. While 39% VS order is lower than expected, given that syntactic theory predicts that VS order should be preferred with unaccusatives, inversion with unaccusatives was clearly distinguished from inversion with unergatives.

Only the advanced learner group demonstrated a similar statistically significant preference for inversion with unaccusatives (56%) as compared to unergatives (33%). That is to say, they are the only learner group that appears to have acquired the distinct syntactic behaviour of these two verb classes. While they did distinguish between the verb classes, and their rate of inversion with unaccusatives was statistically indistinguishable from that of native speakers, it is also important to note that they produced significantly more inversion with unergatives than the native speaker group. They seem to have overgeneralized inversion to the unergative verb class for global questions.

Overgeneralization in the interlanguage of advanced L2 learners was also observed by Pérez-Leroux and Glass (1997; 1999), Yuan (1997; 1999) and Papp (2000). Similar to the results of the present study, Papp, and Pérez-Leroux and Glass, found that while advanced learners overgeneralized, they still showed native-like patterns of performance, distinguishing between grammatical and ungrammatical constructions (Papp) and semantic contexts (Pérez-Leroux and Glass). Papp suggests that pseudo-optional L2 constructions (i.e., constructions that seem optional but actually carry different interpretations), such as Spanish word order, provide an acquisition problem for L2 learners. The word order input they receive is ambiguous, given that both unaccusative and unergative verbs are present in the input with SV and VS order, depending upon the discourse context.

While Yuan (1997; 1999) also found that intermediate and some advanced learners of L2 Chinese overgeneralized VS order with unergatives, the most advanced learners in his study were able to recover from this overgeneralization. Yuan attributes their ability to recover to the fact that VS order with unergatives is always ungrammatical in Chinese and thus will not be present in the input. Because Spanish unergatives are possible with VS order in focused subject contexts, recovery from overgeneralization may be more difficult for L2 learners of Spanish.
Results from the global questions also revealed that the three other learner groups (beginner, low intermediate and high intermediate) produced very little VS order with either verb class, showing no significant sensitivity to the structural effects of verb class. While both the low and high intermediate groups did produce more inversion with unaccusatives than with unergatives, the number of inverted sentences produced was very low. The beginner group was the most categorical, producing zero cases of inversion for the entire task. It is clear that English SV order constrains beginning and intermediate learners’ hypotheses regarding Spanish word order.

This lack of sensitivity to a syntactic reflex of unaccusativity on the part of all but very advanced learners contrasts with much of the previous literature (see Liceras, 1989; Zobl, 1989; Sorace, 1995; Hertel and Pérez-Leroux, 1998, 1999; Toth, 2000;). However, a similar lack of knowledge of lexical–syntactic correspondences in the interlanguage grammars of beginning and intermediate learners has been found in other studies (Liceras, 1988; Lantolf, 1990; de Miguel, 1993; Yuan, 1997; 1999; Hirakawa, 2000). Recall that even though the same verb classes – unaccusatives and unergatives – exist in the learners’ L1, English does not display clear diagnostics of surface unaccusativity. Beginning and intermediate learners thus do not seem to have acquired the syntactic consequences of verb class, but instead transferred the word order of their L1. These results are also consistent with Oshita’s (2001) Unaccusative Trap Hypothesis, which suggests that beginning L2 learners do not distinguish between unaccusative and unergative verbs, analysing the argument of both verb classes as the external argument.

2 Focused subject questions: sensitivity to discourse structure

Results for focused subject questions revealed that advanced and high intermediate learners’ production was statistically indistinguishable from the native speakers for both unaccusative and unergative verbs. These learners seem to have acquired the discourse-related word order preferences of their L2. The low intermediate group again produced very little inversion, and the beginner group again produced none. These two learner groups do not exhibit knowledge of how focus interacts with word order in Spanish, but are instead influenced by their L1, which uses prosodic rather than syntactic means to focus constituents. Because the experiment was a paper and pencil task, it is not known with certainty if they use English prosodic patterns to focus the preverbal subject. As expected, no groups treated the two verb
classes differently to a significant extent, since discourse context rather than verb class determines the word order for answers to focused subject questions.

This late acquisition of discourse structure is consistent with previous studies (Ocampo, 1990; Polio, 1995; Pérez-Leroux and Glass, 1997; 1999). Sensitivity to syntactic marking of focus relations, as opposed to prosodic marking, is acquired gradually, and is preceded by L1 transfer. However, the prediction that discourse-related word order would be acquired after lexically determined word order was not borne out in this experiment. The word order effects of both verb class and discourse structure seem to be acquired late in the acquisition process.

3 Negative NP questions
Results from the global questions with a negative NP subject showed that the advanced learners and the native speakers were statistically indistinguishable for both unaccusative and unergative verbs. The other learner groups produced just one inverted answer with unaccusatives and none with unergatives. Regarding within-group results, different from the global question results, no groups produced significantly more inversion with unaccusatives than unergatives, although the native speaker data approached significance (29% with unaccusatives and 13% with unergatives). However, recall that fewer tokens were provided for this question type, which may have led to the high standard deviations of the native speaker group, and thus a lack of significance. The advanced group had almost identical mean scores for unaccusatives and unergatives (30% and 32% respectively), again overgeneralizing inversion to unergatives. Given the low number of tokens used, it is difficult to determine with much certainty whether negative NP subjects of unaccusatives and unergatives behave differently with regard to word order, for either native speakers or learners. Future study of the nature of negative NP subjects is needed.

4 Economy principles and L2 development
Minimalist accounts of SLA predict that L2 learners, like L1 learners, should be sensitive to economy considerations when acquiring a language (see Platzack, 1996; Yusa, 1998, 1999). Results from this production task, however, cast doubt upon all but the most advanced learners obeying principles of economy. If learners are sensitive to economy principles, it would be expected that they first assume SV order for unergatives in all discourse contexts, given that
covert movement is less costly than overt movement. In other words, they would assume that all features are weak. The subject of unergatives would be assumed to stay in preverbal position in [Spec, VP], and the verb would also remain in situ. However, for unaccusatives, the initial-state preference should be VS, since the subject of unaccusatives is generated postverbally in all natural languages. Given that beginning learners produce no cases of VS order, economy is clearly not the primary factor guiding their acquisition process.

Rather than beginning the SLA process with the weak N-feature in T, beginning and intermediate learners of Spanish seem to have a strong N-feature in T, requiring the less economical overt movement of NP to [Spec, TP] to check T’s strong N-features. Thus, SV order results for both unaccusative and unergative verbs regardless of the focus structure. The most logical source of the strong N-feature is the L1. Both Camacho (1999) and Yusa (1999) also found evidence of transfer of strong L1 features to the L2, the former examining Spanish word order patterns of native Quechua speakers and the latter investigating wh-island effects in the English of L1 Japanese speakers.

In addition to economy considerations in SLA, the MP also regards parametric change in SLA as a lexical phenomenon. Herschensohn’s (2000) Constructionism is a model of SLA that is consistent with a lexical view of parametric change. Recall that Constructionism involves a three-stage acquisition process, the first of which predicts the transfer of L1 parameter settings (see Schwartz and Sprouse, 1996). The beginning learners in this experiment did seem to begin the acquisition process with the grammatical template of their L1. They produced only SV order with both verb classes, assuming that Spanish, like English, does not distinguish between unaccusatives and unergatives in the syntax.

The low and high intermediate learners in this study fit the description of learners in Herschensohn’s intermediate stage, which is characterized by variability, indeterminacy and gradual acquisition. While the intermediate groups invert with unaccusatives significantly less than native speakers, there is a gradual rise in production of VS order from beginner to low intermediate to high intermediate groups. It is assumed that a learner must first notice a mismatch between his or her SV representation and the input’s VS order for one unaccusative verb, and then the verb’s lexical entry changes to note that its NP argument does not have to raise before LF. The resulting parametric change is gradual, and different parametric settings may be in effect for different lexical items, as evidenced by variable word order within the same verb
The change observed for the present experiment seems to be very slow, since even high intermediate learners, who are advanced undergraduate majors and minors, produced a very low percentage of inversion with unaccusatives. The ambiguous input combined with L1 influence create acquisition difficulties that are only gradually overcome.

Finally, the production data of the advanced learners in this experiment can also be explained in terms of incomplete acquisition of the lexicon. While the advanced learners’ production of inversion showed native-like sensitivity to verb class, they also overgeneralized inversion to unergative verbs in neutral contexts. Herschensohn suggests that the final stage of SLA is characterized by native-like attainment, but that there is also a potential for residual indeterminacy. Residual indeterminacy may result from the incomplete acquisition of the properties of individual lexical items or the ambiguous and subtle nature of the input. This is the case here, given the seeming optionality of inversion and the interaction of verb class, discourse structure and word order in Spanish.

5 Theoretical predictions and native speaker data

Because research in theoretical syntax usually does not use empirical testing of native speaker performance, the native speaker results for this experiment merit further comment. For unaccusative global, negative NP unaccusative global, and unaccusative and unergative focused subject questions, the native speaker group produced considerably less inversion than predicted by syntactic literature. While all trends were in the predicted direction (i.e., more inversion with unaccusatives than unergatives for global questions and more inversion with unergative focused subject questions than with unergative global questions), the percentages of VS order produced were relatively low. This finding is similar to that of Pérez-Leroux and Glass (1997), who observed that the percentage of overt subject pronouns used by native speakers in focused environments (36%) ‘falls short of the idealized intuition that the target response was unequivocally the overt pronoun’ (p. 159). The subtle nature of the use of null vs. overt subject pronouns and SV vs. VS order does not seem to lend itself to the grammatical–ungrammatical dichotomy presented by theoretical accounts.

A reviewer called to my attention that in opposition to this idea of gradual acquisition within the same class, variation between nonalternating unaccusative verbs found by Ju (2000) was very low. The Chinese learners of English in his study varied in their overpassivization of alternating unaccusative verbs, but nonalternating unaccusatives were relatively equal in terms of difficulty level.
It should also be considered that the native speaker participants in this study, as in many other SLA studies, were all fluent speakers of English residing in the USA at the time of testing. Thus, their proficiency in English could have influenced their performance (see Sorace, 1999; 2000). However, recall that they did produce and prefer VS order in the predicted structures, so if English affected their performance, it influenced only the degree to which they preferred VS order and did not change their word order patterns. While it would be interesting to compare their data with that of monolingual Spanish speakers, the native speaker data elicited here had the benefit of representing the input to which the learners are exposed in the L2 classroom, since most native speakers were Spanish instructors. Additionally, the native speakers had to know English in order to understand the contexts provided in the task (i.e., to be able to complete the same task as the other participants).

VII Conclusions

This study has contributed to our knowledge of the SLA of lexicon-to-syntax mapping and discourse structure, as well as the ability of the MP to account for L2 development. In sum, I have maintained that data from a production task provide evidence that English-speaking L2 learners of Spanish follow a developmental path that can be accounted for by a lexical view of parametric change. Lexically and focus-related inversion are acquired gradually, after a stage of L1 transfer, followed by indeterminacy. Both structures are acquired relatively late, and even very advanced learners diverged from the native speakers, exhibiting overgeneralization behaviour. The challenge that these structures seem to present for L2 learners is not unexpected, given the following assumptions. First, the input data is confusing, since unaccusatives and unergatives both take one argument and appear with SV and VS order, depending upon the context. The native speaker data from these experiments also revealed that the predicted word orders were not categorical, but were instead probabilistic, making the input even more ambiguous. In addition, little, if any, explicit instruction on Spanish inversion is provided by classroom teachers or textbooks. Finally, nonnative-like word order does not impede comprehensibility and is not ‘ungrammatical.’ Yet despite these potential difficulties, learners did show a growing, although not completely native-like, sensitivity to the subtle differences in the distribution of SV and VS sentences. Their sensitivity to the special word order of unaccusatives was attributed to the UG-governed
mapping between syntactic structures and lexical–semantic interpretation.

Future investigations might shed more light on the distinct word order behaviour of sentences with negative NP subjects in neutral discourse contexts. Because it was not the focus of the present study, only a small number of negative NP tokens were included. Inclusion of a greater number of tokens as well as focused subject questions with negative NPs would help to better understand the status of these structures in both native speaker and learner grammars.

Additionally, in order to determine whether learners are indeed using sentence-internal stress to focus constituents, an oral task would be needed. It would also be interesting to investigate the acquisition of Spanish word order patterns for other verb types, such as transitive and ditransitive verbs. In addition, the testing of word order for more varied discourse structures (e.g., focused predicate, focused object) would lead to a better understanding of the SLA of discourse competence. The inclusion of different verb types and discourse structures would also allow for a closer examination of the attainment of advanced learners and their tendency to overgeneralize inversion.

Acknowledgements

The completion of this research would not have been possible without the support and guidance of Ana Teresa Pérez-Leroux.

VIII References

Acquisition of Spanish word order


Kiss, K.E. 1998: Identificational focus vs. information focus. Language 74, 245–73.


Strozer, J.R. 1992: Non-native language acquisition from a principles and


