

Optionality in L2 Grammars: the Acquisition of SV/VS Contrast in Spanish

Laura Domínguez and María J. Arche University of Southampton

1. Optionality in L2 Grammars

This study examines the L2 acquisition of word order variation in Spanish by three groups of L1 English learners in an instructed setting. The three groups represent learners at three different L2 proficiencies: beginners, intermediate and advanced. The aim of the study is to analyse the acquisition of word order variation in a situation where the target input is highly ambiguous, since two apparent optional forms exist in the target grammar, in order to examine how the optionality is disambiguated by learners from the earlier stages of learning to the more advanced.

According to recent research (White 1991, 1992, Eubank 1994, Sorace 1993, 1999, 2000, Prévost & White 2000) the availability of optional forms (i.e. two forms appear in free variation) is common in L2 developing grammars. Optionality is usually characterised as the phenomenon where more than one form of a particular grammatical structure exists in the interlanguage of a speaker at any point in the acquisition process and it is used as evidence for the existence of deficits during the acquisition process. In first language acquisition, Poeppel and Wexler (1993) and also Wexler (1994, 1998) have shown how children use both inflected verbs and root infinitives during a stage at around two years of age which, although ungrammatical, is legitimate in the child's grammar at this early stage. In second language acquisition optional forms have been often accounted for as an interface phenomenon. In particular, it has been argued that optionality arises because of problems with the mapping of abstract syntactic features to their surface morphological manifestations or PF (Lardiere 1998, 2006, Goad & White 2004) or with the specific morphological realisation of L2 features (Haznedar and Schwartz 1997, Prévost & White 2000). Likewise, optional forms in L2 grammars have been observed in structures which are subject to both syntactic and pragmatic adequacy (Sorace 2000, 2004). In this respect, it has been proposed that grammatical structures that are

_

^{*}This research is part of the SPLLOC project (www.splloc.soton.ac.uk) and it is supported by an Economic and Social Research Council research grant (RES 000231609). We would like to thank the other SPLLOC members, Rosamond Mitchell, Florence Myles and Emma Marsden, for their useful contribution to this study.

part of the interface between syntax and the peripheral systems (such as discourse pragmatics) are more prone to instability and, consequently, more vulnerable than narrow syntax (Sorace 2000, 2004, 2005, Tsimpli et al 2004). It is important to note that it is assumed that learners have problems acquiring the pragmatic conditions of these structures, whereas the syntax remains unimpaired.

Previous studies on the acquisition of Spanish word order have shown that advanced second language learners encounter problems acquiring the conditions that constrain word order alterations (Ocampo 1990, Hertel 2003, De Miguel 1993, Camacho 1999, Liceras & Díaz 1999, Lozano 2006, Domínguez in press). These studies seem to support the interface view proposed by Sorace. However, it is unclear that the problems observed with the acquisition of these structures must be accounted for by a pragmatic deficit. In this study we examine the acquisition of word order in Spanish arguing that certain errors found in nonnative grammars cannot be sufficiently accounted for as simple pragmatic-related deficiencies. Instead, we propose that the ambiguity and lack of robustness of the input forces grammatical indeterminacy even at advanced levels of proficiency and that this is independent of learners' knowledge of pragmatic rules.

2. Word Order in Spanish

Spanish word order is flexible and allows the elements of a sentence to appear in more than one configuration (e.g. SV, VS), in contrast with English where the ordering of elements in a sentence is rigid. The possibility of different constituents appearing pre and post verbally may appear to be a case of free optionality in Spanish. However, such optionality is only apparent as each of the configurations is constrained by defined syntactic rules (depending on the type of verb) and pragmatic rules (depending on the type of information encoded in the sentence) (Contreras 1976, Torrego 1989, Zubizarreta 1998). Consequently, the distribution of each of these forms is far from being free in this language.

Such flexibility can be accounted for by two types of operations: focusrelated, which are motivated by prosodic conditions (Zubizarreta 1998, Domínguez 2004), and syntax-related, which are motivated by the syntactic properties of the verb. In the first scenario the focused element in a sentence is expected to appear in sentence-final position even if canonical word order is to be altered. This is because focused elements must receive stress, which is assigned by a stress assignment rule to the most embedded constituent (Chomsky and Halle, 1968, Cinque, 1993). This is illustrated in example (1b) where the focused subject must appear postverbally and in final position:

(1) a. What happened? (broad focus)
b. [F Juan ha traído el perro]
Juan has-brought the dog
'Juan has brought the dog'

c. Who has brought the dog?
 d. Ha traído el perro [F Juan]
 e. #[F Juan ha traído el perro]
 #SVO

Subjects may also appear postverbally with unaccusative verbs in Spanish. Following Perlmutter (1978) intransitive verbs can be classified into unergatives and unaccusatives, depending on the syntactic characteristics of the subject. In Spanish there is evidence that the distinction between unaccusative and unergative verbs is syntactic. For instance, Sanz (2000) argues that unaccusative verbs behave like the object of a transitive sentence and they must check the feature [+telic] overtly in the syntax. The interesting characteristic about unaccusative verbs is that the subject must always appear postverbally regardless of the information status of the sentence (i.e. whether it encodes narrow or broad focus)¹. Consequently, the pragmatic effects of focus are not observed with unaccusative verbs which means that postverbal subjects can only be licensed in that position because of a syntactic condition.

The following examples illustrate cases of unergative and unaccusative structures in Spanish encoding both narrow and broad focus:

(2)	a. What happened?	(broad focus)
	b. [F Juan ha roncado]	SV
	'Juan has snored'	

- (3) a. Who has snored? (narrow focus)
 b. Ha roncado[F Juan] VS
 has snored Juan
 'Juan has snored'
- (4) a. What happened? (broad focus)
 b. [F Ha llegado Juan]
 has arrived Juan
 'Juan has arrived'

^{1.} Unaccusative verbs can also display SV order in cases where the subject is the topic of the discourse as illustrated in the following example. These cases were not included in our study:

⁽i) (Talking about Pablo) Pablo llegó a Málaga hace dos semanas 'Pablo arrived in Malaga two weeks ago'

(5) a. Who has arrived? (narrow focus)
b. Ha llegado [F Juan]
has arrived Juan
'Juan has arrived'

Clitic left-dislocations are also available in Spanish to mark focus (Cinque 1990, Zubizarreta 1998). In these structures the focused element appears in final position by virtue of dislocating the given information out of the core clause. A coindexed resumptive clitic pronoun must appear in this construction as illustrated in the following example:

(6) a. Who has brought the dog? (narrow focus)
b. [F El perro, lo ha traído Juan] O#,Cl-V-S
the dog, it has brought Juan
'Juan has brought the dog'

The subject must appear in postverbal position in this structure. Thus example (7), where the subject is in the preverbal field, is ungrammatical:

(7) *El perro, Juan lo ha traído O#,**S**-Cl-V The dog, Juan it has brought

Clitic left-dislocations are crucial in our study because they are constrained by discourse-pragmatic conditions but, unlike the other structures analysed in this study, no alternative structure with a preverbal subject exists as shown in example (7).

The following table illustrates all the structures tested in our study which have been introduced in this section:

Table 1. Word order types according to information status and syntactic verb

	Broad Focus What happened?	Narrow Focus Who has X?	Narrow Focus CLLD
Unergative Verbs	SV [F Juan ha roncado] 'Juan has snored'	VS Ha roncado [F Juan] 'Juan has snored'	
Unaccusative Verbs	VS [F Ha llegado Juan] 'Juan has arrived'	VS Ha llegado [F Juan] 'Juan has arrived'	
Transitive Verbs	SVO [F Juan ha traído el perro] 'Juan has brought the dog'	VOS [F ha traído el perro Juan] 'Juan has brought the dog'	Obj#, Cl-V-S El perro, lo ha traído [F Juan] 'The dog, Juan brought it'

3. Experimental Design

3.1. The Test

The experiment designed for this study was a context dependent preference test based on Hertel (2003). The subjects were presented with 28 situations followed by a question. The questions were of two types aiming at eliciting different kinds of answers: "What happened?" (for broad focus) and "Who did x?" (for narrow focus). As described in the previous section, declarative sentences in Spanish display different word orders in correlation with the information structure of the sentence. Thus, the expected order to a broad focus question is SV, whereas the one corresponding to narrow focus is VS.

However, as also detailed above, Spanish SV/VS order variation is not only constrained by pragmatic properties like information structure, but also by the syntactic properties of the verb at hand. Transitive and unergative verbs also show the SV/VS contrast, varying according to the information structure encoded in the sentence, whereas unaccusative verbs display VS order in both broad and narrow focus structures.

For the purpose of testing the combination of the syntactic and pragmatic constraints, the test contained four items of each of the verb types aforementioned (transitive, unergative and unaccusative) in both discursive situations, narrow and broad focus. Additionally, another set of four items involving clitic left dislocations was included, as this allowed us to test a focus driven construction where inverted VS order is the only possibility.

For each of the situations three possible replies were provided: a) a sentence displaying SV non-inverted order; b) a sentence with inverted VS order; and c) both. The "both" option allowed us to observe those cases where learners chose the inverted form, nonexistent in his native language, but could not discriminate between the different pragmatic properties associated to each word ordering.

3.2. Participants

The participants of the experiment were 60 native speakers of English learning Spanish as a second language in an instructed setting. Learners were divided into three groups according to their proficiency levels (beginners, intermediate and advanced) corresponding to three different education levels in the UK school system: lower secondary school ("year 9", with c. 180 hours of instruction), high school final year ("year 13", with c.750 hours of instruction) and university undergraduates (UG) at their final year (c. 895 hours of instruction). The control group consisted of 20 native speakers of Spanish in their final year in high school. This sample was collected in Spain. A description of the participants of the study with proficiency levels and hours of instructions is shown in the following table:

Table 2. Summary subjects participating in the study

L2 Spanish level	Typical age	Approx no hours of Spanish instruction	Educational level (English system)
Beginners N=20	13-14	c 180 hours	Lower secondary school (Year 9)
Intermediate N=20	17-18	c 750 hours	Sixth form college (Year 13)
Advanced N=20	21-22	c 895 hours	4 th Year University (UG)
Native speakers N=20	17-18		High school (final year)

3.3. Hypotheses

In this study we test the following two hypotheses:

- If the source of problems is due to a syntactic deficit, inversion involving unergatives (affected by both syntactic and pragmatic constraints) would be allowed at the same rate as inversions with unaccusatives (affected only by syntactic constraints).
- If the source of problems with these forms was pragmatic, inversion
 involving unaccusatives (affected only by syntactic constraints) would
 be allowed more consistently than inversions with unergatives (affected
 also by pragmatic constraints).
- 3. Likewise, if a pragmatic deficit is the source of problems in the acquisition of focus-driven constructions, the acceptability of VS in clitic left dislocations is unexpected as they are also subject to pragmatic constraints.

Con formato: Numeración y viñetas

4. Results

The findings of the study can be summarised as follows:

Learners' acceptability of the inverted VS order is in strict correlation with their level of proficiency. The results show that overall the beginner group does not accept the inverted options preferring the non-inverted option (available in their L1) instead. As expected the learner group with the highest allowability rate and native-like behaviour is the group of advanced learners. This is illustrated in the following table which shows the relative allowability of inverted responses by the three learner groups and natives:

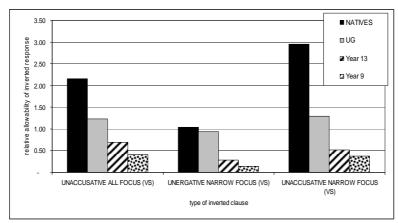


Figure 1. Relative allowability of inverted clauses

Also, the advanced group (UG) behaved very much native-like in accepting the inverted option (VS) in the different information structures presented in the test with the two different verb types. The following three graphs show that the advanced group accepted the inverted option over the non-inverted one in those contexts in which it was also preferred by the native controls. In this respect the UG group was the only group to behave like the native speakers since both the intermediate and beginner groups showed the reverse behaviour accepting the non-inverted structures and rejecting the inverted ones:

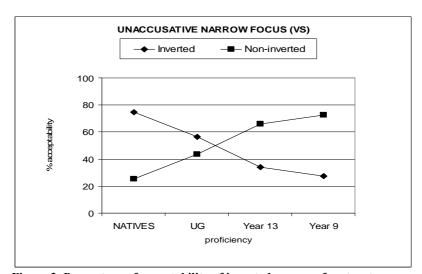


Figure 2. Percentage of acceptability of inverted answers for structures with unaccusative narrow focus by three groups of learners and natives.

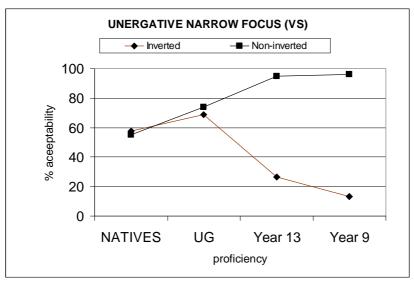


Figure 3. Percentage of acceptability of inverted answers for structures with unergative narrow focus by three groups of learners and natives

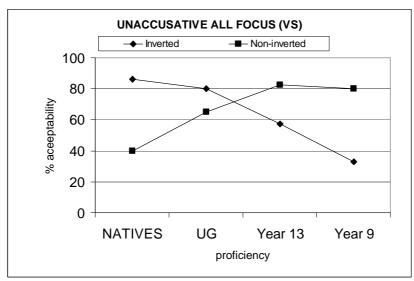


Figure 4. Percentage of acceptability of inverted answers for unaccusative broad-focus structures by three groups of learners and natives

The rate of acceptance for the inverted option is lower in unergative narrow focus contexts. However, the interest of this result resides in the fact that the advanced group behaves, again, completely native-like. In contrast, low and intermediate level learners (year 9 and year 13) show opposite behaviour, not allowing for the inverted order independently from the syntax of the verb. Regardless of whether the verb is unaccusative or unergative, the preferred option is the non-inverted.

The data also show that only the advanced group (UG) behaved like native speakers in those structures where CLLD is involved. As mentioned above, this structure always requires the subject to appear postverbally independently of the type of verb. In contrast, the intermediate and beginner groups behave very similarly in preferring the non-inverted option. This is illustrated in the following graph:

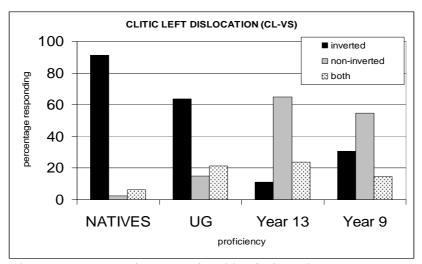


Figure 5. Percentage of responses for clitic left dislocations by the three proficiency groups and native speakers.

5. Summary of Findings

The results just described show that the lack of acceptance of the inverted option by the beginner and intermediate groups does not depend on pragmatic constraints. These learners reject inversion in the different information scenarios and, more importantly, with any kind of verb (unergative or unaccusative) even in those contexts unaffected by pragmatic conditions. This finding supports hypothesis 1, and not 2.

This suggests that the divergence of these learners from native-like patterns cannot be explained by a deficit in the interface between syntax and discourse-pragmatics, as has been claimed in the literature. Under this view, a contrast

favouring inversion with unaccusatives (involving an underlying VS order) with respect to unergative verbs (with an underlying VS order) would have been expected. However, such a result was not borne out by the data analysed in this study. As shown above, the syntactic properties of the verb do not affect the preference for the inverted option. The rejection of the inverted option is general, and not subject to the specific pragmatic conditions required in the native grammars.

Hypothesis 3 is also supported by our data since the advanced group accepts the inverted option in CLLD structures which are subject to pragmatic constraints.

6. Discussion

The acceptability of both SV and VS clause types in sentences with unaccusative verbs weakens previous hypotheses that the syntactic constraints ruling inversion are properly acquired from early on and that, consequently, mismatches between native and non-native forms have to be analysed as the result of a pragmatic deficit. If this were the case, inversion involving unaccusatives (only affected by syntactic constraints) would be allowed more consistently than inversions with unergatives (affected by both syntactic and pragmatic constraints), and this was not attested in the data. Moreover, if a pragmatic deficit was the source of problems in the acquisition of focus-driven constructions, the acceptability of VS in clitic left dislocations would be unexpected as they are subject to pragmatic constraints as well. These results support the hypothesis that an account based on a discourse-pragmatics deficit cannot satisfactorily explain learners' non-targetlike representations in the contexts analysed in our study. Instead, we propose that the availability of optional forms is the result of an overgeneralisation of one of the options in the target language to contexts where neither syntactic nor pragmatic rules would allow them. Under this analysis, the availability of optional forms in the advanced group can be accounted for by a purely syntactic deficit which signals the existence of an intermediate stage where grammar restructuring, on the basis of apparently ambiguous input, occurs.

References

Camacho, J. (1999) From SOV to SVO: the grammar of interlanguage word order. Second Language Research 15, 115-132.

Chomsky, N. and Halle, M., (1968) *The sound patterns of English*, New York Evanston and London: Harper and Row.

Cinque, G. (1990) Types of A' dependences. Cambridge, MA: MIT Press.

Cinque, G. (1993) A null theory of phrase and compound stress, *Linguistic Inquiry* 24, 239-298.

Contreras, H. (1976) A theory of word order with special reference to Spanish. Amsterdam: North Holland

- De Miguel, E. (1993) Construcciones ergativas e inversión en la lengua y la inter-lengua españolas. Ed. J.M. Liceras. *La Lingüística y el Análisis de los Sistemas no Nativos*. Ottawa: Dovehouse, 178-195.
- Domínguez, L. (2004) Mapping focus: the syntax and prosody of focus in Spanish. Unpublished Doctoral Dissertation. Boston University.
- Domínguez, L. In press. The L2 acquisition of Spanish focus: a case of incomplete and divergent grammars. Proceedings of the Romance Turn 2: The Second Workshop on the Acquisition of Romance Languages. Utrecht, The Netherlands.
- Eubank, L. (1994) Optionality and the initial state in L2 development, in T. Hoekstra & B. Schwartz (eds.) Language Acquisition Studies in Generative Grammar, Amsterdam: John Benjamins.
- Goad, H. and White, L. (2004) Ultimate attainment of L2 inflection: effects of L1 prosodic structure. In Foster-Cohen, S., Sharwood Smith, M., Sorace, A. and Ota, M., editors, *Eurosla Yearbook* 4. John Benjamins, 119-145.
- Haznedar, B. and Schwartz, B.D. (1997). Are there optional infinitives in child L2 acquisition? In E. Hughes et al.(eds.), *The BUCLD Proceedings*, Somerville:MA, Cascadilla Press, 257-268.
- Hertel, T. (2003) Lexical and discourse factors in the second language acquisition of Spanish word order, *Second Language Research* 19, 4, 273-304.
- Lardiere, D. (1998) Dissociating syntax from morphology in a divergent L2 end-state grammar, Second Language Research 14, 359-375
- Lardiere, D. (2006) Ultimate Attainment in Second Language Acquisition: A Case Study. Mahwah, NJ: Lawrence Erlbaum Associates.
- Liceras, J., and Díaz, L. (1999) Topic-drop versus pro-drop: null subjects and pronominal subjects in the Spanish L2 of Chinese, English, French, German and Japanese speakers. Second Language Research 15, 1-40.
- Lozano, C. (2006) Focus and split intransitivity: The acquisition of word order alternations in non-native Spanish, Second Language Research 22, 1-43.
- Ocampo, F. (1990) The pragmatics of word order in constructions with a verb and a subjec', *Hispanic Linguistics*. 4, 1 87-127.
- Perlmutter, D. (1978) Impersonal passives and the Unaccusative Hypothesis in *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*, Berkeley Linguistics Society, University of California, Berkeley, 157-89.
- Poeppel, D. & K. Wexler (1993) The full competence hypothesis of clause structure in early German, *Language* 69, 1–33.
- Prévost, P. and L. White. (2000) Missing surface inflection or impairment in second language acquisition? Evidence from tense and agreement, Second Language Research 16, 103-133.
- Sanz, M. (2000) Events and predication: a new approach to syntactic processing in English and Spanish. Amsterdam: Benjamins.
- Sorace, A. (1993) Incomplete and divergent representations of unaccusativity in nonnative grammars of Italian, *Second Language Research*, 9, 22-48
- Sorace, A. (1999) Initial states, end-states, and residual optionality in L2 acquisition. Proceedings of the 23rd Boston University Conference on Language Development. Somerville, MA: Cascadilla Press.
- Sorace, A. (2000) Syntactic optionality in non-native grammars, Second Language Research 16: 93-102.
- Sorace, A. (2004) Native language attrition and developmental instability at the syntax-discourse interface: data, interpretations and methods. *Bilingualism: Language and Cognition* 7: 143-145.

- Sorace, A. (2005) Syntactic optionality at interfaces. In L. Cornips and K. Corrigan (eds). *Syntax and Variation: Reconciling the Biological and the Social*, Amsterdam: John Benjamins, 46-111.
- Torrego, E. (1989) Unergative-unaccusative alternations in Spanish, *MIT Working Papers in Linguistics 10: Functional heads and Clause Structure*, 253-272. MIT, Cambridge, MA
- Tsimpli I., Sorace, A., Heycock, C., Filiaci, F. (2004) First language attrition and syntactic subjects: a study of Greek and Italian near-native speakers of English. *International Journal of Bilingualism* 8, 257–277.
- Wexler, K. (1994) Optional infinitives, head movement and the economy of derivations in child grammar, in D. Lightfoot & N. Hornstein (Eds.) *Verb movement*, Cambridge, MA: Cambridge University Press. 305-350.
- Wexler, K. (1998) Very early parameter setting and the unique checking constraint, *Lingua* 106, 23-79.
- White, L. (1991) The verb-movement parameter in second language acquisition, Language Acquisition 1, 337-360
- White, L. (1992) Long and short verb movement in second language acquisition, Canadian Journal of Linguistics 37: 273-286.
- Zubizarreta, M. L. (1998) *Prosody, Focus, and Word Order*. Cambridge, MA: MIT Press.

Hola!

Pues si que los resultados salen al reves, si. aunque puedo entender que no escojan la VOS porque suene rara no entiendo como ponen la otra. Mirando la pregunta a la que hace referencia (quien...), no es natural el SVO, la verdad, asi que no entiendo.

Mirando todos los resultados la verdad es que los natives parecen aceptar bastante menos la inversion con unergatives, así que parece que la sintaxis tiene un peso muy importante.

Dr Maria J. Arche Lecturer in Spanish & Linguistics King William 226 Tl: 020 8331 9007 University of Greenwich London SE10 9LS