THE ROLE OF DISCOURSE CONTEXT AND VERB CLASS IN NATIVE AND NON-NATIVE SPANISH POSTVERBAL SUBJECTS

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THE ROLE OF DISCOURSE CONTEXT AND VERB CLASS IN NATIVE AND NON-NATIVE SPANISH POSTVERBAL SUBJECTS

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ABSTRACT

Recent research on the second language (L2) acquisition of postverbal subjects in Spanish has focused on the important role of discourse context in licensing postverbal subjects with unaccusative and unergative verbs (Hertel, 2003; Lozano, 2006; Domínguez & Arche, 2008; Domínguez, 2013). While these studies have made important advances in early L2 research within the generative framework, in which the structure was studied as a part of the pro-drop parameter (White, 1985; 1986, Liceras, 1988; 1989), they only examine intransitive verbs, do not consider the role of nuclear stress, and do not compare postverbal subject use across discourse contexts nor include contrastive focus as a discourse context. These shortcomings have led to variable performance by the native speaker controls, which make any claims of native or non-native like performance on the part of L2 learners questionable. This dissertation uses empirical data to incorporate discourse context, verb type, and nuclear stress into one experiment examining postverbal subjects in Spanish by native speakers and English-speaking L2 learners. A multi-componential experiment was conducted, consisting of two oral assessment tasks, in order to gauge native speakers’ and L2 learners’ ability to produce and rate sentences with postverbal subjects compared to those with preverbal subjects. It considers three discourse contexts: wide, narrow, and contrastive focus, four verb types: unaccusative, unergative, transitive, and ditransitive verbs, and transitive verbs with topicalized objects. Ninety-five L2 learners from four proficiency levels and thirty-seven native speaker controls completed the
study. Results show that for the contexts in which native speakers most frequently use postverbal subjects, namely with topicalized objects and in contrastive focus, L2 learners from low through advanced proficiency can also use postverbal subjects, and knowledge of postverbal subjects increases significantly with proficiency. The optionality of pre- and postverbal subjects in narrow and contrastive focus is explained syntactically by positing a null $pro_{[FOC]}$ that can optionally be used in the numeration along with the lexical subject when it bears matching agreement and focus features. The Feature Reassembly Hypothesis (Lardiere, 2008; 2009) can explain L2 behavior by positing difficulty in reassembling the features from one lexical item in English, the lexical subject, to two lexical items in Spanish, the lexical subject and $pro_{[FOC]}$. 
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All my love,
Ariel
In Memoriam

MARIANNA ZACH

Don’t you sit upon the shoreline  
And say you’re satisfied
Choose to chance the rapids  
And dare to dance the tide

-Garth Brooks
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INTRODUCTION

Canonical word order in Spanish is subject (S) verb (V) object (O), but it is also a language that allows what is known in the pedagogical and generative literature as ‘free inversion’, in which the subject and the verb of a sentence can invert, yielding grammatical postverbal subjects, as shown in (1).

(1) a. Vendrá a la fiesta Juan.
   come.FUT to the party John
   ‘John will come to the party.’

b. *Will come to the party John.

The term ‘free,’ however, is a misnomer because SV and VS word orders cannot be used interchangeably in any context, but rather have a strict relationship with verb type, discourse information, and nuclear stress placement. The information structure of Spanish supposes that old or known information is mentioned first in a sentence, followed by new information in sentence final position (Contreras, 1976; RAE, 2010:754). This strategy is employed to align new information with nuclear stress, which is preferably in sentence final position (Zubizarreta, 1998; Zubizarreta & Nava, 2011). Since Spanish can be characterized as a language that prioritizes nuclear stress placement over canonical subject placement (Gutiérrez-Bravo, 2003:8), also known as nuclear stress rigidity (Zubizarreta & Nava, 2011), it exhibits more flexible and varied word order patterns. English, on the other hand, prioritizes word order over nuclear stress placement, or has flexible nuclear stress (Zubizarreta & Nava, 2011), allowing it to be sentence internal via stress shift rules (Chomsky & Halle, 1968; Zubizarreta, 1998; Reinhart, 2006). Therefore, English exhibits more varied nuclear stress placement patterns with relatively strict SVO word order patterns.
Applying these constraints to subject-verb word order, if the subject of a Spanish sentence is deemed new information by the speaker, it should go in sentence final position, where it aligns with canonical nuclear stress, yielding grammatical VS word order. If the subject is assumed to be presupposed, known information, it will appear in canonical preverbal position. In English, the subject will be placed in canonical preverbal position regardless of whether it is new or old information. If it is new information, a stress shift rule will align nuclear stress with the subject. However, it will be shown that a preverbal subject with nuclear stress shift to mark it as new information is also possible in Spanish; therefore the term rigidity used by Zubizarreta and Nava (2001) to describe nuclear stress in Spanish is too strong, but rather represents the canonical structure. Furthermore, in addition to the role of discourse, lexical verb class is also assumed to affect the use of postverbal subjects. When the entire sentence is the new information in Spanish, postverbal subjects are barred with all verb classes except unaccusatives, a concept which will be defined in Chapter 2. This is a commonly painted picture of subject placement conditions in both pedagogical and second language acquisition (SLA) literature, as well as in much early syntactic research, but in Chapter 2, I return to define the notions of lexical verb class and discourse context and provide a more detailed account of the distribution of subject positions in Spanish.

The differences between how Spanish and English encode discourse information, both syntactically and prosodically, make word order, particularly between the subject and the verb, a worthwhile way in which to examine the acquisition of a second language (L2) at the interface between syntax, discourse (Sorace, 2011), and prosody (Zubizarreta & Nava, 2011). A first language (L1) English speaker learning Spanish as their L2 must learn to switch from a prosody-based system to a syntax-based system for encoding discourse information (Zubizarreta & Nava,
Postverbal subjects are well attested in the literature to be difficult to acquire by native speakers (NSs) of English (Ocampo, 1990; Hertel, 2003; De Miguel, 1993; Camacho, 1999; Liceras, 1988; 1989; Lozano, 2006a,b, 2013; Domínguez, 2007, 2013; Domínguez & Arche, 2008; 2014; Hertel & Pérez-Leroux, 1999; Hertel, 2003), and a vast amount of previous research finds the interface between syntax and discourse to be challenging for both L1 and L2 learners (Sorace, 2005; Sorace & Filiaci, 2006; Valenzuela, 2006; Belletti, Bennati & Sorace, 2007; Tsimpli, 2007; Tsimpli, Sorace, Heycock & Filiaci, 2004; Rothman, 2009; among others).

The present dissertation aims at a two-fold contribution to the field of linguistics—first to the syntactic understanding of postverbal subjects within the minimalist project and second to the field of SLA. First, based on empirical data from NSs of Spanish, the dissertation contributes to the syntactic literature by proposing a minimalist syntactic analysis that accounts for the distribution of pre- and postverbal subjects in Spanish with unaccusative, unergative, transitive, and ditransitive verbs in three discourse contexts: the whole sentence as new information, the subject as new information, and the subject as contrastive information, as well as the use of postverbal subjects with a transitive verb and a preverbal topicalized object. It contributes to the Spanish SLA literature by using a controlled experimental design to examine whether English-speaking learners of Spanish are ultimately able to use and accept postverbal subjects successfully under the appropriate discourse and syntactic conditions, by comparing the ultimate attainment of very advanced L2 speakers to the developmental stages of L2 learners. Based on the proposed syntactic analysis, it explores both the Feature Reassembly Hypothesis (FRH, Lardiere, 2008, 2009) and the Interface Hypothesis (Sorace, 2006, 2011; Sorace & Filiaci, 2006; Tsimpli & Sorace, 2006) to determine the extent to which each one makes correct predictions to explain the performance observed by the L2 learners. Data was collected from NSs in order to
gain a clearer picture of the distribution of postverbal subjects, which will contribute to both the syntactic analysis and serve as a base line for comparison for the L2 speakers.

Previous studies have examined postverbal subjects as simply a syntactic phenomenon (White, 1985; Liceras, 1988,1989; Hertel & Pérez-Leroux, 1999; DeMiguel, 1993), or as a construct limited solely to the syntax-discourse interface (Hertel, 2003; Lozano, 2006; Domínguez & Arche, 2008; Domínguez, 2013; Domínguez & Arche, 2014; Belletti & Leonini, 2004; Belletti, Sorace, & Serratrice, 2007). However, given that “any linguistic phenomenon involves multiple interfaces” (White, 2011:586) between linguistic domains, this study addressed postverbal subjects as a multi-faceted phenomenon involving the interface between syntax, pragmatics, and phonology.

Chapter 1 provides an overview of the uses of postverbal subjects in Spanish and English in order to establish a point of departure for the syntactic analyses and for the acquisition of Spanish postverbal subjects by native speakers of English. Chapter 2 presents a critical review of several syntactic analyses of postverbal subjects, in both the government and binding framework and the minimalist program. Chapter 3 presents a critical review of the current literature on the acquisition of postverbal subjects in Spanish as well as a review of the two SLA hypotheses mentioned previously, the Feature Reassembly Hypothesis (Lardiere, 2008, 2009) and the Interface Hypothesis (Sorace, 2006, 2011; Sorace & Filiaci, 2006; Tsimpi & Sorace, 2006). This chapter concludes with the research questions which will shape the study. Chapter 4 presents the experimental study examining the production and acceptability of postverbal subjects in Spanish. The dissertation concludes with Chapter 5, in which I return to answer the research questions in order to propose a scale of postverbal subject use by NSs, support a syntactic analysis to explain
the native controls’ behavior, and examine how Feature Reassembly and the Interface Hypothesis can explain the L2 behavior.
CHAPTER 1: THE DISTRIBUTION OF POSTVERBAL SUBJECTS

As we saw in the introduction, Spanish allows grammatical postverbal subjects as in (1.1).

(1.1)  
a. Vendrá a la fiesta Juan.  
   come,FUT to the party John  
   ‘John will come to the party.’  

b. *Will come to the party John.

English, while also allowing them, limits postverbal subjects to much fewer contexts. In neither of the languages do postverbal subjects exist in free variation with preverbal subjects, and in the current chapter I present the grammatical uses of postverbal subjects in both languages.

1. Subject placement in Spanish

   One principle factor in determining the appropriateness of pre- or postverbal subjects is the mapping of information structure to a sentence. Information structure refers to the way in which information is packaged within a sentence (Chafe, 1976). A sentence is broken down syntactically into subject and predicate upon which discursive information, specifically old and new information, is mapped. New information is often referred to as the information focus of a sentence, which reflects the speaker’s decision as to where the main burden of the message lies (Halliday, 1967:204). For the current purposes, I look only at subject focus, and I assume the definition of focus to be the information assumed by the speaker not to be shared by all interlocutors (Jackendoff, 1972:230). A sentence also has a topic, which is the given information in the discourse which is being commented upon or talked about (Reinhart, 1981; Jackendoff, 1972) often via the focus. I show in this chapter how the mapping of topic and focus to a sentence can cause variations in subject position in Spanish.
Another factor that plays a role in subject position is lexical verb type. This dissertation focuses on four types: unaccusative, unergative, transitive, and ditransitive verbs, which are distinguished based on transitivity. Transitive verbs have two arguments, an internal and an external, the former of which is the direct object and the latter the subject. A transitive verb in a sentence like *Juan come una galleta* ‘Juan eats a cookie’ requires both the subject *Juan* and the object *la galleta* to fulfill its semantic content. A ditransitive verb is a type of transitive verb that is accompanied by an indirect object in addition to the direct object, such as in a sentence like *Maria le da una galleta a Juan* ‘Maria gives a cookie to Juan’, where the verb has both a direct object, *galleta* ‘cookie’, and an indirect object, *Juan*, to fulfill its semantic content.

The Unaccusative Hypothesis, originally proposed in Perlmutter (1978) and adapted by Burzio (1981, 1983, 1986) distinguishes between two types of intransitive verbs: unaccusative, such as *llegar* ‘arrive’ and unergative, such as *bailar* ‘dance’. The two verb types can be distinguished semantically, as in “unergative verbs denote a process and have agentive subjects, whereas unaccusative verbs refer mostly to instantaneous, point-like event or change of state, and non-agentive subjects” (Montrul, 2004:304). They are also assumed to differ syntactically; where the subject of an unaccusative is merged as a sister to the verb while the subject of an unergative verb is merged in the verb’s specifier position, as shown in the two diagrams in Figure 1 adapted from Van Valin (1990:221).

```
Unaccusative          Unergative
[VP llegar NP]        [vp NP [VP bailar]]
```

Figure 1. Syntactic structures of unaccusative and unergative verbs

There are also syntactic diagnostics which can distinguish the two verb types, the most common of which is subject placement. Subjects of unaccusative verbs in Spanish show a marked
tendency for postverbal position in wide focus while unergative verbs must have a preverbal subject (Suñer, 1982; Contreras, 1976), a distinction that will be looked at in more detail in the following discussion. Other diagnostics include the availability of bare plurals (Demonte, 1985; Torrego, 1989), as contrasted in example (1.2), and participial absolutive constructions (de Miguel, 1992), as contrasted in example (1.3), with unaccusative but not unergative verbs.

(1.2)  
a. Han pasado camiones. (unaccusative, Montrul, 2004:304)  
Have.3PL passed trucks  
‘Trucks have passed by.’

b. *Han dormido animals. (unergative, Montrul, 2004:304)  
have.3PL slept animals  
‘Animals have slept’

(1.3)  
a. Muerto el perro, se acabó la rabia. (unaccusative, Montrul, 2004:305)  
Dead the dog, SE end.PAS the rabies  
‘Once the dog was dead, the rabies stopped.’

b. *Nadado Juan, se sintió mejor. (unergative, Montrul, 2004:305)  
swam Juan, SE felt.PAS better  
‘Once Juan swam, he felt much better.’

A final factor that plays a role in subject position is nuclear stress placement. Spanish is known for its “nuclear stress rigidity” (Zubizarreta & Nava, 2011:652), in which canonical nuclear stress is sentence final. In this way, the word order of Spanish is flexible in order to align new information with rigid sentence final stress. English, on the other hand has “nuclear stress flexibility” (Zubizarreta & Nava, 2011:652), where the nuclear stress placement, while sentence final in neutral contexts, can be moved to initial or internal position with stress shift rules in order to align nuclear stress with the new information (Chomsky & Halle, 1967; Zubizarreta, 1998; Reinhart, 2006). In this way, English has flexible stress placement to align itself with rigid
word order. This difference can be seen in the English-Spanish comparisons in Table 1, where capital letters indicate nuclear stress placement.

Table 1. Nuclear stress patterns in Spanish and English

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ¿Quién vendió el coche? Who sold the car?</td>
<td>Lo vendió JUAN. JUAN sold it.</td>
</tr>
<tr>
<td>b. ¿Qué hizo Juan con el coche? What did Juan do with the car?</td>
<td>Lo VENDIÓ. He SOLD it.</td>
</tr>
<tr>
<td>c. ¿Qué vendió Juan? What did Juan sell?</td>
<td>Vendió el COCHE. He sold a CAR.</td>
</tr>
<tr>
<td>d. ¿COMPRÓ Juan el coche? Did Juan BUY the car?</td>
<td>No, lo VENDIÓ. No, he SOLD it.</td>
</tr>
<tr>
<td>e. ¿Compró JUAN el coche? Did JUAN buy the car?</td>
<td>No, lo compró JOSÉ. No, JOSÉ bought it.</td>
</tr>
</tbody>
</table>

In the examples in Table 1, it can be seen that nuclear stress in Spanish favors sentence final position and the word order changes so that focus is sentence final as well. In the English examples, the nuclear stress position varies and the word order is always SV. However, as can be seen in the (d) and (e) questions just presented, stress placement in Spanish is not as rigid as commonly assumed, and stress shift is possible. As the distribution of postverbal subjects are described in this chapter, it becomes apparent that picture painted in Table 1 is not always the case, and that Spanish does in fact have flexible stress patterns. In the following sections, I provide the distribution of preverbal and postverbal subjects, while highlighting the role that discourse information, namely focus and topic, and nuclear stress placement play in subject position.
1.1. Contexts yielding only preverbal subjects

In Spanish, the known information is assumed to be introduced first in a sentence with new information occurring in sentence final position (Contreras, 1976; RAE, 2010:754). Turning to subject placement, if the subject is all or part of the known information or if there is no presupposed information and the entire sentence is new, a preverbal subject is typically employed, as in the out-of-the-blue context in (1.4).

(1.4)  ¿Qué pasó?
‘What happened?’
Juan llamó.  
*Llamó Juan.
‘Juan called.’

The discourse context in (1.4) will be referred to as wide focus, since the entire sentence receives the focus and all of the information is new. The question in (1.4) presupposes no information, so the entire answer to the question bears the information focus and a preverbal subject is generated, while a postverbal subject is pragmatically infelicitous. However, the unsuitability of a postverbal subject in wide focus contexts depends on which lexical verb class is being used. A preverbal subject should be used over a postverbal subject in wide focus with unergative verbs as was shown in (1.4) (Lozano, 2006; Hertel, 2003; Domínguez, 2013) as well as with transitive and ditransitive verbs in wide focus (Belletti, Benati, Sorace, 2007) as in (1.5) and (1.6).

(1.5)  ¿Qué pasó?
‘What happened?’
a. Juan besó a María.  
b. *Besó a María Juan.
‘Juan kissed Maria.’
(1.6) ¿Qué pasó?
‘What happened?’

a. Juan le dio flores a María. (ditransitive)
b. *Le dio flores a María Juan.
‘Juan gave flowers to Maria.’

1.2. Contexts yielding both pre- and postverbal subjects

While wide focus yields preverbal subjects with unergative, transitive, and ditransitive verbs, unaccusative verbs in wide focus yield optionality of subject position (Hatcher, 1956; Contreras, 1976; Suñer, 1982), as shown in (1.7).

(1.7) ¿Qué pasó?
‘What happened?’

a. Llegó Juan.
b. Juan llegó,
‘Juan arrived.’

In the examples in (1.7), stress falls canonically in sentence final position. According to Suñer (1982), word order with unaccusatives determines whether a sentence is declarative or presentational. Sentence (1.7a) with VS word order is presentational in nature, which serves to introduce the subject and places informational focus on the noun. Sentence (1.7b) is a declarative sentence where main focus falls on the verb, but the subject is part of the asserted information. Suñer (1982) provides a diagnostic test assuming a neutral stress pattern, based on what type of constituent can logically be conjoined to the sentence, to distinguish between the two sentence types, as shown in the comparison between an unaccusative with the preverbal subjects in (1.8) and the postverbals in (1.9).

(1.8) a. Tres hombres aparecieron.  
(Suñer, 1982:128,7a)
‘Three men appeared.’
b. Tres hombres aparecieron y no desaparecieron.  
Three men appear\_PAS and not disappear\_PAS  
‘Three men appeared, they didn’t disappear.’  
c. *Tres hombres aparecieron y no tres chicos.  
‘Three men appeared and not three boys.’

(1.9)  
a. Asomó el sol.  
Appear\_PAS the sun  
‘The sun appeared.’  
b. Asomó el sol y desaparecieron las nubes.  
Appear\_PAS the sun and disappear\_PAS the clouds  
‘The sun appeared, and the clouds disappeared.’  
c. *Asomó el sol y no desapareció.  
Appear\_PAS the sun and did not disappear\_PAS  
‘The sun appeared, it didn’t disappear.’

If we look at the preverbal subject with the unaccusative verb in (1.8a), we see that only a verb phrase, as in (1.8b), can logically conjoin itself to the sentence, since it is the verb in (1.8a) that is the information focus. It is not grammatical to conjoin another subject, in (1.8c), because the subject of (1.8a) is not the sole asserted information. In (1.9a) with a postverbal subject, on the other hand, it is only grammatical to conjoin another sentence with a new subject, as in (1.9b), since the entire sentence receives the information focus but simply conjoining a verb, in (1.9c) is not grammatical (Suñer, 1982).

Recall that in Spanish, the new information is commonly assumed to be placed in sentence final position (Contreras, 1976; RAE, 2010:754) where it aligns with sentence-final stress. However, when looking at subjects, this is not an obligatory occurrence and preverbal position with stress shift is also possible. When the subject alone bears the new information focus, it can appear in postverbal, sentence final position, as in the (a) examples in (1.10) – (1.13), where it receives canonical sentence final stress. It can also appear in preverbal position,
as in the (b) examples, where stress shift has occurred to match with the preverbal new subject (RAE, 2010:754).

(1.10) ¿Quién llegó? (unaccusative)
‘Who arrived?’
a. Llegué yo.
b. YO llegué

c. *Llegué.
‘I arrived.’

(1.11) ¿Quién llamó? (unergative)
‘Who called?’
a. Llamé yo.
b. YO llamé.
c. *Llamé.
‘I called.’

(1.12) ¿Quién besó a María? (transitive)
‘Who kissed María?’
a. La besé yo.
   her kiss$_{PAS}$ I
b. YO la besé.
   I her kiss$_{PAS}$
c. *La besé.
   her kiss$_{PAS}$
‘I kissed her.’

(1.13) ¿Quién le dio las flores a María? (ditransitive)
‘Who gave flowers to María?’
a. Se las di yo.
   her them give$_{PAS}$ I
b. YO se las di.
   I her them give$_{PAS}$
c. *Se las di.
   her them give$_{PAS}$
‘I gave them to her.’
The discourse context in (1.10-1.13) will be referred to throughout the dissertation as *narrow focus* since the new information is focused solely on the subject. The questions are asking about the subject of the verb, so the subject of the answer sentence bears narrow focus because it was unknown to the person asking the question, and thus appears in postverbal position in the (a) examples where it aligns with sentence-final stress. However, Spanish does allow some flexibility, as shown in the (b) examples (1.10-1.13), where the canonical sentence-final stress is no longer employed, and stress shift places the nuclear stress on the preverbal subject in narrow focus (Zubizarreta, 1998; Reinhart, 2006).

Also, although the verbal morphology of the verb is unambiguous and only refers to first person singular, which according to the generative pro-drop parameter could license a null subject, an overt subject is required in narrow focus, as shown by the ungrammaticality of the (c) examples in (1.10-1.13). The null subject is not syntactically ungrammatical, but pragmatically infelicitous since “the information that they provide is emphasized” (RAE, 2010:78, my translation), thus the subject bears the most information load and must be overt. The optionality between pre- and postverbal subjects in narrow focus is true for all verb types, unaccusative verbs in (1.10), unergative verbs in (1.11), transitive verbs in (1.12), and ditransitive verbs in (1.13).

Another discourse context that yields pre- or postverbal subjects is when the subject provides a contrast to presupposed, known information (RAE, 2010:645), as shown below with an unaccusative verb in (1.14), an unergative verb in (1.15), a transitive verb in (1.16), and a ditransitive verb in (1.17).

(1.14) ¿Llegó Juan? (unaccusative)

‘Did Juan arrive?’

a. No, llegué yo.
b. No, YO llegué
c. *No, llegué.
‘No, I arrived.’

(1.15) ¿Llamó Juan?
‘Did Juan call?’
a. No, llamé yo.
b. No, YO llamé.
c. *No, llamé.
‘No, I called.’

(1.16) ¿Besó a María Juan?
‘Did Juan kiss María?’
a. No, la besé yo.
No, her kiss\textsubscript{PAS} I
b. No, YO la besé.
No, I her kiss\textsubscript{PAS}
c. *No, la besé.
No, her kiss\textsubscript{PAS}
‘No, I kissed her.’

(1.17) ¿Quién le dio las flores a María?
‘Did Juan give flowers to Maria?’
a. No, se las di yo.
No, her them give\textsubscript{PAS} I
b. No, YO se las di.
No, I her them give\textsubscript{PAS}
c. *No, se las di.
No, her them give\textsubscript{PAS}
‘I gave them to her.’

The discourse context in (1.14-1.17) will be referred to as contrastive focus because the new information contrasts with presupposed information in the question. In the questions, the asker is presupposing the fact that the subject Juan is doing the action. In response, the new information is the subject, yo, contrasted against the presupposed subject Juan, so a postverbal subject can be employed, as in the (a) examples in (1.14-1.17), where it receives stress in sentence-final
position. Note that as we saw with narrow focus, in contrastive focus a preverbal subject can also be used, as in the (b) examples in (1.14-1.17), where the nuclear stress shifts to preverbal position. Finally, a null subject is also inappropriate in contrastive focus; due to the information load it bears which requires it to be overt, as shown in the (c) examples of (1.14-1.17). The optionality between pre- and postverbal subjects is posited for all verb types, unaccusative, unergative, transitive, and ditransitive in contrastive focus as well.

Another context which allows variable subject placement is when a non-object topic, such as a temporal or locative adverbial, is placed in sentence initial position (RAE, 2010:760; Torrego, 1984). In (1.18), it is shown that both a pre- and a postverbal subject are allowed with the preverbal temporal adverbial *ayer* ‘yesterday’. However, the variable nature is debated in the literature. According to Ordoñez (2000) and Sheehan (2010), where the fronted element is a temporal adverbial, the postverbal subject is optional, as in (1.18), but when the fronted element is a locative adverbial the inversion obligatory, as in (1.19).

(1.18)  
a. Ayer, ganó Juan la lotería. (Ordoñez, 2000)  
b. Ayer, Juan ganó la lotería. (Ordoñez, 2000)  
‘Yesterday, Juan won the lottery.’

(1.19)  
a. En el parque, me regaló Juan el anillo. (Sheehan, 2010)  
b. *En el parque, Juan me regaló el anillo. (Sheehan, 2010)  
‘In the park, Juan gave me a ring.’

1.3. **Contexts yielding only postverbal subjects**

While typically unaccusative verbs allow either pre- or postverbal subjects, there are certain contexts which require a postverbal subject only. When the subject of an unaccusative verb is a bare plural, postverbal position is obligatory (Ortega-Santos, 2006) as shown in the contrast in (1.20a-b).
(1.20) a. Vinieron investigadores de todas partes.
   Come, investigadores from all parts
   ‘There came investigators from all parts.’
b. *Investigadores de todas partes vinieron.
   ‘Investigators from all parts came.’
c. *Trabajan investigadores de todas partes.
   Work, investigadores from all parts
   ‘Investigators from all parts work.’
d. Allí trabajan investigadores de todas partes.
   ‘There work investigators from all parts.’

Even with a bare plural, the postverbal subject is ungrammatical with a unergative verb in (1.20c), but the structure can be saved with locative inversion and preposing of a locative adverbial, such as allí ‘there’ in (1.20d). Bare nouns, whether singular or plural, require postverbal position when used with the passive SE construction as in (1.21), and bare plurals require postverbal position with the passive construction with the auxiliary verb ser ‘to be,’ as in (1.22).

(1.21) a. Se sigue importando petróleo.
   SE continue, petróleo
   ‘Petroleum is still being imported.’
b. *Petróleo se sigue importando.
   ‘Petroleum is still being imported.’
c. Se dan regalos.
   SE give, regalos
   (RAE, 2010: 41.2)
d. *Regalos se dan.
   ‘Gifts are given.’

(1.22) a. Le fueron dados regalos.
   him/her were given regalos
   ‘Gifts were given to him/her.’
While the Royal Spanish Academy (2010:645) posits grammaticality of both pre- and postverbal subjects in narrow and contrastive focus contexts, the presence of a preverbal topic can force a postverbal subject. When the object of a transitive verb is the topic and placed in preverbal position, a postverbal subject is obligatory (Cinque, 1990), regardless of the focus context, as shown in wide focus in (1.23), narrow focus in (1.24), and contrastive focus in (1.25).

(1.23) ¿Qué pasó con la tarta?  
‘What happened with the cake?’  
a. La tarta, la hizo Juan.  
b. *La tarta, JUAN la hizo.  
‘The cake, Juan made it.’  

(1.24) ¿Quién hizo la tarta?  
‘Who made the cake?’  
a. La tarta, la hizo Juan.  
b. *La tarta, JUAN la hizo.  
‘The cake, Juan made it.’  

(1.25) ¿Hizo la tarta Juan?  
‘Did Juan make the cake?’  
a. La tarta, la hizo Juan.  
b. *La tarta, JUAN la hizo.  
‘The cake, Juan made it.’  

In the examples in (1.23-1.25), when the object of a transitive verb is topicalized and placed in sentence-initial position, a postverbal subject is obligatory and the preverbal subjects in the (b) examples are ungrammatical (Domínguez & Arche, 2014). These are known as clitic left dislocation structures (Cinque, 1990), in which the object is known information and topicalized to the front of the sentence. These will be referred to throughout the dissertation as topicalized object structures. This happens regardless of the focus context introduced by the questions (Domínguez & Arche, 2014).
A postverbal subject is also required when a focused element is preposed into preverbal positions, as in (1.26).

(1.26) ESO MISMO pensaba yo. (RAE, 2010:760)

‘That same thing I thought.’

It is known that the fronted phrase is a focus and not a topic because it receives stress prominence and there is no resumptive object clitic as is the case of topicalized objects in (1.23-1.25). Furthermore, with negative preposing, postverbal subjects are also obligatory, as in (1.27).

(1.27) a. Nunca haría eso Pedro.
    Never doCOND that Pedro
    ‘Pedro would never do that.’

b. *Nunca Pedro haría eso.
    Never Pedro doCOND that
    ‘Pedro would never do that.’

It has already been shown that when a sentence uses the subject to contrast with presupposed information in contrastive focus, either a pre- or a postverbal subject can be used. However, when two subjects are contrasted within the same sentence with the conjunction sino ‘but,’ a postverbal subject is used, as in (1.28).

(1.28) a. No vino Juan sino Pedro.
    No comePAS Juan but Pedro
    ‘Juan didn’t come but Pedro did.’

This can be paralleled to the contrastive focus structure we saw in (1.14), because there is a presupposition that Juan did in fact come, but this is being negated and contrasted with the new subject Pedro. This may be a case of verb ellipsis from the parallel sentence No vino Juan sino
(que vino) Pedro ‘Juan didn’t come but Pedro came’, in which two sentences with postverbal subjects are conjoined.

There are several other contexts that elicit a postverbal subject. Subject placement is obligatorily postverbal in wh-questions\(^1\), as shown in (1.29), but optionality arises in relative clauses, which can pattern with preverbal subjects as in declaratives in (1.30a) or with postverbal subjects as in questions, as in (1.30b).

\[(1.29)\]
\[
\begin{align*}
\text{a. } & \text{¿Qué leyó Juan?} \\
\text{b. } & \text{*¿Qué Juan leyó?}
\end{align*}
\]
‘What did Juan read?’

\[(1.30)\]
\[
\begin{align*}
\text{a. } & \text{El libro que Juan leyó.} \\
\text{b. } & \text{El libro que leyó Juan.}
\end{align*}
\]
‘The book that Juan read.’

(1.30)  
\[(Zagona, 2002: 28)\]

‘Non-finite clauses typically allow only post-verbal subjects’ (Zagona, 2002:28), as in (1.31a) with a participle form and (1.31b) with an infinitive.

\[(1.31)\]
\[
\begin{align*}
\text{a. } & \text{Llegada ella, empezó la fiesta.} \\
& \text{Arrive}_{\text{PART}} \text{she, start}_{\text{PAS}} \text{the party} \\
& \text{‘Once she arrived, the party started.’}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{Al ganar ellos, recibirán un premio.} \\
& \text{ART win}_{\text{INF}} \text{they, recieve}_{\text{FUT}} \text{a prize.} \\
& \text{‘Upon winning, they will receive a prize.’}
\end{align*}
\]

When a subject is included with the imperative, postverbal position is also obligatory, as in (1.32).

\[(1.32)\]
\[
\begin{align*}
\text{¡Haz la tarta tú!} \\
\text{make the cake you}
\end{align*}
\]

---

\(^1\) Certain dialects, predominantly of the Caribbean, allow preverbal subject pronouns in wh-questions (Domínguez & Hicks, 2016). Speakers of these dialects will be excluded from the present study.
‘You make the cake!’

The use of exclamative qué, in (1.33), and quotative que, in (1.34), both require postverbal subjects.

(1.33)  ¡Qué buena tarta hizo Juan!
‘What a great cake Juan made!’

(1.34)  ¿Qué pasó?
‘What happened?’
Que estornudó Pedro.
‘That Peter sneezed.’

In direct speech with quotations, postverbal subjects are also used, as in (1.35).

(1.35)  “Yo voy a misa a rezar,” dijo mi madre.
‘I’m going to mass to pray,” said my mother.’

1.4. Postverbal subject position relative to objects

Not only can a subject invert with the verb, but postverbal subjects can also interchange positions with a postverbal object, making both VSO and VOS order grammatical options. VOS is grammatical in other Romance languages, including Catalan, Italian (although restricted), and French (although very marginal) but these other languages suffer many more restrictions on VSO, depending on the type of object (Ordoñez, 2000). While VSO order can have two information structures, VOS order is restricted to one information structure, as contrasted in (1.36).

(1.36)  a. Ganó Juan la lotería.
b. Ganó la lotería Juan.
‘John won the lottery.’
According to Ordoñez (2000:28), in (1.36a) the subject can be a part of the asserted information, is contained within the information focus material, but cannot bear main sentence stress. It can answer the question *What happened?* in being a part of the assertion, but the subject cannot be the entire assertion. However, in (1.36b), *Juan* is the only asserted information, receives narrow focus, and can only answer a question like *Who won the lottery?*

1.5. **Frequency of SV and VS word orders**

While the previous discussion examined the specific contexts in which postverbal subjects are grammatical, it is also important to look at the frequency with which SV and VS orders are present in native Spanish, which presumably represents the input available to the L2 learner. Learners must rely on evidence available in the linguistic input to obtain accurate use of postverbal subjects since they do not typically have access to explicit instruction on when to use postverbal subjects as opposed to the default preverbal subjects (Domínguez & Arche, 2014:245). This is true of the participants in this dissertation, who receive very little explicit instruction on postverbal subjects, as will be seen in Chapter 4 where I discuss the participant pool. Mayoral Hernández (2006, 2008) analyzed whether there is a correlation between verb type and subject position, based on written data from the *Corpus de Referencia del Español Actual* (*CREA*). The study reported relatively similar preference for preverbal (54.4%) and postverbal (45.6%) subjects for unaccusative verbs, and a strong preference for preverbal (78.55%) subjects for unergatives. Additionally, transitive verbs showed an even greater preference for preverbal (97%) versus postverbal (3%) subjects. Domínguez and Arche (2014) point out that this finding for unaccusative verbs undermines the commonly stated notion that unaccusative verbs prefer postverbal subjects.
In another corpus-based study, Domínguez and Arche (2014) examined the same correlation with oral data from with NSs from the Spanish Language Learner Oral Corpus (SPLLOC). Out of 1597 active verb tokens, 3.6% were intransitive. Their results differ from Mayoral Hernández’s (2006; 2008) study in that unergative verbs showed a relatively similar preference for preverbal (57%) compared to postverbal (43%) subjects. They claim that the discrepancy between their results and those of Mayoral Hernandez (2006; 2008) may be due to sample size, since only seven unergative verbs appear in their corpus. Additionally, the corpus used by Mayoral Hernández’s (2006; 2008) is written while that of Domínguez and Arche (2014) is oral; thus the mode of language use may affect subject position. Results for unaccusative verbs confirmed what was found previously, with an equal preference for preverbal (54%) and postverbal (46%) subjects. They also compared use of subject positions for all verbs types combined, finding a similar distributive frequency, 54.16% for SV and 45.83 for VS. Based on these results, they claim that NSs demonstrate no clear preference for SV or VS, and subsequently the input available to the L2 learners would indicate optionality on subject placement with intransitive verbs.

Both of the frequency studies mentioned above fail to account for frequency of subject placement within the discourse contexts discussed, wide, narrow, and contrastive focus. Therefore, we have an incomplete picture of what evidence is available from NSs from usage-based studies and must rely on grammar-based studies as discussed in this section. This dissertation aims at contributing to the picture painted by these studies by including discourse context in examining frequency of subject placement.

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2 Pilot data for this dissertation showed no difference in subject position in written versus oral production; therefore it was not included in the experiment. However, the written modality is often more formal than the spoken modality and could be fruitful for future research.
2. The distribution of postverbal subjects in English

Postverbal subjects are also grammatical in English under much more constrained conditions. They are most common with unaccusatives, but under certain circumstances, can also occur with unergatives (Stowell, 1981; Levin & Rappaport Havov, 1995; Culicover & Levin, 2001; Rizzi & Shlonsky, 2006). Crucially, as we saw in several examples of postverbal subjects in Spanish, postverbal subjects in English always require a preverbal element.

The first use of postverbal subjects is with unaccusative verbs with an expletive there in canonical subject position, as in (1.37), where the sentence fulfills a presentational function (Rizzi & Shlonsky, 2006:3) similar to the postverbal subjects with unaccusatives in Spanish, as proposed by Suñer (1982).

(1.37) There came three students.

Additionally, postverbal subjects with unaccusatives are grammatical even with no expletive in cases of stylistic inversion. In (1.38), we see a case of locative fronting which yields a postverbal subject with an unaccusative verb. In (1.39), we see a similar case of the fronting of a prepositional phrase (PP), however there is an unergative verb. The postverbal subject in this allowed in this case because the subject is heavy or complex. Culicover and Levin (2001) refer to cases in (1.38) as light inversion and cases in (1.39) as heavy inversion.

(1.38) a. Into the room walked my brother Jack. (Stowell, 1981:ex31)³
b. Down the stairs fell the baby.

(1.39) a. In the enclosure, among the chicks, hopped the most recent children of Nepomuk and Snow White. [M. Benary, Rowan Farm 287] (Levin & Rappaport Havov, 1995:ex78)

³ Note, this is the unaccusative use of walk as in to enter, not the action of walking.
As in Spanish, English also utilizes postverbal subjects when quoting direct speech, as in (1.40).

\[(1.40) \quad \text{“I’ll blow your house down” cried the wolf.}\]

As an English-speaking learner acquires postverbal subjects in Spanish, they have an available structure in their L1 that could facilitate acquisition. However, it is important to note that it occurs mostly with an overt element in preverbal position, whether the expletive *there*, a fronted locative PP, or a quotation. The relevance of this will become clear when I examine syntactic analyses of postverbal subjects and as we look at the L2 acquisition of this structure in Spanish by speakers of English.

This section has demonstrated that postverbal subjects are not limited to Spanish, but are also possible in English. Therefore, an English-speaking L2 learner of Spanish can potentially use the structure from their L1 to yield postverbal subjects in Spanish. If this is the case, the L2 learner will exhibit the same distribution of postverbal subjects that exists in English in their Spanish interlanguage. However, as we have seen, the distribution is not the same between the two languages; therefore the L1 strategy will only work superficially, but will not allow full convergence on target usage. In Chapter 2, I show that the syntax of these structures also varies, also indicating that convergence cannot be attributed to superficial use of English postverbal subjects in Spanish, but must rely on the acquisition of the underlying syntactic structure in Spanish.

3. Concentration of this dissertation

It is beyond the scope of the present dissertation to analyze all uses of postverbal subjects in Spanish; therefore it centers itself on a subset of these uses in order to examine both syntactic
and discourse constraints in native speech and the speech of second language (L2) learners. In order to examine the role of discourse, three focus contexts are examined: narrow focus contexts when answering questions of the type *Who did [verb]?*, as shown in (1.10-1.13), contrastive focus contexts when answering questions of the type *Did Juan do [verb]?*, as shown in (1.14-1.17), and wide focus contexts when answering questions of the type *What happened?*, as shown in (1.4-1.7). If traditional accounts of Spanish information structure hold true, which posit that new information should be in sentence final position (Contreras, 1976; RAE, 2010:754), then postverbal subjects should be preferred in narrow and contrastive focus contexts for purely discursive reasons, while preverbal subject may still be used. Similarly, postverbal subjects should be barred in wide focus contexts with transitive and unergative verbs, since the entire sentence bears the information load. However, postverbal subjects are permitted with unaccusative verbs in wide focus. Therefore, the present dissertation also looks at the interplay of verb class with focus contexts, including four classes: unaccusative, unergative, transitive, and ditransitive verbs, across the three focus contexts.

In order to look at both discursive and syntactic constraints, the dissertation also examines subject position when the object of a transitive verb is topicalized to the front of the sentence, as shown above in (1.23-1.25). Recall that a postverbal subject should be used regardless of focus context; therefore syntactic constraints alone render a grammatical postverbal subject. However, the topicalization of the object is also due to discourse factors, so this structure is not without discursive constraints. It should be noted that the contrastive focus contexts in (1.14-1.17) demonstrate an interaction between discourse context and syntactic constraints, since syntactically, there is a preverbal element that could render a postverbal subject, but this postverbal subject also allows the new information to fall in sentence final position, following
discursive constraints. Therefore, all of the contexts examined will show interplay between discourse and syntax.

The uses of postverbal subjects in narrow versus wide focus and with unaccusative versus unergative verbs has been widely studied in both the theoretical syntax literature (Rizzi, 1982; Campos, 1997; Burzio, 1986; Raposo, 1988; Coopmans, 1989; Bresnan, 1994; Demuth & Harford, 1999; Rizzi & Shlonsky, 2006; Salzmann, 2004; 2011; Culicover & Levine, 2001; Pinto, 1997; Sheehan, 2006; 2010; Corr, 2012) and the second language acquisition literature (Ocampo, 1990; Hertel, 2003; De Miguel, 1993; Camacho, 1999; Liceras & Díaz, 1999; Lozano, 2006a,b, 2013; Domínguez, 2007; 2013; Domínguez & Arche, 2008, 2014; Hertel & Pérez-Leroux, 1999). However, to the best of my knowledge, contrastive focus in Spanish has not been examined, and transitive verbs have been understudied, especially in Spanish; therefore the present dissertation aims to examine include contrastive focus and transitive verbs in order to gain a clearer picture of the distribution of postverbal subjects. The use of postverbal subjects in contrastive focus and with topicalized objects will prove to be crucial in both supporting any syntactic analysis of postverbal subjects and supporting formal theories of second language acquisition of postverbal subjects.
CHAPTER 2: SYNTACTIC ANALYSES OF POSTVERBAL SUBJECTS

The existence of so-called ‘free inversion’ in Spanish is most commonly assumed to be related to the availability of null subjects in Spanish; therefore most syntactic analyses of postverbal subjects derive themselves from theories of null subjects. This chapter will present a history of the derivation of postverbal subjects in Spanish within the pro-drop parameter, first within the government and binding framework and then within the minimalist program.

1. The pro-drop parameter

Spanish is a null subject language (NSL, Rizzi, 1982) which allows subjects to be phonetically unrealized when their interpretive content is recoverable through agreement in verbal inflection and/or the discourse context. The canonical subject position in both Spanish and English is preverbal, as shown in (2.1). Chomsky (1981) assumed that there was a single parameter of core grammar, the “pro-drop parameter,” that distinguishes NSLs like Spanish from non-NSLs like English. “When the parameter is set one way or another, the clustering of properties,” or lack thereof, should emerge (Chomsky, 1981:241). The cluster of properties includes null referential subjects, shown in (2.2), null expletive subjects, shown in (2.3), postverbal subjects with no overt expletive or ‘free’ inversion as we saw in the previous section, and repeated here in (2.4), and lack of that-trace effects, shown in (2.5).

(2.1) a. Juan vendrá a la fiesta.
    Juan come\textsubscript{FUT} to the party
    b. John will come to the party.

(2.2) a. Vendrá a la fiesta.
    come\textsubscript{FUT} to the party
    b. *Will come to the party.

(2.3) a. *Lo/Ø Llueve.
    b. It*/Ø is raining.
(2.4)  
a. Vendrá a la fiesta Juan  
come_{FUT} to the party Juan  
b. *Will come to the party Juan.

(2.5)  
a. ¿Quién dijiste que fue a la fiesta?  
Who say_{PAS} that went to the party?  
b. *Who did you say that went to the party?

Null referential subjects, as shown in (2.2), allow the subject of a finite verb to lack a phonetic realization when its interpretation is understood via verbal inflection and the discourse context. The sentence in (2.2a) would only be used in a context in which there is a clear and apparent third person singular referent available for interpretation of the sentence. Null expletive subjects, as shown in (2.3), also lack phonetic realization, but unlike null referential subjects, they also lack semantic content. We can see in the Spanish example in (2.3a) that an overt subject is neither necessary nor grammatical, while an overt subject is required in the English counterpart in (2.3b). The that-trace effect restricts extraction from the subject of an embedded clause (except relative clauses), when the overt complementizer (COMP) that is present (Perlmutter, 1971; Chomsky & Lasnik, 1977; Taraldsen, 1978; among others). We see that in Spanish in (2.5a), wh-extraction from the subject position is grammatical with the overt complementizer, but its English counterpart is ungrammatical in (2.5b). The present section will describe the pro-drop parameter in government and binding, focusing on its role in licensing postverbal subjects in Spanish. For more details on the licensing of null subjects see Rizzi (1982, 1986), Jaeggli (1980, 1982), Chomsky (1982), Hyams (1983, 1986), and Jaeggli and Safir (1989).

According to Rizzi (1986a:518), “a theory of a null element should specify (a) the conditions that formally license the null element and (b) the way in which the content of the null element (minimally its phi-features) is determined or “recovered” from the phonetically realized
environment.” In other words, formal licensing specifies the syntactic conditions in which a null element can occur, and recovery specifies how an empty category is interpreted or how its reference is determined.

Underpinning all theories of the pro-drop parameter, both descriptive and explanatory, is the role of agreement features within inflection (INFL) in allowing null subjects. Such descriptive accounts of the role of the verb’s inflectional morphology go as far back as Jespersen (1924) who noted that finite verbs show person distinctions with no explicit subject. Pronouns are only explicitly stated when necessary or desirable to lay special stress (Jespersen, 1924: 213). In formal theory, based on Taraldsen (1978), the INFL node, which contains agreement (AGR) features, has been postulated to license the null subjects and was assumed to govern them. The so-called ‘rich’ agreement found in INFL, specifically number and person, in languages like Spanish, allows for recovery of the null information.

One prominent government and binding theory to capture how INFL fulfills the function of both licensing and recovering null subjects is that of Rizzi (1982), in which he assumes the subject position of NSLs to be filled by an empty noun phrase (NP), \([NP\ e]\). Important to this analysis is the idea that tensed INFL doesn’t determine grammatical well-formedness but functions in allowing interpretation of the empty NP, allowing for a definite, referential interpretation, given that certain non-finite clauses also allow null expletives, as in the Italian example in (2.6).

\[(2.6)\quad \text{Essendo piovuto per tutto il pomeriggio, no siamo usciti.} \quad \text{[Italian]} \quad \text{‘Having rained for the whole afternoon, we didn’t go out.’} \quad \text{(Rizzi, 1982:128)}\]
He provides the following distribution of two types of null subjects regarding their interpretation. A phonetically null “dummy” subject can be generated in the local context of a nominative Case assigner, i.e. tensed inflection or an auxiliary in the Spec of the complementizer phrase (CP). This allows sentences such as (2.3) and (2.6), with expletive null subjects, to have an expletive interpretation. A phonetically null subject can be found with a definite, referential interpretation in the local context of tensed inflection (Rizzi, 1982:130), which allows a definite interpretation for the null referential subject in (2.2) above.

In incorporating the two descriptive statements just mentioned into a cohesive theory, Rizzi (1982) posits that verbal inflection has clitic-like pronominal features and the INFL head has a [+pronoun] feature. This is an optional feature that gives INFL the following characteristics: it serves as a verbal affix, has pronominal person and number properties, is interpreted as a definite pronoun, and binds and properly governs an empty NP. When present, it must absorb the nominative Case, which it normally assigns to the subject in Spec of INFL, which is possible because it functions like a nominal element. Referential pro is more restricted than expletive pro because a pronominal must contain person features in order to be referential. A non-finite verb can never have person features, thus allowing only the expletive interpretation in (2.3) and (2.6) (Rizzi, 1982:142).

Rizzi (1982:143) sums up his formulation of the pro-drop parameter in his example (75), stated here in (2.7), where F represents morphologically realized agreement features.

(2.7) a. INFL can be [+pronoun]
b. INFL [+pron, F₁…Fₙ] can be referential
Languages first vary in whether they have (2.7a) or not, distinguishing between pro-drop (both expletive and referential) and non-pro-drop. Further divisions can be made between languages that have (2.7b), which distinguishes expletive-only pro-drop, like German, from referential pro-drop, like Spanish.

In order to make the pro-drop parameter cohesive with binding theory and the Empty Category Principle\(^4\), Chomsky (1982) identifies the empty category pro, with the binding theoretic properties [-anaphor, +pronominal], which is the empty counterpart to a pure, overt pronominal, as shown in (2.8).

\[ (2.8) \quad \text{Juan dijo que iba a la fiesta.} \]
\[ \text{Juan say.PAS.SG that go.PAS.3SG to the party} \]
\[ \text{‘Juan said that (she/he) was going to the party.’} \]
\[ \text{[CP [IP Juan\(i\) dijo [CP que [IP pro\(i,j\) iba a la fiesta]]]]] } \]

As opposed to its overt counterpart, pro is a pure pronominal without phonetic content which should be interchangeable with overt pronouns (Hyams, 1983:32), which must be free in its governing category under binding theory. In (2.8), pro can optionally be bound by Juan or by another referent in the discourse context, but either way it is free in its governing category, IP, since neither is contained within the lower IP. Pro may refer to an entity in the discourse context, as is shown with the \(j\) indexing in (2.8) or be coindexed with an element in the linguistic context, as shown with \(i\) coindexing between pro and Juan. Pro has a distribution typically limited to the subject position in NSLs\(^5\), which can be assumed to be projected to satisfy the

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\(^4\) For more information on binding theory, the empty category principle, and their predecessors, the reader is referred to Chomsky and Lasnik (1977), Kayne (1980), Chomsky (1981; 1982; 1986), Huang (1982), and Lasnik and Saito (1984).

\(^5\) Rizzi (1986b) provides evidence that pro also occurs in object position in Italian.
Extended Projection Principle (EPP, Chomsky, 1981, 1982:82), which requires that the Spec of IP be filled, thus requiring that sentences have subjects.

Using data from null objects in Italian and adopting the use of pro as the label for empty subjects, Rizzi (1986) extends the generalized Empty Category Principle (Chomsky, 1981:274) by incorporating clause (iv) to incorporate formal licensing of pro, in (2.9) below.

\[
\begin{align*}
(2.9) & \quad \text{If } \alpha \text{ is an empty category, then} \\
& \quad (i) \quad \alpha \text{ is PRO iff it is ungoverned} \\
& \quad (ii) \quad \alpha \text{ is trace iff it is properly governed} \\
& \quad (iii) \quad \alpha \text{ is a variable iff it is Case-marked} \\
& \quad (iv) \quad \alpha \text{ is pro iff it is governed by } X_y^0 \\
\end{align*}
\]

(Rizzi, 1986a:519)

In clause (2.9iv), \(X_y^0\) refers to a class of licensing nodes that can vary from language to language. In languages like Italian and some dialects of Spanish, \(X_y^0\) is made up of INFL (for subjects) and V (for objects). In English, it is made up of the empty set, in that pro is never licensed. This is a multivalued parameter that can account for differing conditions on pro licensing in different languages. Interpretation of pro occurs through rich AGR and “pro has the grammatical specification of the features on the X coindexed with it” (Rizzi, 1986a:520). If recovery of referent fails, via lack of AGR in INFL, expletive pro is generated.

2. Postverbal subjects within the pro-drop parameter

Chomsky (1981:273) originally formulated the pro-drop parameter as in (2.10) below, which incorporates both null subjects, in (a) and postverbal subjects in (b).

\[
\begin{align*}
(2.10) & \quad \text{a. } \alpha \text{ VP} \\
& \quad \text{b. } \alpha \text{ VP NP}
\end{align*}
\]
The α in both rules was originally represented by PRO, since pro was not yet posited, which in (2.10a) is a true referential pronoun and in (2.10b) is an impersonal pronoun, serving a pleonastic function such as it or there. In deriving postverbal subjects, Chomsky (1981, 1982) and Jaeggli (1982) both support rightward movement of the subject NP adjoined to the VP (Kayne, 1972; Kayne & Pollock, 1978; Kayne, 1981; Belletti & Rizzi, 1981), leaving an empty category in canonical subject position, as shown in (2.11).

(2.11) Come una manzana Juan.
     ‘Juan eats an apple.’
     \[ CP [IP e AGR [VP [VP come una manzana] [NP Juan]]]]

The empty category left by subject movement in (2.11) is improperly bound, so a rule of PRO insertion is posited to save the structure, \([\text{NP} \ e] \rightarrow \text{PRO}\) (Jaeggli, 1982:143). This would be the language specific formulation for Spanish, but the rule could be generalized to English-like languages as well, \([\text{NP} \ e] \rightarrow \text{pronominal}\) (Jaeggli, 1982:143). When this applies in Spanish, which has an active Avoid Pronoun Principle, PRO is inserted, while in English the pleonastic pronouns there and it are generated. For an unaccusative verb, the subject is base-generated in postverbal position, as the sister of the verb, as in (2.12), and the PRO is inserted in canonical subject position in the Spec of IP.

(2.12) Llegó Juan.
     ‘Juan arrived’
     \[ CP [IP PRO AGR VP llegó Juan]]

Rizzi (1982) also assumes the rightward movement and VP-adjunction of the subject with verbs that are not unaccusative, in his example (48) shown below in (2.13).
(2.13)  

(a) $[\text{IP}_e, \text{INFL} [\text{VP} [\text{VP ha telefonato Gianni],]]]$  
has called Gianni  
‘Gianni called.’

(b) Ho telefonato io/*me.  
Has called I/*me.  
‘I called.’

(Rizzi, 1982:132ex48)

(Rizzi, 1982:133ex50)

However under Rizzi’s (1982) theory, the empty category is licensed by INFL with the [+pronoun] feature. INFL cannot, however, give it a definite pronoun interpretation but rather contains a [+dummy] feature, which gives an expletive interpretation to the empty category. Rizzi (1982:133) posits a “transmission convention” in which the “dummy pronominal inflection absorbs nominative Case and transmits it to postverbal subject,” with which it is coindexed. We can see the nominative Case in (2.13b), where only the nominative *io ‘I’ is grammatical as opposed to the ungrammatical accusative Case *me ‘me’. Chomsky (1981) claims that the postverbal subject receives its theta role in a similar way. Theta roles are assigned to NP argument positions, and, if empty, the theta role is transmitted to a nominal element with which it is coindexed. In this case, the postverbal subject receives its theta role by being coindexed with the null expletive pronoun.

The theory of rightward movement of the subject has also been used in theories of the apparent lack of that-trace effects in NSLs. Several authors have shown that subject extraction from canonical preverbal position in embedded clauses is in fact ungrammatical in NSLs, but these languages are able to avoid the negative effects by extracting subjects from postverbal position (Campos (1997) for Spanish, Burzio (1986) for Italian, Raposo (1988) for European Portuguese). Campos (1997), posits the structures in (2.14) for Spanish.
In the structures in (2.14), the wh-subject is base-generated in Spec,IP. Wh-extraction from preverbal position in (2.14a) is ungrammatical because the COMP head que ‘that’ does not contain AGR features which can head-govern the lower trace in Spec,IP (Campos, 1997:107). To make extraction possible, the wh-subject is extracted from postverbal position, with a pro-expletive, the silent equivalent of *there*, in canonical subject position in Spec, IP, in (2.14b). The pro-expletive, following Chomsky (1995), contains no AGR features or Case. Agreement is established between the extracted wh-subject quién ‘who’ and the verb by inheritance through the expletive pro. This is the case for embedded clauses as in (2.14b) and main clauses as in (2.14c), and Campos (1997) provides evidence of the validity of this analysis not only in Spanish but in Italian and Gallegan as well.

While these analyses of postverbal subjects within the pro-drop parameter, constrained by binding theory and the empty category principle, can account for the syntactic licensing of postverbal subjects, they fail to incorporate the discursive and prosodic constraints that relate so closely with their use. They have no explanatory power that can predict when a postverbal subject would be used instead of a preverbal subject. They cannot explain why a postverbal subject should be used in narrow focus or in contrastive focus. They touch on why an unaccusative can use a postverbal subject, but they do not explain why other verbs cannot have postverbal subjects in wide focus. Furthermore, it will also be shown that many of these analyses
do not work under minimalist assumptions. In the next section, first I present the minimalist conventions that I assume in the present dissertation. Following that, postverbal subjects will be examined within minimalism, noting the defects of the government and binding analyses just presented in the process and with the goal of accounting for the differential uses of postverbal subjects under discursive and prosodic constraints.

3. Minimalist assumptions

I now provide an outline of the basic minimalist assumptions that will be adopted in this dissertation, based primarily on the *Minimalist Program* (Chomsky, 1995) and refinements in *Minimalist Inquiries* (Chomsky, 2000) and *Derivation by Phase* (Chomsky, 2001). The faculty of language is assumed to be an organ in the brain which works with the two cognitive-performance systems, the sensorimotor system, used in pronunciation, and a system of thought, used in understanding meaning. The faculty of language interacts with these systems at the interface levels, phonological form (PF) and logical form (LF). Under the strong minimalist thesis (Chomsky, 1995, 2005), the faculty of language is optimally designed to yield legibility at the interfaces.

Derivations must meet two central principles to be grammatical: convergence and inclusiveness. Convergence means that a structure is legible to both PF and LF. Inclusiveness means that no new features are introduced into the derivation after those included in the lexical array. Under minimalist assumptions, universal grammar (UG) makes available a set of features (F) and three computational operations: Merge, Agree, and Move. Merge is the fundamental structure building operation that combines elements via sisterhood. Agree is an operation between a probe and a goal that match in one or more features. Features on the probe are
uninterpretable and unvalued, and therefore must be deleted before spell-out. These features are valued by the matching interpretable features on the goal. Move is the result of Agree plus Merge, in which an Agree relation is established between a node $\alpha$ and a node $\beta$, and $\beta$ optionally moves to the Spec of $\alpha$, depending on its EPP feature. In order to construct a specific language based on what UG makes available, a one-time selection of a subset of UG’s features is made, $[F]$, which are bundled to create individual lexical items from which a lexicon is formed.

There are two categories of lexical items: substantive categories (nouns, verbs, adjectives among others) and functional categories (tense, complementizers, among others). Lexical items are composed of features from $[F]$. For example, tense (T) may be composed the unvalued $\phi$-features $[_{\text{plural}}]$, $[_{\text{person}}]$, etc., depending on the specific language. Much of syntax is derived from three core functional categories (CFCs): C, T and v. All CFCs may have phi-features which are uninterpretable, thus must be deleted via Agree. An uninterpretable feature becomes valued (and deleted) when it enters the Agree relation, in order to satisfy convergence. Transitive v selects for a determiner phrase (DP), the external argument, which is merged in its Spec. All CFCs may also have an EPP feature which introduces an additional Spec which is not selected. The EPP feature on T is often thought to be universal, while the same feature on v and C are optional. It is this EPP feature that causes the external argument, or subject, to move from the Spec of v to the Spec of T. Traditionally, this movement is assumed to be the result of Agree between the probe T and the goal v. In this way, the uninterpretable phi-features of T are deleted and the EPP is satisfied by the same goal.

In developing a derivation, a selection of the features of a language is bundled into the lexical array, which is the set of features available for use in a particular sentence. Derivations demonstrate a preference for Merge over Move, in that whenever possible an element from the
lexical array should be merged into the derivation rather than displacing an already merged element. Defective intervention is also in action when a probe is trying to find a goal for its Agree relation. This notion implies that a probe can only enter into an Agree relation with the closest active goal.

The cyclic unit of minimalism is the phase. Phases are made up of two parts, the Edge, composed of the Spec and the head, and the spell-out domain, composed of the sister of the head. C and transitive \( v \) are assumed to be strong phases while intransitive \( v \) is a weak phase (Chomsky, 2001). Spell-out, or transfer of the derivation to the interfaces, happens at the completion of each phase. It will be assumed following Chomsky (2001) that the spell-out domain of a phase is spelled-out once the next phase head is merged. Phases are also subject to the phase impenetrability condition (PIC), which stipulates that only the edge of a phase is accessible to outside operations. This explains the purpose of successive cyclic movement in derivations, because elements can move to [Spec,CP] or to [Spec, vP] to avoid being spelled-out and remain available for further operations. Take an object wh-question for example, shown in a minimalist account here in (2.15).

(2.15) ¿Qué compraste?
What did you buy?

\[
[CP \text{Qué} [TP \text{compraste} [VP \text{qué compraste} v [VP \text{compraste qué}]]]]
\]

In (2.15), the first phase is the vP. Its spell-out domain, the VP, is spelled out when the \( v \) is merged with the VP. In order for the wh-word \( qué \) to be able to continuing moving to the upper CP, it is moved to the edge of the phase, to the Spec of the vP, so that it is no longer in the spell-out domain and is thus still available for operations and can continuing moving up to Spec of the higher CP.
As was seen in (2.15), minimalism eliminates traces in favor of copy theory. To satisfy inclusiveness, no elements can be added to the derivation once it is being constructed, in order to be legible at the interfaces. This makes traces, which would be new elements not originally contained in the lexical array, violate inclusiveness. Therefore, movement operations leave an exact copy of the moved element in the original position, thus obeying inclusiveness, and PF is responsible for sorting out which copy is pronounced. The highest copy is typically pronounced, but this is subject to cross-linguistic and cross-structural variation. A sample derivation of a transitive verb with an overt subject is provided below in (2.16).

\[(2.16) \quad \text{Juan leyó un libro.} \quad \text{‘John read a book.’}\]

The lexical array is selected from the lexicon, including both substantive and functional categories. In (2.16), *leyó* ‘read’ merges with the DP *un libro* ‘a book’, which has interpretable \(\phi\)-features and uninterpretable Case. The *v* is then merged, which has uninterpretable \(\phi\)-features. In order to delete its uninterpretable \(\phi\)-features, *v* probes looking for an active goal with the
matching interpretable features, finding *un libro* 'a book'. They enter into an Agree relation in which v’s uninterpretable ϕ-features are valued and deleted and *un libro* receives accusative case. It will be assumed that in both English and Spanish, the V moves up to v to be at the edge of the phase, but only in Spanish does the v+V move up to T (Pollock, 1989; Belletti, 1990). *Juan*, with interpretable ϕ-features and uninterpretable Case, is then merged with v. T, containing uninterpretable ϕ-features and an EPP feature, is then merged with vP. T needs to delete its uninterpretable ϕ-features and probes for a goal with the matching interpretable features. It finds *Juan* and enters into an Agree relation, giving *Juan* nominative case and deleting T’s features. Once C is merged, the rest of the sentence is spelled-out. The structure in (2.16) will be assumed for Spanish canonical sentences with unergative and transitive verbs with an overt preverbal subject in wide focus when no known information is presupposed. It will be assumed that for unaccusative verbs, the subject is merged with V, internal to the VP, and the derivation proceeds in the same fashion.

4. **The pro-drop parameter in minimalism**

In the transition from government and binding to minimalism, theories of *pro* licensing must be reanalyzed. One reason is the desire for a maximally under-specified universal grammar (UG) under the strong minimalist thesis (Chomsky, 2000, 2005; Baker, 2008; Richards, 2008). In minimalism, UG is composed of only a set of features (both functional and substantive), from which a particular language makes a one-time selection to create its lexicon. These features are then combined to form lexical items. UG can no longer consist of universal principles or parameters with language-specific settings. Therefore, the pro-drop parameter can no longer be viewed as a component of the core-grammar that is set with exposure to input. Cross-linguistic variation must now be restricted to the lexicon and the different features that are selected from
UG in a particular language (Baker, 2008; Richards, 2008). Pro-drop is no longer triggered, but rather acquired via evidence of certain features and their properties in the input.

Furthermore, the notions of government and c-command are lost and replaced by notions such as inclusiveness and cyclicity via phases. Elements are no longer governed but can enter into Agree relations, and these Agree relations are no longer restricted by c-command but rather independently through cyclicity (Linares, 2012; Béjar, 2003). Government and c-command were central notions in licensing *pro* and other empty elements, which must now be understood through the different Agree relations.

Another change from government and binding to minimalism involves the representation of empty categories. Minimalist derivations conform to the inclusiveness principle in which no new elements can be added to a derivation. In government and binding, traces were left behind when an element was moved, but are essentially new elements added to the derivation. Thus, traces become ungrammatical as they violate inclusiveness. Instead, traces are assumed to be deleted copies of moved elements. This eliminates wh-traces and NP-traces as empty categories, which then questions whether or not the empty category *pro*, as an item available in the lexicon, is a grammatically viable option. Therefore, government and binding theories analyzed under minimalist assumptions must question the necessity of *pro* or whether its effects can be understood in another way, without the lexicon containing this empty element.

Recalling from our discussion of pro-drop in GB, the INFL was assumed to have a pronominal feature (Rizzi, 1982) which allowed it to license a null element in [Spec,IP]. In transitioning to minimalism, this pronominal feature translates to a D feature on T (Chomsky, 1995), that is present in NSLs but absent in non-NSLs. After T enters into an Agree relation with the verb in a pro-drop language, the verb raises to T. This D feature on T allows the Agreement
features and the verb movement to delete the EPP feature on T (Alexiadou & Anagnostopoulou, 1998). The role of this D feature on T and the validity of verb movement to satisfy EPP will be discussed as it relates specifically to the use of postverbal subjects. Many minimalist theories of NSLs manipulate the role of the null pronominal pro licensed by D (Cardinaletti, 1997; Camacho, 2013), the role of D in deleting T’s EPP feature (A & A, 1998; Barbosa, 1995; Manzini & Savoia, 2002; Ordóñez & Treviño, 1999), and the role of PF deletion of the subject (Roberts, 2010; Holmberg, 2005; Saab, 2009). A brief presentation of the role of pro and D in licensing null subjects will be presented before turning to their role in postverbal subjects, but the reader is referred to Biberauer, Holmberg, Roberts, and Sheehan (Eds, 2010) for a more thorough discussion of null subjects in minimalism.

Holmberg (2005) asserts that the system of pro-licensing postulated by Rizzi (1986) is incompatible with the feature-valuing via Agree approach of minimalism (Chomsky, 2000, 2001). If the φ-features of T are inherently unvalued, and pro is also inherently unspecified with unvalued φ-features and must be identified by T, then it is not possible for either one to value the other (Holmberg, 2005:537). However, in GB, the richness of the agreement features in INFL was assumed to license pro. This leads to a contradiction in that INFL is rich yet has unvalued φ-features.

To account for this incompatibility, Holmberg (2005) hypothesizes that either T or pro must enter the derivation with valued person and number φ-features. It is more desirable for pro to enter the derivation with the valued φ-features in order to maintain compatibility with the basic minimalist assumption that T is merged with unvalued φ-features and probes for a nominal element with valued phi-features via Agree. Based on data from Finnish, which has null referential but not null expletive subjects, Holmberg (2005) supports the hypothesis that pro has
valued $\phi$-features. Referential null subjects in consistent NSLs\(^6\) are fully specified pronouns with full $\phi$-features whose silent nature is due to deletion in PF. Similar approaches are advanced by Roberts (2010) and Holmberg (2010), which examine the specific nature of pro and the role of D in yielding a definite interpretation of the null pronoun. Holmberg claims that when pro is probed by a T with a D feature, the Agree relation yields a definite pronoun interpretation (Holmberg, 2010:95) in addition to valuing and deleting T’s $\phi$-features. The D feature thus is not only representative of agreement but also definiteness, explaining the lack of indefinite null subjects in consistent NSLs.

Returning to Rizzi’s (1986) claim that interpretation of null subjects must also be explained, Holmberg (2010) also discusses how null subjects are co-referenced with their antecedents, which also serve to value the D feature. First, the antecedent should be a topic (Frascarelli, 2007), specifically an aboutness-shift topic (AS-topic, Frascarelli & Hinterhölzl, 2007) which combines Reinhart’s (1981) notion of aboutness, in that the topic is what the sentence is about, with a shift, the property of being introduced into the discourse. Frascarelli (2007) adopts Sigurðsson’s (2004) claim that every clause has a speaker and addressee that act as local antecedents for 1\(^{st}\) and 2\(^{nd}\) person null subjects, respectively. For 3\(^{rd}\) person null subjects, the ultimate antecedent is the topic of the previous clause, which will be explained now.

Null subject pronouns are linked to AS-topics, which are syntactically represented overtly or covertly in the C-domain. The relationship between the antecedent and the null subject is indirect in consistent NSLs: “in a clause CL which has a 3\(^{rd}\) person null subject NU, the ‘ultimate antecedent’ of NU is a DP which is the A[S]-topic of a clause preceding NU” (Holmberg,

---

\(^6\) Holmberg’s (2005) analysis also makes claims for the differential nature of null subjects in consistent NSLs like Spanish, partial NSLs like Finnish (Holmberg, 2005), and discourse NSLs like Chinese (Huang, 1984). The present discussion will not present the differences in order to focus on the role of pro-drop in licensing postverbal subjects.
The A-topic values the uninterpretable D feature on T, and the referential index of the topic is copied on D, thus it is interpreted as the previous DP present in the C-domain (present in the discourse context). Following Sigurðsson’s (2004) claim that the C-domain of every clause contains a speech feature, if the null subject is 1st or 2nd person, D is valued by the speech feature and obtains its referential index. An example is provided in (2.17), based on Holmberg (2010:105).

(2.17) a. Compró un coche nuevo.\(^7\)
Buy\_PAS a car new
‘He/she bought a new car.’

\[
[C \langle DP \rangle \rightarrow \langle T_{compró+} \rangle_{\phi}\rightarrow \langle 3\text{SG, EPP} \rangle \rightarrow \langle v_{compró+} \rangle \rightarrow \langle VP \rangle_{compró un coche nuevo}]]
\]

b. María compró un coche nuevo.
Maria buy\_PAS a car new
‘Maria bought a new car.’

\[
[C \rightarrow \langle T_{María compró+} \rangle_{\phi}\rightarrow \langle 3\text{SG, EPP} \rangle \rightarrow \langle v_{María} \rangle \rightarrow \langle VP \rangle_{compró un coche nuevo}]]
\]

In (2.17a), T first probes the pro to establish an Agree relation and value and delete its φ-features and T becomes definite, by Holmberg’s (2010:95) claim that the D feature is responsible for definiteness. The null AS-Topic values the uninterpretable D feature on T by giving it the same referential index, thus valuing and deleting the D feature. Thus, the null pronoun in (2.17a) is interpreted the same as the antecedent topic. If there were no AS-topic, a full lexical DP subject would have to appear in [Spec, vP] and it would be moved to [Spec, TP], as in (2.17b). However, Holmberg’s (2010) analysis doesn’t explain why a lexical subject, such as that in (2.17b) cannot satisfy EPP in-situ, since there is still a D feature on T. Therefore, the movement of an overt

\(^{7}\) Italian in the original.
preverbal subject cannot be explained. This idea will be taken up again when we examine postverbal subjects.

In this analysis, the EPP is also satisfied by the AS-topic, through which Holmberg (2010) takes an approach to parameterizing EPP satisfaction, like we will see in Alexiadou & Anagnostopoulou (1998) and Sheehan (2006, 2010), by positing the notion of ϕ-dependence regarding EPP. A ϕ-dependent EPP means that the process that deletes EPP is the same as the Agree relation that values the ϕ-features on T. A ϕ-independent EPP means EPP can be deleted separately from the Agree relation between T and the goal. Spanish is a ϕ-independent language because EPP can, but is not necessarily deleted when T’s ϕ-features are valued. In example (2.17a) above, when null subjects are in place, EPP has not been deleted through Agree but through the AS-Topic in CP. In (2.17b), where we have a lexical subject, EPP has been deleted canonically through the Agree relation, when T’s ϕ-features are valued and the lexical subject moves to Spec,TP. This will have an important role as I turn to the syntax of postverbal subjects in minimalism and examine the possibility that constituents other than the subject can delete EPP, thus deriving postverbal subjects which remain in-situ to be discussed in the next section.

Most recent work by Chomsky (2013, 2015) uses labelling theory to parametrize EPP to explain the difference between NSLs like Italian or Spanish and non-NSLs like English. Labeling or projection is a theory internal part of the generative computational processes requiring that projections must be labeled in order to be interpretable (Chomsky, 2013:43). A labeling algorithm licenses syntactic objects by minimal search. For example, if the labeling algorithm encounters a syntactic object composed of a head H and an XP, it will label it using the label of the head. If the labeling algorithm encounters XP, YP, both of which are not heads, X and Y must be “identical in some relevant respect, providing the same label” (Chomsky,
In the case of an overt subject DP in Spec, TP, “the construction is labeled \(<\phi,\phi>\) by their matching features” (Chomsky, 2015:6).

In parametrizing EPP to license null subjects, Chomsky (2015) claims that in English, T with weak agreement is unable to label the projection, therefore the subject raises to Spec,TP and must be overt to label TP and also satisfies EPP. In Italian or Spanish, “T, with rich agreement, can label TP and also Spec,TP” (Chomsky, 2015:6), therefore the subject can be null. If the subject in Italian or Spanish raises to Spec, CP for independent reasons, T is still labeled by the strong agreement. As a result, Italian and Spanish do not have an EPP feature nor a null expletive in Spec,TP, which were the result of a “historical accident: English was investigated first, and it was natural to extend the principles discovered for English to other languages” (Chomsky, 2015:6) and they are no longer necessary. The universal nature of EPP has been debated in the literature and in the next section I provide evidence in favor of its necessity in Spanish.

5. The position of preverbal subjects and EPP

If the EPP in Spanish is already deleted by Agree and the valuing of T’s \(\phi\)-features, due to the D feature on T (Holmberg, 2010; A&A, 1998, among others), then there is no need for the overt subject to raise to [Spec,T], and it would predict that VS is the canonical word order, when it is in fact SV. In order to derive preverbal subjects, several analyses claim that overt preverbal subjects in NSLs are thought to maintain a different position from preverbal subjects in non-NSLs. Understanding the location of preverbal subjects is crucial in order to license postverbal subjects and understand the interaction with other preverbal elements. Following Chomsky (2000, 2001), it is assumed that subjects of transitive and unergative verbs are merged in the Spec of \(v\), while the subject of unaccusative verbs are merged as complements internal to VP (Coopmans, 1989; Hoekstra & Mulder, 1990), as shown in (2.18).
(2.18) a. María habla. (unergative)
   ‘Maria speaks.’

\[
\begin{array}{c}
\text{[iP [DP María] v [VP habla]]}
\end{array}
\]

b. María come una galleta. (transitive)
   ‘Maria eats a cookie.’

\[
\begin{array}{c}
\text{[iP [DP María] v [VP come una galleta]]}
\end{array}
\]

c. Maria viene. (unaccusative)
   ‘Maria comes.’

\[
\begin{array}{c}
\text{[VP viene [DP María]]}
\end{array}
\]

Many researchers claim that preverbal subjects in NSLs occur in a higher topic element above TP, a non-argument (A’) position (Contreras, 1991; Benincà & Cinque, 1985; Moro, 1993; A&A, 1998; Barbosa, 1995, 2009; Fassi Fehri, 1993; Manzini & Savoia, 2005; Nash & Rouveret, 1997; Ordóñez, 1997; Platzack, 2004; Pollock, 1997). This position is claimed to be within CP, possibly in the Topic Phrase (TopP, Rizzi, 1997), diverging from the classical claim that preverbal subjects are moved canonically to [Spec,TP], an (A)rgument position in NSLs, as in non-NSLs (Goodall, 2001; Cardinaletti, 1997; Sheehan, 2010), following basic minimalist assumptions. Therefore, in order to understand how postverbal subjects are derived, we must understand where preverbal subjects are located and how they interplay with other preverbal constituents.

If a preverbal subject moves to CP rather than to TP, another question arises as to the universality of the EPP feature on T. Goodall (2001) provides a thorough review of arguments for and against EPP in Spanish. Goodall (2001) provides evidence against EPP in Spanish from quantifier scope (Uribe-Etxebarría, 1992), wh-in-situ questions (Ordóñez, 1997), and the
incompatibility of preverbal subjects with other focus-fronted material. However, both Goodall (2001) and Cardinaletti (1997) use the following evidence contrasting topics and subjects to argue in favor of the existence of the EPP feature in Spanish and assume that preverbal subjects are moved to Spec, TP, following basic minimalist assumptions.

First, Goodall (2001) shows that preverbal subjects do not always have information status of topic or focus; therefore cannot always be moved to CP for reasons other than EPP. According to Cardinaletti (1997), a preverbal subject in TP can have multiple referents while a subject dislocated to CP can only have one referent as shown in (2.19).

(2.19) Context: Ayer premiaron una película de Almodóvar. (Goodall, 2001:ex9) ‘Yesterday, they premiered a film by/about Almodóvar.

a. EL DIRECTOR, el premio lo recibió en el teatro del centro.  
   the director, the prize, it received in the theater in the center

b. El premio, el director lo recibió en el teatro del centro.  
   the center, the director it received in the theater in the center

‘The director received the prize in the downtown theater.’

Cardinaletti (1997) claims that in (2.19a) the focalized subject el director ‘the director’ is in Spec,CP and can only refer to the director of the film, while in (2.19b), the object el premio ‘the prize’ is topicalized and the subject el director ‘the director’ is in Spec, T, the canonical preverbal position, wherein it can refer to either the director of the film or to the director Almodóvar.

Second, there is much evidence that preverbal subjects do not occur in topic position. The topic in CP cannot be a bare quantifier, as in (2.20a) (Goodall, 2001:ex14-15,fn10).

(2.20) a. *A nadie, Juan no lo ha visto.  
   No one, Juan NEG it has seen
‘Juan hasn’t seen anyone.’

b. Nadie ha visto a Juan.
‘No one has seen Juan.’

c. A Juan, nadie lo ha visto.
To Juan, no one him has seen
‘Juan, no one has seen him.’

In (2.20a) the object quantifier nadie ‘no one’ is ungrammatical as a topic, but it is grammatical as a preverbal subject in (2.20b), with no topic, and crucially in (2.20c), when there is a topicalized object, Juan. Goodall uses the example (2.20c) to claim that the subject nadie must be in Spec,TP to allow the topic in CP, but this assumes that nadie is not a topic since Spanish allows multiple topics.

We saw in the distribution of postverbal subjects that bare noun subjects can only be in postverbal position, shown again here in (2.21).

(2.21)  
a. Jugaban niños en el parque. (postverbal, Goodall, 2001:ex16)
play.PAS kids in the park

b. *Niños jugaban en el parque. (preverbal)
kids play.PAS in the park
‘Kids played in the park.’

(2.22)  
a. Libros no le dejo. (Goodall, 2001:ex17)
Books NEG him let.1SG.PRES
‘I don’t let him have books.’

Casielles (1997) claims the contrast between (2.21a) and (2.21b) is because bare nouns are NPs, rather than DPs, and the Spec of TP can only be filled by a DP and not an NP. Topics in CP, on the other hand, can be filled with NPs, and therefore bare nouns, as shown in (2.22) with the topic libros ‘books’, indicating the topic is in Spec,CP not Spec TP.
Another contrast between topics and preverbal subjects is that topics create wh-islands while preverbal subjects do not (Goodall, 2001:201), as contrasted in (2.23).

(2.23)  a. *¿A quién crees que [TP el premio se lo dieron]? (Goodall, 2001:ex21)
    to whom think.PRES that the prize, to him give.PAS.3PL
    ‘Who do you think they gave the prize to?’

    b. ¿A quién crees que [TP Juan le dio el premio]? (Goodall, 2001:ex22)
    to whom think.PRES that Juan to him give.PAS.3PL the prize
    ‘To whom do you think that Juan gave the prize?’

If preverbal topics and preverbal subjects occupied the same position, (2.23a) would be as grammatical as (2.23b). If preverbal subjects occupied a topic position within CP, (2.23b) would also be ungrammatical.

Third, Goodall (2001) shows how preverbal subjects are not necessarily in a Focus or wh-position, which could be argued about the above examples, which would be located below the Topic Phrase (TopP) in the split CP of Rizzi (1997). Evidence is available in data from Torrego (1985), who showed that a wh-phrase can be extracted and fronted out of a wh-phrase, as shown in (2.24a), which is also possible with focus fronting in (2.24b), but this same type of extraction is not possible out of a subject (2.24c), which correspond to Goodall’s (2001) examples (25-27).

(2.24)  a. Este es [el poema] del cual no sé [cuántas traducciones ___ ] han publicado
    ‘This is the poem of which I don’t know how many translations have been published.’

    b. Este es [el poema] del cual [tu traducción ___ ] publicaron (pero no el original)
    ‘This is the poem of which they published your translation (but not the original).’

    c. *Este es [el poema] del cual [tu traducción ___ ] ha ganado premios
‘This is the poem of which your translation has won prizes.’

Example (2.24) shows extraction in order to make a relative clause. In (2.24a), the DP *el poema* ‘the poem’ is extracted out of a wh-phrase, in (2.24b) it is extracted out of a focus-fronted phrase, and in (2.24c) it is ungrammatically extracted out of a subject. Since both wh--phrases and focused phrases occur in Spec of CP, or Spec of Focus phrase (FocP, Rizzi, 1997), these examples show that the preverbal subject must not be in that position since extraction is ungrammatical. Based on the evidence presented, Goodall (2001) follows suit with Cardinaletti (1997) to claim that preverbal subjects occur in Spec, TP and that the EPP feature is in fact active in Spanish, but it can be satisfied by elements other than the subject. However, subjects can optionally by topicalized or focalized in Spec,CP for other discursive reasons.

6. Postverbal subjects in minimalism

One of the first and most prominent theories of postverbal subjects in the minimalist program is that of Alexiadou and Anagnostopoulou (1998). They follow Chomsky (1995), in equating the EPP feature to a D feature present on T8 in NSLs like Spanish, whereas non-NSL languages like English lack this D feature. Alexiadou and Anagnostopoulou (1998) assume that D exists independently in the numeration and can associate itself with either the V head or the T head. Under their analysis, EPP deletion becomes parameterized. Verbal agreement morphology in Spanish contains a +D-feature and uninterpretable φ-features. EPP deletion in Spanish becomes a matter of checking the +D-feature. Movement of the verb via head movement through ν to T deletes EPP. Head movement is able to delete the EPP feature because of the +D feature.

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8 Alexiadou and Anagnostopoulou (1998) assume a system with AgrSP and IP, however, in this paper I use TP for consistency, as the difference does not affect the analysis.
In English, which lacks the +D feature on T, EPP cannot be deleted via head movement, and the subject must move up to check the EPP feature. This process can be demonstrated in (2.25).

(2.25)  

a. Habla Juan.

\[
[CP \{TP \{habla+\}v|\{u\}\{\phi\}:3SG+EPP,+D\} \{vp \{Juan\}|\{u\}\{\phi\}:3SG\} [vp \{habla\}|\{u\}\{\phi\}:3SG\}]]
\]

b. John speaks.

\[
[CP \{TP \{John\}|\{u\}\{\phi\}:3SG\} [vp \{speaks\}|\{u\}\{\phi\}:3SG\}]]
\]

Following Alexiadou and Anagnostopoulou’s (1998) analysis for Spanish, in (2.25a), T has uninterpretable \(\phi\)-features, which probes the subject in Spec, \(\nu\), and values and deletes its uninterpretable features. The verb moves via head movement to \(\nu\) and to T. It is this movement that satisfies EPP because of the presence of the +D feature on T, yielding a postverbal subject. The English sentence in (2.25b) follows the same process of probing by T to value and delete its uninterpretable \(\phi\)-features, but since English doesn’t have the +D feature in T, and the DP John must move up creating a [Spec,TP] position and deleting the EPP feature. Postverbal subjects are thus ungrammatical in English due to the lack of a +D feature. Head movement of the verb couldn’t possibly satisfy EPP in English, since the verb does not move to T. Importantly, Alexiadou and Anagnostopoulou (1998) posit that there is no expletive-\(pro\) derived in Spec,TP with postverbal subjects, but make no claim as to whether \(pro\) can be eliminated entirely from the system for other reasons.

Alexiadou and Anagnostopoulou (1998) assume that the SV(O) and the VS(O) sentences in Spanish are derived from the same numeration, and that the preverbal subjects are the result of CLLD to a Spec in CP. They provide distributional evidence from Zubizarreta (1998), interpretational evidence from quantifiers and indefinites (Barbosa, 1994), and binding evidence (Solà, 1992; Barbosa, 1994) to defend that preverbal subjects appear in an A’ position above TP.
in Spanish. They claim that “movement of the subject to Spec, T will be ruled out as a Procrastinate violation” (Alexiadou & Anagnostopoulou, 1998:500), but do not make it clear how the preverbal subject functions like a CLLD structure. Rather they claim that “TP contains a pronominal element which functions as a predicate variable” (A&A, 1998:500fn10).

What Alexiadou and Anagnostopoulou’s (1998) analysis fails to capture is the fact that SV order is preferred for transitive and unergative verbs in a wide focus context, as we saw in Chapter 1, and that VS is derived only when the subject receives information focus, whether narrow or contrastive. If SV and a VS orders are both derived from the same numeration, as Alexiadou and Anagnostopoulou (1998) claim, there would be no pragmatic features available in each derivation that distinguishes them from each other based on their information structure content. More importantly, this analysis would predict a VS order for neutral contexts, which is not the case, as López (2009) points out and will be explained later. What can be taken away from Alexiadou and Anagnostopoulou’s (1998) analysis is the need to parametrize the deletion of EPP for Spanish and to examine the location and derivation of preverbal subjects in order to understand postverbal ones. However, discourse features must be involved to derive SV order with transitives and unergatives in wide focus contexts but VS when focused.

Following from Alexiadou and Anagnostopoulou (1998), Sheehan (2010) adopts the idea that EPP does not necessarily need to be deleted via subject movement to Spec, TP nor by the same constituent that values the ϕ-features of T, recalling Holmberg’s (2010) ϕ-independence. Sheehan (2010) bases her analysis on the examples mentioned in Chapter 1, repeated here in (2.26), in which preverbal subjects are not possible due to another XP in preverbal position.

(2.26)  
a. Eso mismo pensaba yo.  
‘That same thing I thought.’
b. En el parque me regaló Juan el anillo.
   ‘In the park, Juan gave me the ring.’

She assumes, following Chomsky (2008), that T inherits its \( \phi \)-features from C, specifically from the finite phrase (FinP), the phase head that selects it. The Fin head holds all of T’s features (u\( \psi \) and EPP) until it is merged with T. Sheehan (2010) claims that EPP is not obligatorily associated with the D feature in T, as claimed by Alexiadou and Anagnostopoulou (1998), but rather EPP signifies the “requirement to fill the specifier position of a head which independently establishes a relation with a phase which it c-commands” (Sheehan, 2010:246-247). In fact, this proposal doesn’t require the presence of a D feature on T in Spanish to license postverbal subjects\(^9\). In this way, unlike traditional accounts following Chomsky (2000, 2001), EPP deletion becomes separated from \( \phi \)-feature valuing (Holmberg, 2010; Goodall, 2001), but the EPP feature must associate itself with some feature, whether \( \phi \)-features on T or as will be proposed by Sheehan (2010), discourse features in C.

In order to incorporate the discourse/pragmatic function of postverbal subjects, Sheehan (2010), following Giorgi and Pianesi (1997), assumes that Fin also holds any of the optional Focus, Emphatic, or Topic features present in the numeration in Spanish. As an economy principle, EPP should attach to a discourse feature over a \( \phi \)-feature\(^10\). Thus, when one of these discourse features is present in Fin, the EPP-feature associates itself with Fin, rather than being transferred to T (Sheehan, 2010:247). When T probes the subject in \( \nu \), it only creates an Agree relation to delete the \( \phi \)-features, but the subject is not raised. Therefore, EPP can be deleted by something other than the subject, as shown in the diagram of (2.26b) in (2.27).

\(^9\) However, Sheehan (2010) makes no explicit claim that D does not exist on T for independent reasons.

\(^10\) Sheehan (2010) does not explain why this would be more economical. One hypothesis is that if EPP goes into the numeration attached to Fin, it is more economical to maintain this connection than to pass it on to T.
(2.27) \[ \text{FinP En el parque Fin[Topic, EPP] [TP me regaló+T[u phi 3SG (D)] [vP Juan [vP me regaló+T[u phi 3SG]]]]} \]

In (2.27), FinP contains a [Topic] feature, which causes EPP to associate itself with the Fin head, rather than pass it on to T. In wide focus contexts, such as in (2.28), there are no discourse features in the C domain. Since EPP knows it must associate itself with either a discourse feature or T, it associates itself with T, its only option, whereby the subject must move to Spec,T to delete EPP.

(2.28) \[ \text{TP Juan me regaló+T[u phi 3SG] [vP Juan [vP regaló+T[u phi 3SG en el parque]]]} \]

In order to account for focused, postverbal subjects, Sheehan (2010) puts forth that when the subject is in narrow focus, as the new information focus in postverbal position, EPP stays in Fin because of the focus discourse feature. The subject raises to preverbal position, but it is deleted in narrow syntax, as shown in (2.29) where the subject Juan raises to Spec,Fin, but the higher copy is deleted at PF. According to standard copy theory, the highest copy of a constituent is the one realized phonetically. However, following Zubizarreta (1998), Sheehan (2010) assumes that PF rules can undo syntactic operations. In order to align nuclear stress with sentence focus, a PF rule requires the lower copy of the subject, in Spec v, to be pronounced. In this way the subject appears to remain in postverbal position, but has a focus interpretation and receives nuclear stress. Ortega-Santos (2006:1) makes the same claim that “if an argument is focused, the lowest copy of that argument would be retained.”

(2.29) Baila Juan.
‘Juan dances.’

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However, the accounts by Sheehan (2010) and Ortega-Santos (2006), assume that the lower copy of a focused constituent is always pronounced by a PF rule, while the preverbal subject can also be pronounced with stress shift to mark the focus interpretation. Therefore, their analysis provides no mechanism to account for optionality between pre- and postverbal focused subjects.

With transitive verbs, if the subject is the new information, it is most likely that the object is old information which will be realized as a preverbal object clitic. However, if an overt lexical object is included, VOS word order is possible. This is achieved by scrambling the object over the verb (Ordóñez, 2000) so that the subject can receive the nuclear stress. The derivation of VOS is shown in (2.30), in which the lower copy of the subject is pronounced by a PF rule to align nuclear stress with focus.

(2.30)  ¿Quién te regaló el anillo?
‘Who gave you the ring?’
Me regaló el anillo Juan.
‘John gave me the ring.’

Following Chomsky (2000), all core functional categories allow for an extra specifier that is not selected for, which is instantiated as an optional EPP feature. When the object is scrambled past the subject, it can be the result of satisfying v’s EPP feature. Example (2.30) shows us the scrambling of the object over the postverbal subject (Ordoñez, 2000) to satisfy v’s optional EPP as well as the deleting of the higher copy of the subject in Spec, Fin to align nuclear stress with the focused postverbal subject (Sheehan, 2010).
Sheehan (2010) uses evidence from Zubizarreta (1998) and Pinto (1997) to support her claims that some subject-inversion structures that lack any other overt preverbal element actually have a fronted null locative or temporal adverb. An example from Ambar (1992) in (2.31) below shows this phenomenon in Portuguese.

(2.31)  

a. LOC chegaram os técnicos ontem. (Sheehan, 2010:240ex19)  
   LOC arrived the technicians yesterday  
   ‘The technicians arrived (here) yesterday.’

b. A Lisboa chegaram os técnicos ontem. (Sheehan, 2010:240ex20)  
   To Lisbon arrived the technicians yesterday  
   ‘The technicians arrived in Lisbon yesterday’

Corr (2012), following Pinto (1997) points out that unaccusative verbs in wide focus, such as *arrive* in (2.31), often contain an implicit locative feature, indicating movement within, towards, or into a place. Corr (2012) extends this proposal to claim that they also contain an implicit deictic feature. According to Pinto (1997), Zubizarreta (1998), Sheehan (2010), and Corr (2012), this implicit locative (LOC) feature is what deletes the EPP feature. The LOC feature present in (2.31a) implies that the technicians were arriving to a specific place, even though the locative is covert. This can be compared to the overt counterpart in (2.31b), where the PP is topicalized to preverbal position to satisfy EPP. In both cases, the stress would fall in sentence final position in these wide focus contexts.

In support of the locative feature, Tortora (2001) provides evidence from the northern Italian dialect Borgomanerese which has an overt locative clitic *ngh*, as shown in (2.32).

(2.32)  
   Ngh è rivà-gghi na fjola. (Tortora 2001:317)  
   LOC be.PRS.3SG arrive-LOC a girl  
   ‘There arrived a girl.’

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The postverbal subject is allowed in (2.32) because the locative clitic ngh is moved to preverbal position to delete EPP. There is also a manifestation of the locative on the verb.

Note that where in Spanish an unaccusative verb can have a postverbal subject with a null locative, in English an overt expletive there is merged in canonical subject position or overt locative inversion of a PP is required, shown here in (2.33).

(2.33) Into the room walked my brother Jack. (Stowell, 1981:ex31)

Culicover and Levine (2001) claim that in English, locative inversion is not limited only to unaccusatives but can also apply to unergatives and even transitive verbs but only when there is a complex, or heavy, subject. Sheehan (2010) makes the same claim for locative inversion with unergative and transitive verbs in Spanish. Providing evidence based on that-trace effects, whether-trace effects, gerunds, raising verbs, and cross-over effects, Culicover and Levine (2001) put forth an analysis in which the fronted PP in locative inversion cases functions like a subject and resides in the canonical subject position in Spec, TP, while the grammatical subject remains in-situ in the VP, as shown in (2.34) for an unaccusative verb.

(2.34) \[ [TP PP T [VP V NP \text{Subject} t_{PP}]] \] (Culicover & Levine:284ex1)

Culicover and Levine (2001) make no claim as to why or how the PP raises but admit it clashes with the feature based movement developed in Chomsky (1995).

Pinto (1997) made similar claims for postverbal subjects in Italian with a null locative for unaccusatives and a null locative and an overt fronted PP for other verb types, claiming that the

\[1\] The definition of ‘heavy’ corresponds with that of heavy NP shift as in Arnold (2000).
null LOC satisfies EPP in both cases, as in (2.35a) for unaccusatives and (2.35b) for unergatives and transitives.

\[(2.35) \begin{align*}
a. & \quad [_{IP} \text{LOC}_i \ V_j \ [_{VP} \text{SUBJ} \ t_j \ t_i]] \\
b. & \quad \text{PP} \ [_{IP} \text{LOC}_i \ V_j \ [_{VP} \text{SUBJ} \ t_j \ t_i]]
\end{align*}\] (Pinto, 1997:174)

Combing the structures in (2.35) with the Portuguese examples from (2.31) above, we are left with the diagrams shown in (2.36).

\[(2.36) \begin{align*}
a. & \quad [_{IP} \text{LOC}_i \ \text{chegaram}_j \ [_{VP} \text{os tecnicos} \ t_j \ t_i]] \\
& \quad \text{‘The technicians arrived (here).’} \\
b. & \quad [_{CP} \text{A Lisboa} \ [_{IP} \text{LOC}_i \ \text{chegaram}_j \ [_{VP} \text{os tecnicos} \ t_j \ t_i]] \\
& \quad \text{‘To Lisbon arrived the technicians.’}
\end{align*}\]

Assertions by both Culicover and Levine (2001) for English and Pinto (1997) for Italian claim that locative inversion, whether overt or null, deletes EPP via movement to Spec, TP. Rizzi and Shlonsky (2006), on the other hand, claim that while locative inversion does delete EPP in English, it is done in FinP, converging with what Sheehan (2010) claims for Spanish.

Rizzi and Shlonsky (2006:12) employ the theory of criterial freezing from Rizzi (2003), which makes no reference to EPP, but rather to satisfaction of the Subject Criterion, and claim that when “nominal Fin is merged” with TP, “the locative phrase is attracted to Spec, Fin” on its way to TopP to fulfill a topic function, which yields the inversion structure shown in (2.37a). Alternatively, after T establishes an Agree relation with the subject, the subject DP can be attracted up to satisfy the Subject Criterion, as in (2.37b).
I do not go into detail about how criterial freezing works with triggering locative inversion. The important take away from this approach for English is the locative PP is proposed to be moved to FinP rather than TP, as claimed by Culicover and Levine (2001) and Pinto (1997). This is comparable to Sheehan’s (2010) approach for Spanish in that it involves the use of FinP in deleting EPP with a prepositional phrase and leaving TP without a specifier.

One desirable consequence of evoking the CP domain in licensing postverbal subjects is that it allows the connection between the subject position and discourse context. I now look at various analyses of the role of CP in connecting postverbal subjects to their discourse function. We saw earlier in Holmberg’s (2010) proposal that the CP domain was responsible for interpretation of null subjects. The same will be held true in assigning discursive properties to postverbal subjects. In his derivational approach to information structure, López (2009) claims that the notions focus and topic are not primitive devices that trigger movement, but are simply descriptive elements. Evidence for this comes from the fact that a topic or focus can stay in situ, so the notions do not determine movement. In fact, the postverbal subjects of the present investigation are in-situ focused elements. Based on Rizzi (1997), he assumes that the CP is split into ForceP and FinP, and further posits that along with $\nu$, Fin is a phase head. With this assumption, he posits that pragmatic rules apply at the spell out of each phase. The pragmatic rules López proposes depend on the information structure features $[(\pm a)naphor]$ and $[(\pm c)ontrast]$. The positive values are assigned to the edge of the phase, and the negative values
are assigned to the complement of the phase. The present analysis will only discuss the importance of the [±c] feature, as it is the only one that is relevant.

Elements in the left periphery are always contrasts and receive [+c] in Spec, Fin (López, 2009). According to Vallduví and Vilkuna (1998) the left periphery is contrastive and opens up domains of quantification. This is similar to Sigurðsson’s (2010:162) claims that there are “context linkers” in CP which are “inherent features of the syntactic speech event” to encode pragmatic features. This can also be related to Pesetsky’s (1987) claims of d-linking of wh-words in CP. Therefore, according to López (2009), the [+c] opens up the domain of quantification and can introduce a new discourse context, thus being contrastive with the old context. All elements not found in the left periphery are consequently non-contrasted, [-c], and are connecting themselves to a prior discourse context. This is important in order to understand the location of a preverbal subject when it receives nuclear stress to mark focus.

López (2009) posits that preverbal subjects can be found in TP, but they may optionally be dislocated to Spec, Fin, where the subject receives focus and nuclear stress in preverbal position. If all sentences showing SVO order were the result of a dislocated subject with the subject in CP, as assumed by A&A (1998), Barbosa (2009) and Ordóñez (2000), then we would expect VSO to be the basic word order for a wide focus sentence answering the question “What happened?” but this is not the case. SVO is the canonical, wide focus order for unergatives and transitives. A non-dislocated preverbal subject in a wide focus context thus connects to a previous discourse rather than initiating a new discourse, therefore receiving [-c] and located in Spec, TP and not Spec, CP. When the subject is used preverbally, it receives narrow focus, [-c], because it is connecting itself to the discourse introduced by the wh-question. López (2009) assumes a traditional analysis of preverbal subjects, in that the EPP feature triggers movement to
Spec, T, and other discourse factors can cause additional dislocation to the left periphery. If the subject is focus fronted to the CP domain, it will receive [+c] which will lead to main stress shift at PF (Zubizarreta, 1998; Reinhart, 2006).

It might be questioned how contrastive focus can occur in postverbal position if [+c] is assigned in [Spec, Fin]. Recall that contrastive focus opens up a variable and also resolves it and that [+c] was posited to do the job of opening up the variable. López (2009) points out that in contrastive focus sentences, the postverbal focused element is not actually opening up the variable, but the negative element no is opening the variable and the postverbal element is closing it. The example in (2.38) below represents the structures for postverbal subjects as contrastive focus following the proposals of López (2009).

(2.38) ¿Ganó la lotería María?
‘Did Maria win the lottery?’

No, ganó la lotería Juan.
‘No, won the lottery Juan.’
In the structure in (2.38), verb movement from V through v to T satisfies T’s EPP, similar to Alexiadou and Anagnostopoulou’s (1998) proposal. The subject Juan is selected by v and merged in its lower specifier. Since v has an EPP feature, la lotería ‘the lottery’ moves up to the higher specifier of v via object scrambling (Ordóñez, 2000), after entering an Agree relation with v. When no is merged in Fin, which is assigned [+c] when the rest of the structure is sent to spell out and receives [-c] (López, 2009). This proposal makes no claim as to how a postverbal subject gets narrow focus, since there is nothing in Spec, Fin to connect to the discourse, but it pairs well with notions from Sheehan (2010) which requires an element in CP to assign focus to the postverbal subject. The EPP feature on v is necessary so that sentence-final stress aligns with the subject, which is the new information, and not the object.

Another theory that has consequences for the present study is Zubizarreta (1998), who assumes that when discourse features are present, they are associated with T. So unlike Sheehan (2010), Zubizarreta (1998) assumes that T contains the discourse features as well as the EPP, claiming to follow Chomsky (1995) by minimizing structure whenever possible in a given derivation. Connecting discourse features to T is more efficient then positing another projection within C. These discourse features are assumed to attract topicalized XPs to SpecT, as we saw in object-fronting and locative inversion, leaving the subject in postverbal position. While Zubizarreta (1998) does not specifically connect the discourse features to EPP, her approach is compatible with Sheehan’s (2010) association between discourse and EPP.

Finally, an analysis put forth by López-Cortina (2007) proposes a more fine-grained division of the left periphery; including an Answer Phrase (AnsP) to obtain answers to wh-questions, and a yes/no phrase (Yes/NoP) for these question types, “which are on par with focus and topic as discourse-related syntactic phenomena (López-Cortina, 2007:187). Extending the
split CP of Rizzi (1997), López-Cortina derives the AnsP and the Yes/NoP below TopP and FocP, based on distributional evidence similar to that of Goodall (2001), presented above, in which a topic element and a focus element can co-occur above an answer to a question. Under this analysis, the answer to a question will always move to the left periphery. In answering a narrow focus question with a preverbal subject, only the subject moves to Spec,AnsP, and in answering the same question with a postverbal subject, the entire TP is pied-piped with the subject to Spec AnsP. This can be seen below in example (2.39) from López-Cortina (2007:200).
In the diagrams in (2.39), nuclear stress is assigned in the same way: to the final element of the XP in the AnsP. This falls canonically in sentence-final position for the postverbal subject in (2.39b) and in preverbal position with stress shift in (2.39a), but in both derivations it is assigned within the AnsP. What is lacking with this analysis is any claim as to why one of the derivations would be used over another, but it matches with the frequency facts presented in Chapter 1, indicating that there is no clear preference for pre- or postverbal subjects. However, this leaves one problem as to why the preverbal subject in (2.39a) moves to Spec,IP but the postverbal subject in (2.39b) does not. It also doesn’t explain why answers to wide focus questions would differ from narrow and contrastive focus in subject placement.

In answering a yes/no question, as in contrastive focus, a Yes/NoP is evoked below the AnsP, where the sí ‘yes’ or no ‘no’ adverbials are merged, which have a [+answer] feature and are moved to Spec,AnsP to delete a proposed EPP feature. This is shown in example (2.40), adapted from López-Cortina (2007:215).

(2.40)  ¿Lo compró?
‘Did he/she buy it?’
Sí, lo compró.
‘Yes, he/she bought it.’

[AnsP Sí Ans[+[answer] [Yes/NoP Sí Ø[+[answer] [TP lo compró]]]]

In (2.40), the head of the Yes/No is assumed to be a null element and the sí is merged in the specifier position and then moves to the specifier of AnsP. López-Cortina’s (2007) analysis works fine for an example like (2.40) with a null subject. However, if we apply this to the contrastive focus contexts under present investigation, which are derived from a yes/no question, that analysis cannot explain the contrast between a pre- and a postverbal subject. However, we
can derive a pre- and postverbal subject in this construction if we assume that the yes/no adverbial is actually merged as the head of the Yes/NoP, as in (2.41).

(2.41) ¿Lo compró Susana?

a. No, MIGUEL lo compró.

[AnsP No Ans [+answer] [Yes/NoP Miguel No] [+answer] [TP Miguel lo compró]]

b. No, lo compró Miguel.

[AnsP No Ans [+answer] [Yes/NoP [IP lo compró Miguel] No] [+answer] [TP lo compró Miguel]]

The derivations in (2.41) follow the same process proposed by López-Cortina (2007) for (2.39), only using the Yes/No phrase. Unlike López-Cortina’s (2007) proposal, the yes/no adverbial is merged as the head of its respective phrase. This leaves the specifier open for movement of the subject to the Spec of Yes/NoP, in the preverbal answer in (2.41a) and the adverbial or the entire TP can pied-pipe up, as in the postverbal answer in (2.41b). This still leaves open the question as to why one structure is preferable over another and why the postverbal subject does not move to Spec,TP.

The analyses presented in this chapter do not paint a complete picture deriving the distribution of pre- and postverbal subjects in narrow, wide, and contrastive focus contexts in Spanish. Furthermore, grammar-based and usage-based research also indicates that postverbal subjects can be used interchangeably across verb classes and do not indicate a preference according to discourse context. Therefore, this dissertation collected empirical data from NSs to get a better understanding of the distribution of pre- and postverbal subjects. This information is used in order propose a syntactic analysis for pre- and postverbal subjects, which will be
corroborated with data from L2 learners of Spanish as well. As the review on the syntactic literature suggests, any explanatory analysis requires determining two crucial components: the nature of the EPP feature, more specifically where it is located and how it is deleted, and the role of discourse features and their relationship to EPP.

Given that Spanish and English differ in crucial aspects regarding the relationship between EPP and discourse features, namely focus and topic, an English speaker learning Spanish as a second language need not acquire any new features but must acquire a differential organization of features already present in their L1 in order to acquire Spanish word order to mark information structure. While English manipulates nuclear stress placement to map new and old information onto a rigid SVO word order, Spanish has the added option to manipulate word order to mark new information in sentence-final position. In this dissertation, I assume a full-transfer approach to SLA in which the learner’s L1 serves as the starting point for L2 acquisition (Schwartz & Sprouse, 1996). Looking specifically at subject-verb word order, the learner will begin with a system in which the EPP feature is located on the T head and discourse features have no effect on its subsequent deletion. In this way, the learner can be expected to always move the subject to preverbal position in Spec,T to delete the EPP, regardless of the subject’s status as a focused constituent or the existence of other focused or topicalized constituents in the sentence, yielding consistent preverbal subjects. Following the analyses presented in this chapter, the learner must determine that the EPP feature can optionally be located in FinP when discourse features are present in Spanish. When the topic feature is present, this will allow EPP to be deleted by a topicalized constituent, yielding a postverbal subject in most cases. If the focus feature is present, the subject will still move to preverbal position as in English, but this time to
Spec, Fin, and the lower copy will be pronounced, yielding a postverbal subject with a focus interpretation.

In Chapter 5, I propose a syntactic analysis that aims at capturing the distribution of postverbal subjects in focus and topic contexts, including any optionality apparent in the empirical data. Based on this analysis, I go into more detail on the task at hand for the L2 in acquiring the differential word orders Spanish. In the next chapter, I present two formal approaches to second language acquisition which appeal to the acquisition of formal features and discourse features to explain differential acquisition in Spanish, followed by a review of the literature on the L2 acquisition of postverbal subjects in Spanish.
CHAPTER 3: SECOND LANGUAGE ACQUISITION AND POSTVERBAL SUBJECTS

Now that I have presented the distribution and syntax of postverbal subjects in both Spanish and English, I turn to the second language (L2) acquisition (SLA) of postverbal subjects by English speakers. First, I present two prevalent hypotheses in the SLA literature that relate directly to the acquisition of the structures and features under question: the Feature Reassembly Hypothesis (Lardiere, 2008, 2009) and the Interface Hypothesis (Sorace, 2006, 2011; Sorace & Filiaci, 2006; Tsimpli & Sorace, 2006). To continue, I present a critical review of previous research on the SLA of Spanish postverbal subjects. Finally, I use the syntactic, discursive, and phonetic constraints on postverbal subjects discussed in Chapter 1 to motivate this dissertation as an important contribution to the existing research and present my research questions.

Recalling some of the minimalist assumptions presented in Chapter 2, UG makes available a set of features, and a particular language chooses a subset of those features to create its lexicon. Using this to understand cross-linguistic variation, Baker (2008) posits the Borer-Chomsky conjecture, by which “all parameters of variation are attributable to differences in the features of particular items (e.g. the functional heads) in the lexicon” (Baker, 2008:3). It is called the Borer-Chomsky conjecture based on minimalist principles introduced by Chomsky (2001:2) where it is advanced that “parametric variation is restricted to the lexicon,” which is itself an extension of Borer’s (1984) postulation that “the availability of variation is restricted to the possibilities which are offered by one single component: the inflectional component” (Borer 1984:3). Therefore, cross-linguistic variation is derived from languages choosing a different subset of features from UG to make up its lexicon. Language A and language B may utilize some of the same features, while differing in the presence/absence of other features. Turning from
variation to acquisition, L2 acquisition becomes a matter of determining what subset of UG’s features are instantiated in the target language and how they are organized into the lexicon.

This dissertation adopts a full transfer approach to SLA in which “the entirety of the first language (L1) grammar (excluding the phonetic matrices of lexical/morphological items)” represents the initial state of L2 acquisition (Schwartz & Sprouse, 1996:41). The initial state is gradually restructured to become more like the target language after exposure to input. Using the L1 as a starting point, the L2 learner must determine not only the set of features instantiated in the target lexicon, but also the morpholexical forms which express them and any possible conditioning factors that make forms obligatory, optional, or prohibited (Hwang & Lardiere, 2013:58). Since the acquisition of postverbal subjects in Spanish relies on two crucial components—the location of the EPP feature, which causes movement of the subject into preverbal position, and the presence of discursive features, which may allow subjects to optionally remain in postverbal position—there are two predominant SLA hypotheses that may prove fruitful in explaining non-target L2 grammars as well as explaining how target-like performance is achieved.

The first is the Feature Reassembly Hypothesis (FRH, Lardiere, 2008; 2009) which focuses on the restructuring of features present in the L1 as necessitated by the L2. This hypothesis may help explain L2 performance as related to reassociation of the EPP feature from English to Spanish and the association of discourse features with functional heads in Spanish. The second is the Interface Hypothesis (IH, Sorace, 2006, 2011; Sorace & Filiaci, 2006; Tsimpli & Sorace, 2006) which posits that persistent difficulties and residual optionality in end-state grammars are due to difficulties that arise at the interface between syntax and discourse. This hypothesis may help explain L2 performance as related to the syntactic function of the discursive
notions of focus and topics. Both of these hypotheses make different claims about ultimate attainment by late-stage advanced L2 learners; while the IH predicts residual optionality in end-state L2 grammars, the FRH predicts attainment is ultimately possible despite difficulties during earlier stages of acquisition. The details of these claims are explained in the following sections, and this dissertation compares ultimate attainment to various stages throughout acquisition in order to get a global picture of the acquisition of postverbal subjects and to decide whether these hypotheses make accurate predictions of the observed L2 postverbal subject behavior.

1. Feature-based hypotheses of SLA

Since we saw that cross-linguistic variation in minimalism is contained within the differential feature content of particular languages, one line of SLA research uses a feature-based approach to language variation in order to understand non-target-like performance by non-NSs. The Failed Functional Features Hypothesis (FFFH, Hawkins & Chan, 1997) was a precursor to the Representational Deficit Hypothesis (RDH, Hawkins, 2003; Hawkins & Liszka, 2003) and eventually the Interpretability Hypothesis (Tsimili, 2003; Tsimili & Mastropavlou, 2007; Tsimili & Dimitrakopoulou, 2007), all of which support the central idea that some features of an L2 not instantiated in the L1 will not be available to the L2 learner and thus lead to variable performance and persistent optionality in morphosyntax, even in very advanced learners. These hypotheses will be presented first, as they play a crucial role in validating the FRH, which doesn’t predict difficulty in the acquisition of a certain type feature, necessarily, but in the organization of features.

The FFFH (Hawkins & Chan, 1997) was based on early precursors to the minimalist program in which overt syntactic movement, such as wh-movement in English, was licensed by
strong features (in this case [+wh]), while covert syntactic movement, such as wh-movement in Chinese, was the result of weak features (Chomsky, 1995). Hawkins and Chan (1997) claim that L2 learners will not have access to the full range of functional categories past the critical period, but they may be able to map L1 functional features onto L2 morphophonological content. However, where the functional features of the L1 and the L2 differ, “learners will not be able to determine the full functional significance of the new morphophonological content” (Hawkins & Chan, 1997:199). This process would yield L2 lexical items with L1 syntax; where learners are able to approximate the performance of a native speaker, but due to the inaccessibility of the functional feature content in the L2, they will establish grammatical representations that diverge from NSs as well as from their L1, while still being constrained by UG (Hawkins & Chan, 1997:216).

To test the FFFH hypothesis, Hawkins and Chan (1997) used a grammaticality judgment task (GJT) of wh-movement in English and compared three levels of matched-proficiency L1 speakers of Chinese (47 elementary, 46 intermediate, 54 advanced) and L1 speakers of French (33 elementary, 40 intermediate, 40 advanced) (Hawkins & Chan, 1997:202), all of whom were learning English as their L2. Results showed that not only were native Chinese speakers unable to accurately correct subjacency violations, but their performance worsened as proficiency increased, while the L1 French learners were able to accurately correct subjacency violations in English, an ability that improved with proficiency. They explained this contrast through failed functional features, since English and French both allow wh-operator movement, while Chinese leaves wh-operators in situ. The French learners were able to use the functional features of their L1 to obtain nativelikeness in their L2, while Chinese learners did not have the features available to use in their L2. In order to explain why performance worsened for Chinese learners as
proficiency went up, Hawkins and Chan (1997) claim that the lower proficiency learners actually incorrectly transferred an L1 strategy of in-situ wh-operators. So while the beginning learners appear to correct subjacency violations appropriately, performance appears to worsen as proficiency increases because the learners are no longer transferring an incorrect strategy, yet they have not acquired the correct strategy.

Hawkins and Franceschina (2004) make similar claims for failed functional features in the acquisition of gender agreement within the determiner phrase in L2 Spanish. Following Carstens (2000), they view gender agreement between nouns and determiners as a morphological reflex of feature checking. Gender concord languages such as Spanish and Italian have an uninterpretable gender feature, while languages like English lack said feature and thus do not demonstrate grammatical gender. Based on the spontaneous Spanish conversations of six advanced learners, three native Italian speakers and three native English speakers, all of whom were living and working in Argentina, Hawkins and Franceschina (2004) claim that the English speakers showed persistent gender agreement errors by being unable to acquire the uninterpretable gender feature not instantiated in their L1. The Italian learners, on the other hand, demonstrated no difficulties with grammatical gender because their L1 already contains the gender feature. Therefore, failure to achieve native-like gender agreement in Spanish was due to a representational deficit of the feature content.

The Interpretability Hypothesis (Tsimpli & Roussou, 1991; Tsimpli, 2003; Tsimpli & Mastropavlou, 2007; Tsimpli & Dimitrakopoulou, 2007) extends the ideas of the FFFH, only revised with later minimalist modifications of Chomsky (2001), in which movement is no longer dependent upon strong versus weak features but rather interpretable versus uninterpretable features. Under this hypothesis, UG principles are still active in SLA but features that are
uninterpretable at the semantic interface and not instantiated in the L1 will be unavailable to the
L2 learner, while interpretable features are still accessible. It is posited that interpretable features
are available to the L2 learner due to their “dual status in the mental lexicon: a linguistic and a
conceptual one” (Tsimpli & Dimitrakopoulou, 2007:224). Interpretable features play a
grammatical role in deriving (morpho)syntactic constructions as well as a conceptual role in
determining the mental representation of the construction.

Tsimpli and Dimitrakopoulou (2007) tested the Interpretability Hypothesis by comparing
the acquisition of animacy, derived from interpretable features, and subject agreement and object
clitics in wh-interrogatives, derived from uninterpretable features, in 48 L1 Greek learners of L2
English (21 intermediate and 27 advanced). They found that the learners transferred L1 Greek
parametric options for subject agreement and object clitics to the L2 English, claiming what they
term “morphological misanalysis” (Tsimpli & Dimitrakopoulou, 2007:235,237), and supporting
the Interpretability Hypothesis by demonstrating unsuccessful acquisition of uninterpretable
features as evident by non-target-like acceptability of L2 pronouns in interrogatives on a GJT.
Animacy, on the other hand, demonstrated target-like acceptability, indicating the accurate
acquisition of the interpretable features, also supporting the Interpretability Hypothesis.

Hawkins and Hattori (2006) examined the acquisition of wh-movement in L2 English by
Japanese speakers, who, according to FFFH and the Interpretability Hypothesis, would not be
able to consistently produce wh-movement since Japanese is a wh-in-situ language and wh-
movement in English is a reflex of uninterpretable features. Using a truth-value judgment task,
which requires participants say whether a target sentence is true or false based on the context
provided (Crain & Thornton, 1999), they found that 19 advanced Japanese speakers were able to
“interpret long-distance wh-word . . . gap dependencies and recognize scope ambiguities in the
same way as native speakers” (Hawkins & Hattori, 2006:291). The native-like performance seems to argue against the FFFH and the Interpretability Hypothesis, indicating the learners were in fact able to acquire the uninterpretable wh-feature. The researchers posited that the learners had not actually acquired the uninterpretable wh-feature but were rather using the Focus feature, which is interpretable and exists in Japanese and causes scrambling (although optionally). Therefore, the learners did not acquire an uninterpretable feature, but rather used an interpretable feature available in their L1 to accommodate the structure, similar to claims made by Hawkins and Chan (1997) previously on the GJT.

However, Lardiere’s (2007) L1 speaker of Hokkien and Mandarin Chinese, Patty, an advanced learner of English, also exhibited production of complex wh-raising questions, including accurate preposition stranding (an option not available in Chinese), indicating that strong, uninterpretable features were in fact acquirable, a finding that appears to refute the FFFH and the Interpretability Hypothesis. Lardiere provides evidence based on Patty and her acquisition of nominative Case and tense marking in English. While the mechanism for Case assignment has been modified, in both GB (Chomsky, 1981) and Minimalism (Chomsky 1995, 2000, 2001), subjects receive the nominative Case feature from T. In English, T also enters into an Agree relation with the verb in order to assign the appropriate tense agreement features, which then become agreement morphemes in the morphological component. Since Chinese has neither agreement morphology nor Case morphology, the FFFH and the Interpretability Hypothesis predict that Patty will fail to acquire both tense morphology and nominative Case morphology in English, since they require the acquisition of the same features on T.

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12 It is worth noting that the Japanese-speaking English learners in Hawkins & Hattori (2006) were able to apply wh-movement consistently, even though the Interpretability Hypothesis would predict the movement to be optional if the learners are truly using the L1 scrambling strategy, which is optional.
Lardiere (2008) claims that Patty’s difficulties are morphological rather than syntactic, following previous arguments by Schwartz and Sprouse (1994; 1996) and Lardiere (1998a) that a lack of overt agreement on the verb does not necessarily indicate a lack of syntactic features, since “L2 learners’ knowledge of functional categories and features far outpaces their production of overt verbal morphology” (Lardiere, 1998b:364). Lardiere (1998a) found that while Patty’s verbal production showed variability in omission and suppliance of third person singular tense morphology, she demonstrated complete accuracy of nominative Case assignment and subject raising. Since both phenomena involve the same syntactic features, Patty’s problem was not due to a lack of features in the syntactic component, but to a failure to map them to the correct verbal morphology in the morphological component (Lardiere, 2008:132). The failure of the FFFH, the RDH, and the Interpretability Hypothesis to account for data such as what was found for Patty led to the formulation of the FRH (Lardiere, 2008; 2009), which I now describe in more detail including several studies which lend support to it.

2. The Feature Reassembly Hypothesis

The FRH is “a comparative linguistic feature-based approach in which the ultimate attainment of nativelike” knowledge relies on the learners’ ability recognize the differences between how “feature values in functional categories and lexical items” are organized in the L1 and the L2 and reassemble them “in cases where these differ” (Hwang & Lardiere, 2013:58). It makes the assumption that the L1 is the starting point for L2 acquisition, following Schwartz and Sprouse (1996), and the L2 also serves as the basis for comparison which underlies any relative ease or difficulty in acquisition. Therefore, “the acquisition of an L2 is tightly constrained by properties of the L1” (Lardiere, 2009:190) and learners will look for correspondences between the L1 and the L2, based on semantic meaning or grammatical function (Lardiere, 2009:191).
Recognizing how features, which are instantiated in both the L1 and the L2, are assembled into lexical items in the L2 is a “true learning problem” which may cause difficulties throughout the acquisition process but is “ultimately attainable” (Lardiere, 2009:187).

Co-occurrence plays a pivotal role in feature reassembly, meaning that features which co-occur on one lexical item in language A may be divided amongst two (or more) lexical items in language B, necessitating reassembly during acquisition. For example, wh-expressions in Korean and English differ in their assembly of features; both English and Korean select a [Q] and a [wh] feature. English wh-words contain an inherent wh-operator, while Korean ‘wh’ words are variables without one (Kim, 1989; Nishiguachi, 1990; Aoun & Li, 2003, as cited in Lardiere, 2009). In other words, in English, the wh-feature is assembled together into one lexical item with the wh-word, but in Korean the wh-feature is a separate null operator in Spec, C. English also uses the lexical item that to spell out the [-Q] feature while the [+Q] feature is null. Korean, on the other hand, licenses the [+Q] particle –ci and the [-Q] particle –ta on the verb. The difference between the two languages is exemplified in (3.1) and (3.2) below adapted from Lardiere (2009:186ex2-3).

(3.1) a. John-un Mary-ka mues-ul sassnun-ci an-ta
   John-TOP Mary-NOM ‘thing’-ACC bought-[+Q] know-DECL

   b. John knows [CP whati [Ø]+Q [Mary bought ti]]

(3.2) a. John-un Mary-ka mues-ul sass-ta-ko an-ta
   John-TOP Mary-NOM ‘thing’-ACC bought-[-Q]C know-DECL

   b. John knows [CP [thati-Q] Mary bought something]]

Choi and Lardiere (2006a) investigated the acquisition of Korean wh-expressions by 80 adult NSs of English at intermediate Korean proficiency levels by examining their interpretation
of variable expressions, which we saw are distinguished by co-occurrence of the [+/-Q] in English and the use of particles in Korean. The learners performed significantly better with [+Q] versus [-Q], since they were accustomed to wh-operators embedded in the same lexical item as the wh-word, as in their L1, and “failed to observe the interpretive contingency between the variable expression and the [+/-Q] particle on the verb in Korean” (Lardiere, 2009:187). Following from the FRH, the intermediate learners were not yet sensitive to the fact that the wh-operator and the [Q] feature, which are assembled on one lexical item in English, are assembled on separate lexical items in Korean.

Results from that study could be used to assume that structures in which features are assembled differently between the L1 and the L2 may not be acquired fully. However, Choi and Lardiere (2006b) investigated high advanced learners and found that four of the 17 learners had a perfect score on both judgment and production of wh-expressions, indicating the Korean variables are ultimately acquirable. Therefore, the FRH makes claims that reassembly may cause difficulties during the acquisition process, as demonstrated by the intermediate learners, but reassembly is eventually possible and the structures are ultimately attainable, as demonstrated by the advanced learners.

The FRH also makes a clear and fundamental distinction between the perspective of the learner and that of the researcher regarding reassembly. While the researcher asks what do features mean and how do we know if a language has selected it, the learner must “identify one or more lexical items over which to distribute the features associated with a particular functional element” (Lardiere, 2009:193). This distinction is important in SLA research in order to understand the task at hand for an L2 learner when acquiring a particular structure, and how it is represented from a theoretical perspective. The FRH has found support in other studies in L2
Spanish with aspect morphology (Domínguez, Arche, & Myles, 2011), differential object marking (Guijarro-Fuentes, 2012), and the present progressive (Perez-Cortes, 2012), existential quantifiers in L2 Korean, Chinese, and English (Gil & Marsden, 2013) and plural marking in L2 Korean (Hwang & Lardiere, 2013).

Domínguez, Arche and Myles (2011) examined the L2 acquisition of the Spanish imperfect and preterit morphology, which they claim “requires native speakers of English to remap semantic concepts regarding the temporal status of events onto new morphological configurations (Slabakova & Montrul 2002, Montrul & Slabakova 2003)” (p. 183). English uses the same morphological past tense to mark both perfective and imperfective events, while Spanish has preterit morphology to mark the former and imperfect morphology to mark the latter. However, the imperfect in Spanish can have three different meanings: continuous, habitual, or progressive (Arche, 2006). English uses the past tense for continuous meanings and periphrases for the habitual and the imperfective meanings.

Domínguez, Arche and Myles (2011) examined 60 L2 learners of Spanish (20 beginner, 20 intermediate, and 20 advanced) using a context/sentence matching task, in which the learners had to rate a pair of imperfect and preterit sentences on a Likert scale according to their appropriateness in the context. Their results showed that accuracy improved as proficiency increased. However, while learners were able to achieve native-like performance by the advanced level for habitual and progressive events, the continuous meaning was still problematic even for the advanced learners. The authors suggest that the use of the imperfect to convey a continuous event is problematic even at advanced proficiency because it requires reassembly to match semantic content to morphological reflexes, thus supporting the FRH which leads to variability in advanced learners.
Guijarro-Fuentes (2012) also adopted to the FRH to explain the difficulties in acquiring the personal *a* object marker in L2 Spanish, but attempts to fine-tune the hypothesis by looking at the role of the number of features needing reassembly and their subsequent vulnerability. The use of the personal *a* in Spanish relies on several interpretable features, namely animacy and specificity (Torrego, 1998; Zagona, 2002). The researcher conducted a sentence-level completion task and an acceptability judgment task with 49 English-speaking learners of L2 Spanish, 15 low intermediate, 16 high intermediate, and 17 advanced learners. Results showed that all groups showed high levels of accuracy on both tasks when the target items only involved one feature, [+/- animate], but there was much variability in accuracy on target items that involved more than one feature, [+/- animate, +/- specific], indicating that “L2 learners may acquire the distribution of the preposition *a* in a gradual fashion” and “more importantly, not all interpretable features are attained at the same rate” (Guijarro-Fuentes, 2012:714) as might be assumed under the Interpretability Hypothesis.

In his appeal to the FRH to explain the results, Guijarro-Fuentes (2012:714) explains that while animacy and specificity are interpretable features available in English, these features need to be “redeployed” to yield the morphological reflex of the object marker *a* in Spanish. The learnability problem is not resolved by virtue of the features being interpretable, but rather is further complicated by the number of features involved and the complexity of configurations of the features. The animacy feature seems to be an intrinsically lexical feature, but specificity is context dependent, involving both the argument it is attached to and the event in which it occurs, making it more complex and difficult for the learner. Therefore, any feature reassembly account should examine the specific features in question in order to explain differential levels of L2 attainment.
Hwang and Lardiere (2013) also address the issue of which features are more vulnerable to deficits in feature reassembly by evoking Harley and Ritter’s (2002) feature-geometry model in their analysis of L2 Korean. Korean has two types of plural marking: the intrinsic and the extrinsic, both of which use the suffix -tul. The intrinsic plural marker is similar in meaning to that of English, which denotes multiple nominal referents, and it also indicates specificity, the omission of which would leave a noun underspecified. Unlike in English, the intrinsic plural is not allowed on constructions with numeral-classifiers unless the noun is [+human]. In restricted cases when the noun is [+human] and the numeral is small, the classifier can be omitted and optionally plural. With ‘weak’ quantifiers such as manhun ‘many,’ classifiers are not used and the plural is optional, regardless of whether the noun is human or not (Hwang & Lardiere, 2013:61).

They adopt Gebhardt’s (2009) feature-based analysis for Korean DPs which involve the uninterpretable [specific], [(q)uantity] and [(i)ndividuation] features from Harley and Ritter’s (2002) feature hierarchy. The [q] feature can be [(r)elative] or [(a)bsolute] and the [i] feature can be [+/human], as shown below in (3.3) from Hwang and Lardiere (2013:64fig1):

(3.3)

```
[q]
  /\  /
[rel] [abs]
    /\  /\  /
[(group)] [(group)]
  |    |    |
[indiv][human] [indiv][human]
    /\    /\  /
[(group)] [(group)]
```

Feature hierarchy for pluralizing quantified noun phrases in Korean.
Hwang and Lardiere’s (2013) posit that English-speaking L2 learners of the Korean intrinsic plural must first distinguish between [q-rel] and [q-abs] features, and then within [q-abs] they must determine if it is human or not, as they make their way through the hierarchy. English is less complex, as it is indifferent to the distinction between the [q-rel] and [q-abs] features, and therefore by entailment to the [±human] feature as well.

The extrinsic plural in Korean can be viewed as a type of distributive marker, which optionally appears on objects, adverbs, and other constituents. It is syntactically constrained by requiring the pluralized entity to be c-commanded by a referentially plural subject (Hwang & Lardiere, 2013:61). Hwang and Lardiere (2013) assume the extrinsic plural marker bears an uninterpretable plural feature [u-pl] and a distributive [distr] feature. The English lexical item *each (of the...)* is the closest equivalent to the extrinsic plural in Korean, which also has a [u-pl] and [distr]. In order to acquire the extrinsic plural, L1 English speakers already start the process with the [u-pl] and [distr] features, which in English are assembled together on the lexical item *each (of the...)*; therefore they must determine that in Korean the two features are reassembled on the plural marker, rather than as an independent lexical item.

Hwang & Lardiere conducted an experiment with 77 English-speaking learners of L2 Korean (12 low intermediate, 30 high intermediate, 17 low advanced, and 18 high advanced learners), who completed the following tasks in a randomized order: an elicitation task, an acceptability judgment task, a preference task, a truth value judgment task, and a multiple-choice translation task. They found increasing target-like performance on the intrinsic plural as proficiency increased. Learners at lower proficiencies demonstrated an overgeneralization of the plural marking by correctly accepting grammatical plurals but failing to reject ungrammatical ones. The researchers claim that the lower proficiency learners had not yet acquired the [specific]
feature, and simply used the L1 plural strategy for all plurals, as in English. The advanced learners, on the other hand, demonstrated having acquired the [q-rel] versus [q-abs] distinction but had not yet acquired the [+human] versus [–human] distinction. They conclude that the more embedded co-occurrence features are more difficult to acquire, and that although the human feature exists in English, since it is not a part of the English plural, its reassembly to the intrinsic plural in Korean caused difficulties. These results corroborate the results found by Guijarro-Fuentes (2012), who also found the [specific] feature to be more difficult to acquire.

The extrinsic plural was much more difficult for the English speakers, which is understandable since it is optional, infrequent in the input, and the features associated with it occur with an entirely independent lexical item in English (Hwang & Lardiere, 2013:80), but target-like performance with the extrinsic plural increased with proficiency as well. They conclude that feature reassembly led to deficits in the extrinsic plural as well, since it required learners to take two features, [u-pl] and [distr], which are assembled on one lexical item in the English each, and to reassociate them onto multiple lexical items in as the Korean plural marker. However, attainment was ultimately achievable for both plural types, indicating reassembly is difficult but not insurmountable.

While the basis of Lardiere’s (2008, 2009) FRH is the mapping of morphosyntactic features to morpholexical items, it seems fruitful to apply it to the acquisition of features that have word order reflexes, such as deriving pre- and postverbal subjects. The L2 learner will need to acquire the syntactic correlation of discourse features and also any difference between the EPP feature in Spanish and in English. Failure to reassemble these features as necessitated in Spanish will lead to deficits in the use of postverbal subjects by English-speaking learners of Spanish. In Chapter 5, I propose a syntactic analysis for postverbal subjects in Spanish and use it in tandem
with the FRH to explain the L2 data, looking both at the developmental stages and ultimate attainment.

3. The Interface Hypothesis

The Interface Hypothesis (IH, Sorace & Filiaci, 2006; Sorace 2006, 2011; Tsimpli & Sorace, 2006) suggests that persistent non-target-like performance in near-native speakers will be found with target structures that involve the interface between two modules of grammar or between the grammar and grammar-external components. It was proposed to account for the highest possible level of ultimate attainment. The original formulation of the hypothesis compares narrow syntax, internal to the computational system, to the interfaces with the performance systems: the intensional/conceptual system, or the semantics interface (LF), and the sensorimotor system, or the phonology interface (PF) (Sorace, 2005, 2006). When interfacing with the performance systems, narrow syntax is assumed to be privileged and less vulnerable to deficits (White, 2011).

Later revisions of the IH compare performance within the internal interfaces, which only implicate the formal properties of grammar, including narrow syntax, PF, and LF, to the external interfaces, where the formal properties interface with cognitive systems and discourse (Sorace, 2011; Sorace & Serratrice, 2009; White, 2008). This version of the IH predicts that “structures involving an interface between syntax and other cognitive domains present residual optionality in L2 acquisition, emerging optionality in L1 attrition, and protracted indeterminacy in bilingual L1 acquisition” (Sorace, 2011:5). The interface between core grammar and the pragmatics/discourse interface is frequently cited as causing a large number of learning deficits in SLA. More specifically, structures involving the syntax-pragmatics interface have been shown to be vulnerable to deficits even at very late-stage and end-state language users (Sorace, 2005; Sorace
& Filiaci, 2006; Valenzuela, 2006; Belletti, Bennati & Sorace, 2007; Tsimpli, 2007; Tsimpli, Sorace, Heycock & Filiaci, 2004; Kamp & Reyle, 1993; among others). Sorace and Serratrice (2009) review several independent factors that affect learnability at the interfaces including underspecification of interpretable features and cross linguistic influence, processing limitations, and input.

According to many studies examining the syntax-discourse interface, residual optionality in L2 grammars is linked to a choice of forms that differs between the L1 and the L2 (Hopp, 2007; Lozano, 2006; Tsimpli, 2007; Tsimpli et al. 2004). Cross linguistic influence and underspecification of interpretable features are closely related, in that “an interface condition that is specified in the L2 in a particular syntactic structure remains underspecified because of the absence of a similar condition in the L1” (Sorace & Serratrice, 2009:199). For example, the distribution of pre- and postverbal subjects in L2 Spanish depends on Focus, a discourse feature, which is morphologically underspecified in L1 English, which may generate ambiguity in L2 Spanish where Focus interfaces with syntax. This interface may even become underspecified in a native language due to attrition from prolonged exposure to another language (Tsimpli et al. 2004).

Sorace and Serratrice’s (2009) processing limitations perspective holds that the integration of syntactic knowledge and knowledge from other cognitive domains requires more processing resources than syntax alone, causing difficulties in the acquisition of such structures. Bilingual speakers may have fewer processing resources available in order to integrate interface information during online processing, so by default they use unmarked forms to relieve the processing overload (Sorace & Serratrice, 2009:199), and similar processing difficulties have been found regardless of L1-L2 combination (Sabourin, 2003; Hopp, 2007; Roberts, Gullberg, &
Indefrey, 2008). For example, Margaza and Bel (2006) examined null subject knowledge by 10 intermediate and 9 advanced Greek-speaking learners of L2 Spanish. Both Greek and Spanish allow null subjects, which is a discourse-syntax interface phenomenon since a null subject is only licit when the referent is recoverable from the discourse context. Based on a 40-item cloze test, their results indicated that in matrix clauses, null subjects were produced 96% of the time by NSs, while both the intermediate (52%) and advanced learners (85.5%) used null subjects less often. The authors do not indicate whether these results are significant, but claim that intermediate learners are able to syntactically license null subjects, since they are able to use null subjects to some extent, but “they do not show command of the pragmatic distribution of subjects in Spanish” when compared to the NS controls (Margaza & Bel, 2006:92). They conclude that cross-linguistic influence plays a role in syntax but not pragmatics, and Sorace and Serratrice (2009) use this as evidence to support the notion that the higher processing load of incorporating discursive and syntactic information leads to non-target-like performance even when the L1 and L2 share the same discourse-syntax specifications.

The quantity and quality of the input available to the advanced L2 speaker plays an inevitable role in structures at the discourse-syntax interface; “the frequency with which a structure is encountered is bound to have an effect on the speed and accuracy with which it is processed” (Sorace & Serratrice, 2009:200). There is robust evidence that both languages are simultaneously active in bilinguals (Dijkstra & Van Heuvan, 2002; Green, 1998) regardless of which one is being used for communication, but relative activation levels and strength of competing structures may differ. While both languages are activated, bilinguals may have slower and less efficient processing to use interface information to process and construct sentences (Sorace, 2005). Furthermore, partial overlap between inventories in both languages will favor
activation of those structures. For example, pronominal forms overlap in Italian and English while only Italian has null pronouns; therefore, overt pronouns will be favored even in redundant contexts. This may also depend on linguistic environment, where an English-dominant environment will favor overt pronouns even when the language in use is Italian, which may also affect native and non-native speakers (Sorace & Serratrice, 2009).

Input plays a pivotal role in the syntax-discourse interface since it is what provides the L2 learner with pragmatic information. It is not doubtful that there is abundant evidence for null and overt pronouns in the Spanish input, but evidence of pre- and postverbal subjects in different discourse contexts may be limited for certain learners. Sorace and Serratrice (2009) point out that the majority of bilingual groups tested under the IH were living and were tested in a predominantly English-speaking environment, where they are likely to hear varieties of the target language that may have experienced influence from English or the speakers may be suffering attrition and represent a non-standard variety. The attrited language also serves as model input for many L2 learners. This is a variable that is very difficult to control in an experiment as language contact and change are ever present, but it should be noted in describing the context of acquisition.

Much research investigating the validity of the IH has revolved around the acquisition of the pro-drop parameter, looking at null subjects in particular. In support of the hypothesis, Sorace and Filiaci (2004), Montrul (2004), and Serratrice, Sorace, Filiaci, and Baldo (2009) found overuse of overt subjects in pragmatically redundant contexts where there was a topic antecedent apparent in the context. However, none of the studies found learners using null subjects in pragmatically infelicitous contexts where no topic was evident to license it. Research has also found overuse of overt subjects in pragmatically incorrect contexts by learners with pro-
drop languages as their L1, as we saw in Margaza and Bel (2006) for Greek learners of Spanish which has also been found by Bini (1993) for Spanish learners of Italian, indicating that cross-linguistic influence cannot be the only factor affecting the interface between discourse and syntax, since deficits were apparent even with the similarity between the L1 and the L2.

The underlying claims of research supporting the IH are that the syntax has been acquired, but the pragmatics is vulnerable even at late stages. This is shown by optional use of target forms on production tasks and gradient acceptability on judgment tasks. However, several researchers claim that the interfaces are not necessarily permanently vulnerable to deficits (Domínguez & Arche, 2008; Iverson, Kempchinsky & Rothman, 2008; Rothman 2007; Slabakova & Ivanov, 2011) and the distribution of null and overt subjects is executed in the correct discourse contexts by advanced proficiency levels.

Returning to postverbal subjects, the IH would predict difficulties in L2 acquisition of Spanish, even at near-native levels, due to the crucial role of discourse features in deriving the structure. While most studies focus on the interface between two modules, White (2011) points out that it is difficult to find a linguistic phenomenon that does not involve multiple interfaces. As we have seen, the acquisition of subject-verb inversion in Spanish involves two interfaces, both the syntax-PF interface, an internal interface, and the syntax-discourse interface, an external interface. At the syntax-discourse interface, the learner must be able to incorporate discourse elements into the syntactic derivation in order represent information structure syntactically and focalize the subject in postverbal position. The IH would predict that L2 learners would be unable to use postverbal subjects as a focus strategy because the incorporation of discourse information into the syntax requires higher processing resources and contributes to problems regarding acquisition of focus-marking strategies (White, 2011).
At the syntax-PF interface, the English speaker must learn that stress-shift rules are more marked in Spanish and nuclear stress is preferably in sentence-final position (Ortega-Santos, 2006); therefore discourse information is marked with word order variation rather than variation in nuclear stress placement. If the syntax-PF interface is vulnerable to deficits in L2 acquisition, the IH predicts that the learner will use preverbal subjects with stress-shift to mark focalized preverbal subjects, transferring the L1 procedure into the L2. In Chapter 5, after proposing a syntactic analysis, I return to the IH to consider its validity in explaining L2 data.

4. L2 acquisition of postverbal subjects

As was mentioned in Chapter 2, the presence of subject-verb inversion was assumed to be a part of the null subject parameter in early generative research (Taraldsen, 1978; Jaeggli, 1980; Chomsky, 1981; Rizzi, 1982); therefore in early generative SLA research, the acquisition of postverbal subjects was examined jointly in studies on the acquisition of null subjects. While the acquisition of null subjects has been amply studied, as constrained by both syntax (Phinney, 1987; Al-Kasey & Pérez-Leroux, 1998; Liceras, 1988, 1989; Liceras & Diaz, 1999; Almoguera & Lagunas, 1993; White, 1986, 1985; Hilles, 1986; Bini, 1993; Liceras et al. 2010) and pragmatics (Polio, 1995; Lozano, 2009; Pérez-Leroux & Glass, 1999; LaFond, Hayes & Bhatt, 2001; LaFond, 2003; Montrul & Rodriguez-Louro, 2006; Margaza & Bel, 2006; Rothman, 2007; Rothman & Iverson, 2007), the acquisition of postverbal subjects has been less studied. Like the studies on null subjects, the earliest studies on postverbal subjects examined them from a purely syntactic perspective and then shifted towards including discursive constraints. In this section, I first review the syntax-based research, followed by the more recent work including discourse conditions.
4.1. Syntax

The main research interest of early syntactic approaches to the L2 acquisition of postverbal subjects was to determine whether all four aspects of the pro-drop parameter, referential null subjects, postverbal subjects, *that*-trace, and expletive null subjects, are acquired simultaneously. This early SLA research was conducted under the assumption that if the four structures form a cluster in the pro-drop parameter, all four will be acquired simultaneously when the pro-drop parameter is correctly set. In this way, a learner who can correctly use null subjects should also demonstrate correct use of postverbal subjects, lack of *that*-trace effects, and null expletive subjects. However, if a learner demonstrates correct use or processing of one but not all of the structures, this was could indicate that parameter resetting was unavailable to the L2 learner, or that the structures do not actually form a cluster within one parameter for that learner, since correct setting of the parameter for one property did not yield correct use of all properties. For example, learners who demonstrate accurate null subject use may not necessarily use postverbal subjects correctly; therefore they are not a part of the same parameter. As related to the acquisition of postverbal subjects, the main conclusion drawn from these studies is that while the acquisition of null subjects seems to be a prerequisite for the subsequent acquisition of subject inversion, it is not sufficient and inversion remains problematic for L2 learners (Liceras, 1988, 1989; White, 1985; DeMiguel, 1993) leading to the proposal that subject inversion is most likely not a part of the same parameter (Chao 1981; Safir 1982; Hyams, 1983; White 1989). Some of these studies will be reviewed here, focusing on their results for postverbal subjects, as their conclusions for the validity of the pro-drop parameter are not pertinent to the dissertation.

Two studies by Liceras (1988, 1989) employed a GJT to test L1 speakers’ of English and French acceptance of postverbal subjects in L2 Spanish unaccusative and unergative sentences,
in addition to null/overt subjects and *that*-trace effects. Liceras (1988) compared two L1 French and two L1 English speakers, whose Spanish spontaneous oral speech was judged to be equally advanced by three NSs, and two native Spanish speakers as controls. Three of the four L2 learners (with no mention of which L1) accepted inversion with both verb types, while both NSs only accepted inversion with unaccusative verbs. Liceras (1988) argued that the L2 performance is evidence of non-nativelike behavior because inversion should not be available with unergatives, and claims that the learners were using their knowledge of inversion with unaccusatives and extending it to unergatives. Although unergative verbs do in fact allow inversion in narrow and contrastive focus contexts, the GJT used in the study did not incorporate discourse context, and therefore the results are consistent with inversion with unergatives in wide focus contexts, since the task lacked a discourse context all together. The reliability of this study must be questioned since there were only two participants in each group, making results difficult to extrapolate to other learners.

Liceras (1989) improved on the 1988 study by including 32 L1 French learners of Spanish (eight beginner, seven intermediate, 15 low-advanced, and two high-advanced), 30 L1 English learners of Spanish (six beginner, five intermediate, 14 low-advanced, and five high-advanced), and five NSs of Spanish. The study still used a GJT, but required participants to translate the sentences to their native language as well. The task only contained four items, all with postverbal subjects, two with unaccusative verbs and two with unergative verbs. Results showed 100% acceptance of both verb types with postverbal subjects by NSs, differing from Liceras (1988) where they only accepted inversion with unaccusatives, while non-natives accepted inversion less than NSs and with unaccusatives significantly more than with unergatives. Participant translations of sentences demonstrated that when non-natives accepted
VS order, they translated the sentences as if the subject were the direct object of the verb, even at the advanced level, indicating that the acquisition of postverbal subjects may be confounded with the acquisition of differential object marking\(^{13}\) and the learners didn’t actually know they were subjects. Therefore, the participants don’t seem to be actually rating postverbal subjects as grammatical, but rather assuming the subject is an object. Liceras (1989) concludes that the unaccusative-unergative distinction is not sufficient to determine subject placement by NSs. While the participant sample size was greatly improved, the task only contained four target items and no statistical comparison between groups was provided; therefore robust conclusions cannot be drawn not extrapolated.

One major problem with both of these studies is that each study only tested two unergative and two un accusative sentences, which makes results difficult to extrapolate to these verb types more generally. It is also necessary to compare performance on more test items as well as incorporate more verb types and pragmatic contexts. What is more interesting is the difference in behavior among the NSs between the two studies. The fact that in Liceras (1988), NSs did not accept inversion with unergatives but in Liceras (1989) they did, poses a question as to what the true native behavior is. Rather than comparing the L2 performance to norms established by traditional reference grammars and generative syntactic accounts, it is necessary to collect a more robust native-speaker sample for comparison, rather than simply two to five speakers. Based on these studies, it is unclear what the “native-like” standard is against which the learners are being compared.

\(^{13}\) Human direct objects are marked with the preposition a while non-human direct objects are not marked (cf. Gili-Gaya, 2002; Aissen, 2003; Leonetti, 2004; Lidz, 2006; Torrego, 1998)
De Miguel (1993) used a written essay and a GJT with corrections to compare 12 advanced L1 English-speaking L2 learners of Spanish to six NSs. The GJT included nine unaccusative verbs, three transitive verbs, and three unergative verbs. Results of the written essay showed that advanced L2 learners could produce inversion with unaccusatives, gustar ‘to be pleasing’, and copulas. The L2 performance with gustar is not surprising since it is a verb that takes a dative experiencer, and Spanish text books initially teach the structure as an object pronoun + gustar + subject. Also, the preverbal object pronoun is commonly translated as a preverbal subject in the English equivalent, as shown in (3.5):

(3.5)  
a. Me gusta la película.  
me please.PRES the movie  
b. I like the movie.

The literal translation of (3.5a) would be the dative construction ‘The movie is pleasing to me.’ where the movie is the grammatical subject and me is the grammatical object. However, the most common expression of this in English is that of (3.5b), which uses I as a subject and the movie as an object. The author claims that use of postverbal subjects by learners with gustar could actually be transfer from the English accusative structure, in which they analyze the me as the subject and la película as the object and use a preverbal subject. These structures are most commonly used and taught with the word order (O)Oclitic.VS; therefore postverbal subjects with gustar are highly frequent in the learner’s input. However, it doesn’t seem that the learners are able to use this evidence and extend it to use postverbal subjects in other contexts.

While the L2 learners were able to produce postverbal subjects, they accepted SV order with unaccusative verbs that NSs had changed to VS. Non-native results also indicated that the acquisition of indirect object and differential object marking also affected their acceptance of VS
order. De Miguel (1993:186) speculates that the learners were confusing the postverbal subject with the object because they “had not internalized the a marking for the animate direct object” (my translation). She points out that they seemed to require SV order with transitives to avoid ambiguity with an animate direct or indirect object, while NSs can use postverbal subjects because they mark the animate object with the a. Additionally, when correcting sentences deemed ungrammatical, many L2 learners turned the subject into an object by using the object marker a, as in (87):

![Equation](3.6) Guardó Juan el secreto. → Guardó a Juan el secreto.

keep.PRES the secret keep.PRES to Juan the secret

‘Juan kept the secret’ ‘he/she kept the secret for Juan.’

As we see in (3.6), DeMiguel (1993) has made an important advance in the field by incorporating three transitive verbs into her study, which was lacking from previous studies of postverbal subjects. However, she only included three such verbs and there was a rather uneven balance of transitive and unergative (three each) to unaccusative (nine) verbs. Belletti, Bennati, and Sorace (2007), which will be described in more depth below, found similar results for the role of objects in determining appropriate subject inversion in Italian. In many contexts in which NSs used postverbal subjects, they also employed preverbal object clitics. L2 speakers, on the other hand used preverbal subjects and postverbal lexical objects. Both of these studies demonstrate the need for more methodological control of transitive verbs.

Hertel and Pérez-Leroux (1999) used a written GJT and an oral story-telling task to compare beginner (n=16) and advanced (n=5) L2 Spanish learners to five NSs of Spanish, examining speakers’ sensitivity to and production of inversion in matrix clauses, comparing two verb classes: unaccusative and unergative. Both the beginners and the advanced learners showed sensitivity to verb class, accepting inversion as grammatical more often with unaccusatives than
with unergatives; however the beginners accepted VS structures less often than the advanced learners, regardless of verb type, while the advanced learners accepted VS structures with unergatives at a significantly higher rate than the NSs. On the story-telling task, all NSs produced inversion but only four of the 21 L2 learners, one advanced and three beginners, produced inversion and only with dative experiencer verbs like *gustar*, unaccusatives, and copulas, as DeMiguel (1993) also found. Hertel and Pérez-Leroux (1999) used their results to claim that L2 learners are able to acquire the role of lexical verb class in licensing postverbal subjects, indicating that the lexicon-syntax interface does not suffer any deficits since L2 learners differentiated between unaccusative and unergative verbs based on subject placement on the GJT. However, this conclusion ignores the fact that the advanced group overaccepted postverbal subjects with unergatives in a non-nativelike fashion. The validity of the claim must also be taken with caution given the low number of advanced and NS participants.

The main issue with the studies just described (excluding Belletti et al., 2007), is the lack of any sort of discourse context in which to evaluate the acceptability of the sentences with inversion. As we have seen, discourse context plays a pivotal role in determining well-formedness. This lack of discourse context may have led to a second disadvantage: highly variable performance by NSs. Especially in Liceras (1988) and DeMiguel (1993), the NSs did not perform as expected by the theories presented in the studies, yet non-natives were still deemed non-nativelike. The performance by the NSs in each study is theoretically correct, since postverbal subjects are grammatical with both verb types, but their acceptability depends on the discourse context. Unaccusative verbs should elicit more postverbal subjects than unergative verbs in wide focus, which was the result in Liceras (1988) and Hertel and Pérez-Leroux (1999), despite lack of discourse context provided. However, no difference should exist between the
verbs in narrow or contrastive focus, which means the lack of distinction between the two verb types found Liceras (1999) is consistent with the distribution of postverbal subjects in a focused context, although no context was provided in the study. Furthermore, the Liceras (1988, 1989) studies contained very few target items (2 and 4) that limit the ability to gain a true inference about non-native behavior. In the next section, I review more recent studies that have addressed some of the issues left by these groundbreaking studies.

4.2. Discourse

Other studies on the acquisition of word order and subject-verb inversion, some of which have separated the phenomenon from the acquisition of null subjects, have begun to address the role of discourse context in licensing inversion. Camacho (1999) investigated the acquisition of L2 Spanish by L1 speakers of Quechua, two languages which differ in their neutral word order. As we saw in Chapter 1, canonical word order in Spanish is SVO in wide focus, as in (3.6), but it also allows an object DP in preverbal position when it is the topic of the sentence, as in (3.7).

(3.6) ¿Qué pasó?
    What happened?
    Vi a Juan ayer.
    ‘I saw Juan yesterday.’

(3.7) ¿Cuándo vio a sus hermanos?
    When did you see your brothers?
    A Juan, lo vi ayer.       (Camacho, 1999:117)
    ‘Juan, I saw him yesterday.’

Quechua is a head-final language which “forces a fairly rigid SOV word order” in wide focus, as in (3.8), while focused constituents, in contrast, must be moved to the immediate preverbal position, as in (3.9) (Camacho, 1999:120ex11-13).
In other words, a preverbal object is used in Quechua for wide focus, while a preverbal object is used in Spanish when it is a topic. Additionally, any new focus information must immediately precede the verb in Quechua, whether it be the subject or the object, while information focus can take place in SVO order via stress shift in Spanish. Therefore, Quechua speakers must learn that OV is only for topics and not focused information when learning Spanish.

Camacho’s (1999) study included 10 L1 speakers of Quechua learning Spanish as their L2. No proficiency information was provided, but all participants began learning Spanish before age 8, one or both parents were bilingual in Spanish and Quechua, and had been living in Lima, Peru for up to 3 years, where Spanish is the dominant language. Based on oral interviews, he found that learners extended the use of word order patterns from their L1 Quechua to ungrammatical discourse contexts in their L2 Spanish, such as the examples in (3.10).

(3.10) a. ¿Y cómo se sembra la cebada?                   (Camacho 1999:124ex17)
     ‘And how is the barley planted?’

(3.8) Ima-ta  pasa-n?
    What-ACC happen-3p
    ‘What happened?’
    Huwan-mi punku-ta  kicha-n
    Juan-VAL  door-ACC  open-3PL
    ‘Juan opened the door.’

(3.9) Pi-n  punku-ta  kicha-ra-n
    Who-VAL  door-ACC  open-PAST-3P
    ‘Who opened the door?’
    Huwan-mi  kicha-n  punku-ta
    Juan-VAL  open-3P  door-ACC
    ‘Juan opened the door.’
b. Primero, semilla bota, toda la charca se tapa.
First, seed throw, all the farm cover
‘First you throw the seed, you cover the whole farm.’

The context in (3.10) is wide focus, since all the information in the response to the question is new. The word order employed is licit in Spanish, but not in the wide focus. For the sentences in (3.10) to be grammatical, semilla ‘seed’ and charca ‘farm’ would need to be topic information and it would also require a resumptive clitic. This word order is consistent with wide focus in Quechua, while the felicitous word order for Spanish is SVO, as in (3.11).

(3.11) Primero, se bota semilla, se tapa toda la charca.
First, SE throw, PRES seed, SE cover, PRES all the farm
‘First you throw the seed, you cover the whole farm.’

Camacho (1999) used this evidence in support of the Full Access/Full Transfer hypothesis (Schwartz & Sprouse, 1996), because the syntactic structure was transferred from the L1 to the L2, where the focus constraints differ and make it ungrammatical. What is unclear from this study is the role of proficiency and whether or not this difficulty will fossilize in the L2 grammar or if the learners can eventually attain native-like discourse-syntax mappings. It can also be questioned whether these learners are truly L2 learners as they are raised in bilingual homes and began learning Spanish before age 8, but given the difficulties the participants demonstrated, the results can be used in support of the IH, since it predicts difficulties at the discourse-syntax interface in bilingual L1 acquisition in addition to SLA.

Using a contextualized written production test, Hertel (2003) tested production of unergative and unaccusative verbs in both wide focus (What happened?) and narrow focus (Who did verb?) contexts, across four proficiency levels, beginner (n=24), low intermediate (n=15), high intermediate (n=18), and advanced (n=24) compared to 18 native speaker controls. (Recall
from Chapter 1 that in narrow focus contexts, both unergative and unaccusative verbs can yield VS order, while in wide focus contexts, only unaccusatives should have VS while unergatives yield SV order.) The research questions that guided Hertel’s study were “To what extent do lexical-to-syntax mappings guide the stages of L2 development?” and “At what stage are L2 learners sensitive to how focus interacts with word order in Spanish?” (Hertel, 2003:284). The test contained 24 items: six unergative verbs in wide focus, six unergative verbs in narrow focus, six unaccusative verbs in wide focus, and six unaccusative verbs in narrow focus.

In the wide focus contexts, only the advanced group performed like NSs by producing substantial VS structures with unaccusatives, and producing significantly more VS structures with unaccusative verbs compared to unergative verbs. The advanced group also overgeneralized VS order to unergative verbs in wide focus, producing significantly more postverbal subjects than NSs with unergative verbs. Hertel pointed out that the NSs did not produce as many VS sentences with unaccusative verbs in wide focus as was expected, while not including any frequency data to support the expectation for NSs to use more postverbal subjects in this context. As was shown in Chapter 1 of this dissertation, both VS and SV can be used with unaccusative verbs in wide focus, and they do not necessarily occur in free variation but rather depend on the presentational nature of the sentence (Suñer, 1982). Therefore, Hertel’s (2003) findings for NSs question the theoretical assumption that unaccusative verbs favor VS order, and may demonstrate a more faithful representation of native production than commonly assumed based on traditional grammars.

In narrow focus contexts, production of VS with unaccusative verbs went up as proficiency increased, and the advanced group produced VS at a higher frequency than NSs (53.60% vs. 36.42%, respectively), but the difference was not significant. The high intermediate
group also did not significantly differ from the NSs. Narrow focus with unergative verbs shows a similar pattern, and the high intermediate and advanced learners did not significantly differ from NSs in their frequency of VS. The study does not compare the frequencies of VS with unaccusative versus unergative verbs in narrow focus, since it was assumed both would allow VS. No significant difference was found between each verb type, although unaccusative verbs seemed to be eliciting more VS structures from advanced learners, 53.60% and 36.26%, respectively, although this difference was not found to be significant.

Hertel (2003) used a feature-based approach to explain the results. She assumes that weak features, which do not require movement, are more economical than strong features, requiring movement, and that a learner will start out assuming all features are weak (Platzack, 1996; Yusa, 1998, 1999). If learners use this hypothesis, they should generate VS structures for unaccusatives and SV structures for unergatives, since those are the base-generated subject positions. Since her beginning learners showed no production of VS order, Hertel (2003) assumes the economy hypothesis is not employed by the learners and they transfer the strong features from their L1 to their L2, causing movement of the subject to preverbal position for both verb types. Hertel (2003) ultimately claims that her results support the three-stage acquisition process of Constructionism (Herschensohn, 2000). The first stage “predicts transfer of L1 parameter settings (see Schwartz and Sprouse, 1996)” (Hertel, 2003:296) to the L2, as demonstrated by her beginning learners who use SV across the board, and the last stage “is characterized by native-like attainment” with the “potential for residual indeterminacy” (Hertel, 2003:297), as demonstrated by her advanced participants who show nativelike use of VS with unaccusative verbs but overproduction of VS with unergative verbs. She does not specifically appeal to the IH, which also predicts lingering deficits in advanced speakers. Since her participants demonstrate
native-like use of VS with both verbs in narrow focus, she claims the discourse constraints do not cause difficulties; therefore she concludes that the learners do not have a grasp on the lexical-syntax interface, evidenced by transfer from the L1.

Lozano (2006) used a contextualized acceptability judgment task in which participants were shown a question and had to choose between two possible target sentences, to test the same distinctions as Hertel (2003) with unaccusative and unergative verbs in wide and narrow focus in L2 Spanish. In addition to L1 English speakers (n=17), he included L1 Greek speakers (n=18), and both groups were determined to be advanced learners based on a proficiency test. Greek and English share the same subject-verb word order properties, differing only in that in Greek, VS is the surface word order for unaccusatives in wide focus contexts, like in Spanish, while in English the word order is SV. Greek and English converge in narrow focus contexts, where the surface word order is SV for both verb types, where Spanish uses VS for both verb types.

The results are similar to what Hertel (2003) found, in that the learners chose SV at a similar rate as NSs for unergative verbs in wide focus, but chose VS more often than NSs did in the same context, indicating an overgeneralization. For unaccusative verbs in wide focus, Lozano (2006) found that the learners chose more SV orders than the NSs, but the NSs did not choose VS order as often as expected based on previous theoretical accounts from Suñer (1982) which post that unaccusative verbs lend themselves to VS order. Lozano (2006) takes a hybrid approach appealing to both a feature-based and an interface approach to explain the results. He coins the phenomenon ‘impaired syntax-discourse functional features’ (Lozano, 2006:179) to explain that the apparent syntax-discourse interface deficit must be grammatical in nature because learners do not have problems identifying what is new and old information, “since
information packaging into topic/focus is universal” (Valduvi, 1995, cited by Lozano, 2006:178), but rather are unable to incorporate the discourse features into their syntactic representations.

Domínguez and Arche (2008) posit that inversion with unergative verbs is affected by both syntactic and pragmatic constraints while inversion with unaccusative verbs is affected only by syntax; therefore they hypothesize that if, following Lozano (2006), the impairment on inversion is purely syntactic (but the pragmatics is unimpaired), unergatives would allow inversion at the same rate as unaccusatives. On the other hand, if the impairment is purely pragmatic (but the syntax is unimpaired), learners would allow inversion with unaccusatives more often than with unergatives. To test these hypotheses, Domínguez and Arche (2008; 2014) used a similar task to Lozano (2006), a context dependent preference task, with multiple-choice answers of an SV sentence, a VS sentence, and a ‘both’ option, testing unergative and unaccusative verbs in both narrow and wide focus. Participants were 20 beginner, 20 intermediate, and 20 advanced English-speaking learners of Spanish and 20 native Spanish speakers. Their results show that as proficiency increases, preference for inversion in narrow focus increases, reaching nativelikeness by the advanced level for unergative verbs but not for unaccusative verbs. However, like Hertel (2003) and Lozano (2006), Domínguez and Arche (2008; 2014) found that even advanced learners overgeneralize VS to unergatives in wide focus contexts, indicating a syntactic rather than pragmatic deficit.

Domínguez (2013) makes the same claims for L2 Spanish that the syntax-discourse interface is not responsible for deficits, but rather the deficits are syntax internal. Based on guided interviews available from TalkBank (MacWhinney, 2007), she shows that advanced learners are able to use VS word order with both verb types in narrow focus contexts, thus exhibit no pragmatic impairment, but overextend VS order to unergatives in wide focus where it
is ungrammatical. Domínguez (2013) concludes that her data does not support the IH, since VS was used in pragmatically appropriate contexts, but rather indicates a syntactic impairment in the licensing of the expletive *pro*, which she claims is required to yield postverbal subjects with unaccusative verbs in Spanish, which was subsequently extended from unaccusatives to unergatives. Domínguez (2013) points out that because her data came from naturalistic production, it has the advantage of offering the most natural discourse contexts, but it makes it more difficult to determine which exact contexts were being used. She also claims to have analyzed transitive verbs, but I was unable to find mention of them in the results.

Crucially, Domínguez and Arche (2008; 2014) also included topicalized object structures (*La tarea, la hace María* ‘The homework, Maria does it’); therefore extending the use of postverbal subjects to transitive. Recall from Chapter 1 that this structure requires a postverbal subject regardless of the discourse context—contrastive, narrow and, critically, wide focus. They find that advanced L2 learners choose VS over SV to a high degree, but not as high as NSs. However, Domínguez and Arche (2008; 2014) do not examine this target item based on discourse context to see if discourse context mediates subject placement. As I mentioned previously, they concluded that the pragmatics are not impaired, since the learners can choose VS appropriately with unergative verbs in narrow focus, but from their experiment, we cannot tell if the learners will use VS with topicalized objects in wide focus in addition to narrow and contrastive focus.

The main thread that connects the investigations of Hertel (2003), Lozano (2006), Domínguez and Arche (2008; 2014), and Domínguez (2013) is the intent to determine whether deficits in the acquisition of subject-verb inversion are grammar-internal or occur at the interface with pragmatics. That is, are problems with postverbal subjects limited to the syntax proper
where unaccusatives are distinguished from unergative verbs, or do they arise at the interface with pragmatics, wherein participants are able to syntactically produce postverbal subjects, but do so in non-pragmatically felicitous contexts? All of the described studies claim a syntactic deficit, in which learners can produce inversion in pragmatically appropriate contexts, but extend postverbal subjects to unergative verbs in neutral contexts, where they are deemed ungrammatical by NSs of Spanish.

It appears that subject position alone is not sufficient evidence for the learners to distinguish between unaccusative and unergative verbs, and with respect to subject position, they are treating them both simply as intransitive verbs. The frequency data cited earlier for NSs from Domínguez and Arche (2014) found little difference between word order preferences between unaccusative and unergative verbs, where unergative verbs had 57% preverbal and 43% postverbal subjects, and unaccusative verbs had 54% preverbal 46% postverbal subjects. Furthermore, Montrul (2005) examined the unaccusative/unergative distinction in native and non-native Spanish based on the following syntactic diagnostics: bare plurals, participial absolutive, and passive constructions, in addition to postverbal subjects. Her results also showed little difference between subject position between the two verb types by neither native speakers nor advanced L2 learners. Therefore, it might not be that the learners in these previous studies are demonstrating a lack of distinction between the two verbs, but rather subject position may not be a sufficient distinguishing characteristic between the two verb types as evident by native data in Domínguez and Arche (2014), Mayoral Hernández (2006), and Montrul (2005).

While the studies described in this section make an important contribution to the field by incorporating discourse information, they are not without some shortcomings. First, only two of these studies examined transitive verbs. Domínguez and Arche (2008; 2014) only examined
transitive verbs with topicalized objects, but with only four target items, and never tested without topics. DeMiguel (1993) examined transitive verbs without topicalized objects, but there were only three target items. The other studies examine only intransitive verbs, but as we have seen, transitive verbs can also yield VS order in narrow and contrastive focus contexts even without topicalized objects, so it is important to see if learners can acquire this word order as well. Second, these studies only compared wide focus and narrow focus contexts, but as we saw in Chapter 1, contrastive focus (Did Juan do [verb]? ) can also elicit postverbal subjects, but the ability of L2 learners to produce postverbal subjects in this context also needs to be examined. Furthermore, these studies take for granted the theoretical assumption that narrow focus yields postverbal subjects, and therefore they provide no statistical comparison of subject positions between wide and narrow focus, but rather only compare SV and VS orders within each context separately.

One component lacking from the acceptability judgment tasks of Lozano (2006) and Domínguez and Arche (2008) is any sort of insight as to why the sentences were deemed unacceptable. The investigators assume that a negative rating was due to subject placement, but there may be other factors in a sentence that can cause a learner to accept a sentence or not. The present dissertation will take into account this methodological issue by having participants correct the sentences that they deem unacceptable. Only Hertel (2003) tested controlled production in Spanish, while other production tasks were more spontaneous.

There are also two important studies on L2 Italian that shed light on the acquisition of inversion. Belletti and Leonini (2004) examined the L2 acquisition of Italian by learners with a wide variety of L2s, including German, French, and other non-pro-drop languages, who were compared to NSs. They used an elicitation task in which participants watched a video and were
then asked a narrow focus question about it. The questions included transitive, unaccusative, and unergative verbs. They found that L2 learners did not master VS like NSs, who used VS to answer the questions 100% of the time. Native speakers of NSLs performed more like NSs, while speakers of German and French showed a slightly higher preference for VS with unaccusatives than other speakers. Overall, verb class was not a determining factor. They warn that due to the wide range of proficiency levels of the participants, comparability between them is limited. Overall, they appeal to the IH to claim that the L2 participants have no problems with pragmatics, in that they can identify the informational value of the verb and the subject, but they have grammatical difficulty in incorporating informational values into the syntactic structures.

Belletti et al. (2007) also included transitive verbs in analyzing near-native L2 Italian by L1 English speakers. They used the same video-retelling task as Belletti and Leonini (2004), to test narrow focus, as well as a spontaneous oral story-telling task and a headline task. In the headline task, participants saw a photograph representing an event and were asked to pretend to report the news to a friend by saying “Have you heard that…” to test subject placement in wide focus contexts. In this task, the participants were given a list of eventive unaccusative verbs to use (e.g. crollare ‘collapse’), since only unaccusative verbs should elicit VS in wide focus. The video-retelling task used narrow focus questions including unergative, unaccusative, and transitive verbs, since all three verb classes elicit VS in narrow focus. One critique of this study is the use of only unaccusative verbs in the headline task. By including unergative and transitive verbs, we can examine if near-natives use VS inappropriately with these verbs in wide focus.

Near-natives used postverbal subjects in a native-like way with unaccusative verbs in the story-telling task. When answering questions in the video-retelling task, near-natives used inversion significantly less than NSs with all verb types, including unaccusatives. They also used
significantly less postverbal subjects with unaccusatives in the headline task. Based on these results, they support the findings of Belletti and Leonini (2004) and claim that the mechanisms that syntactically license inversion are independent from the mechanisms that license inversion in the appropriate discourse context, and there is lingering optionality in production of VS or SV structures in near-native Italian due to impairments at the syntax-discourse interface, as predicted by the IH (Belletti et al. 2007).

Belletti et al. (2007) found there was an overall low use of inversion with transitive verbs by non-native speakers, but this could be confounded with the acquisition of object clitics (DeMiguel, 1993), which also causes deficits for learners (Leonini and Belletti, 2004). While NSs preferred object clitics and postverbal subjects with transitive verbs in narrow focus, near-natives preferred to use preverbal subjects and postverbal lexical object DPs, despite its redundancy and potential violation of Grice’s (1975) quantity maxim, as contrasted in (3.12).

(3.12) Chi ha bevuto il mio caffè?
‘Who drank my coffee?’

a. Francesco ha bevuto il caffè. (near-native)
‘Francesco drank the coffee.’

b. L’ha bevuto Francesco. (native)
It has drank Francesco
‘Francesco drank it.’

In (3.12a), we see the common structure of the near-native responses to transitive questions, in which the subject is preverbal and the full lexical object is used. The native response in (3.12b) has the preverbal object pronoun l’ ‘it’ with a postverbal subject. The present study aims to control for this possible confounding by employing a controlled production task in which participants are forced to use object pronouns. These Italian studies are important because they
support the results found in Hertel (2003) which was the only Spanish study to use a controlled production task to elicit subject placement.

4.3. Nuclear stress

Fewer studies have looked at the syntax-phonology interface of subject inversion in Spanish as an L2. The Italian study by Belletti et al. (2007) points out that when SV structures were used to answer questions, the nuclear stress was placed on the preverbal subject, an extension of the L1 strategy to the L2. To the best of my knowledge, only Zubizarreta and Nava (2011) have looked at the relationship between prosodic and syntactic realization of focus with subject inversion, but they analyze speakers of Spanish learning English as an L2. Recall from Chapter 1 that, in English, a preverbal subject with nuclear stress is the only licit option to answer a subject-focus question. In Spanish preverbal stress-marked subjects are also grammatical, but postverbal subjects are preferred with canonical sentence final stress.

Zubizarreta and Nava (2011) used a scripted question and answer task to test 46 L1 Spanish-speaking learners of English (27 high and 19 intermediate proficiency) on subject-verb word order and intonation with unaccusative and unergative verbs, with 12 of each verb type in wide focus contexts and four of each verb type in narrow focus contexts. These learners were compared to 34 NSs of English. The authors found that the L2 learners consistently used preverbal subjects in English, for both narrow and wide focus, but still used sentence-final nuclear stress in a non-nativelike way. They used sentence-final nuclear stress more with unaccusative verbs than with unergative verbs, even at the advanced level. Comparing their data to that of both Hertel (2003) and Lozano (2006), Zubizarreta and Nava (2011) posit that moving from prosody to syntax for marking wide focus is far less challenging than moving from prosody to syntax to mark narrow focus (Zubizarreta & Nava, 2011: 653). They claim that L2 learners of
English are able to acquire syntactic word order and discursive constraints, but that it is more difficult to acquire stress shift. However, they only tested the process of L1 Spanish to L2 English and not the reverse situation, which the present study seeks to address.

4.4. Interpretation

While all of the previously-mentioned studies focus on the choice of VS or SV, there has also been considerable research on the interpretation of SV and VS word orders. Bever (1970) was the first to note that English-speaking children tended to use a first-noun processing strategy by which they interpret any Noun-Verb-Noun sequence with an actor-action-object structure, always making the first noun the subject, even at the expense of semantic plausibility (Slobin, 1989). This strategy has also been frequently found in studies on L2 Spanish (LoCoco, 1982, 1987; VanPatten, 1984; among numerous others). This research focuses not on whether L2 learners know when to use postverbal subjects, but whether they know that a postverbal subject is in fact a subject and not an object. We saw problems with interpretation posited earlier by DeMiguel (1993) who asserted that her acceptability results may have been confounded by interpretation of subjects as objects.

VanPatten (1984) was one of the first researchers to posit that beginning L2 Spanish learners also use the first noun strategy to process OVS sentences, with the O being a clitic, using an interpretation task in which first and second semester learners heard an OVS sentence, were shown four pictures, and had to choose the picture that matched the sentence. His results show that the learners interpreted the sentences as SVO rather than OVS between 35% and 70% of the time. Lee (1987) found similar results with first-year learners for OV strings that appeared in the second half of a coordinated sentence, in which the object was incorrectly interpreted as the subject between 27% and 73% of the time. González (1997) addressed L2 learners’ ability to
determine the subject and object of sentences with the following word orders: SVO, SOV, OSV, and OVS. She found that there is an acquisitional hierarchy for word order (SVO → SOV → OSV → OVS) and non-subject-initial sentences were the most problematic and later acquired. These results support data from L1 learners of Spanish found by Echevarría (1978) which indicate the same learning hierarchy.

While the previous studies measured interpretation abilities by lower proficiency learners, use of the first noun strategy has also been found with advanced learners. Most recently, Marijuan (2015) found that the first-noun strategy persists even in advanced L2 learners’ processing $O_{\text{clitic}}$VS in Spanish, but agreement morphology between clitic, verb, and subject had a mediating effect. She fine-tuned the experimental design by manipulating subject/verb agreement, which must always match, and clitic/verb agreement, which may only coincidentally match when the subject and the object happen to have the same number, to test the role of agreement morphology in interpretation, creating four contexts in (3.13) from Marijuan (2015:56).

\[(3.13)\]
\[
a. \text{Lo están buscando las chicas.} \\
\text{him.3SG be.PROG.3PL looking the girls.3PL} \\
\text{‘The girls are looking for him.’} \\
\text{(Mismatch)}
\]
\[
b. \text{Lo está buscando la chica.} \\
\text{him.3SG be.PROG.3SG looking the girl.3SG} \\
\text{‘The girl is looking for him.’} \\
\text{(Match)}
\]
\[
c. \text{Los están buscando las chicas.} \\
\text{them.3PL be.PROG.3PL looking the girls.3PL} \\
\text{‘The girls are looking for them.’} \\
\text{(Match)}
\]
\[
d. \text{Los está buscando la chica.} \\
\text{them.3PL be.PROG.3SG looking the girl.3SG} \\
\text{‘The girl is looking for him.’} \\
\text{(Mismatch)}
\]
In (3.13a) and (3.13d), there is a mismatch between the number of object clitic and the verb, which only agrees with the subject. In (3.13b) and (3.13), the number of the object clitic happens to match that of the verb because it also has the same number as the subject. Participants were shown contextual sentence, followed by two pictures accompanied by one of the target sentences. They were asked to choose which picture corresponded to the target sentence. Self-paced reading was also included to examine the online processing of a sentence in addition to its interpretation.

Marijuan’s (2015) results from a sample of 38 advanced participants demonstrated that learners can overcome the subject-first word order bias to correctly interpret the sentences in the mismatch conditions, (3.13a) and (3.13d), when the morphological cues matched between the verb and the subject but not the object. Participants also tended to present longer reading times on the verb when the clitic was singular but both the verb and the subject were plural, indicating further processing of the morphological cues rather than solely word order cues. While the present dissertation does not directly address interpretation of VS word orders, some implications on the interface between production, acceptance, and interpretability will be drawn in the discussion on Chapter 5.
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<td>Spanish</td>
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Table 2. (cont.) Summary of previous research on SV/VS word order alternations

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<td>L1 German (n=16) L1 French (n=3) L1 Polish (n=2) L1 Dutch, Russian, Greek, Albanian, Bosnian (n=1 each) NSs (n=10)</td>
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<td>Oral</td>
</tr>
<tr>
<td>Lozano (2006)</td>
<td>Spanish</td>
<td>L1 English (n=17) L1 Greek (n=18) Both advanced prof.</td>
<td>Acceptability judgment task</td>
<td>Narrow Wide</td>
<td>Unaccusative Unergative</td>
<td>Written</td>
</tr>
<tr>
<td>Belletti et al. (2007)</td>
<td>Italian</td>
<td>L1 English Near-native (n=17) Native (n=8)</td>
<td>Question-answer story telling Spontaneous story-telling Controlled story-telling</td>
<td>Narrow Wide</td>
<td>Unaccusative Unergative Transitive</td>
<td>Oral</td>
</tr>
<tr>
<td>Domínguez &amp; Arche (2008; 2014)</td>
<td>Spanish</td>
<td>L1 English (n=60) Beg. (n=20) Inter. (n=20) Adv. (n=20) NSs (n=20)</td>
<td>Acceptability judgment task</td>
<td>Narrow Wide</td>
<td>Unaccusative Unergative Topicalized objects</td>
<td>Written</td>
</tr>
<tr>
<td>Zubizarreta &amp; Nava (2011)</td>
<td>English</td>
<td>L1 Spanish (n=46) Inter. (n=19) Adv. (n=27) NSs (n=34)</td>
<td>Question-answer</td>
<td>Narrow Wide</td>
<td>Unaccusative Unergative</td>
<td>Oral</td>
</tr>
<tr>
<td>Domínguez (2013)</td>
<td>Spanish</td>
<td>L1 English (n=60) Beg. (n=20) Inter. (n=20) Adv. (n=20) NSs (n=20)</td>
<td>Spontaneous oral data</td>
<td>Narrow Wide</td>
<td>Unaccusative Unergative</td>
<td>Oral</td>
</tr>
</tbody>
</table>
5. Summary of previous literature and contribution of the present dissertation

The present dissertation seeks to contribute to the SLA literature by addressing some of the shortcomings found in the previous literature in order to strengthen the findings and get a better picture of both native and L2 knowledge of postverbal subjects. In Table 1, I have provided a summary of the previous literature on L2 acquisition of SV/VS word order alternations including information on what tasks, focus contexts, and verb types were included and whether the tasks were oral or written, as these are the elements that I focused on improving in the present study. In Chapter 5, my results are compared mainly to Hertel (2003), Lozano (2006), Belletti et al. (2007), and Domínguez and Arche (2008, 2014), as these are most directly related to the variables examined in this dissertation, but I have summarized all the studies here as they have also contributed to the formulation of this study.

In the task column, we can see that eight of the twelve studies include tasks that elicit production, but only two of them are controlled tasks which regulate what types of sentences were produced. Therefore, the first contribution I have made is to use a controlled production task. In order to determine which elements to control for, I turned to the focus and verb columns. First, while many studies examined narrow and wide focus, I found no study that examined contrastive focus (¿Corre Nacho? ‘Is Nacho running?’), which, as we saw in Chapter 1, can elicit a postverbal subject (No, corre María. ‘No, Maria is running.’); therefore this context was included. Second, the majority of the studies only examined intransitive verbs, both unaccusative and unergative, while only four included transitive verbs. Two of those studies were from Italian (Belletti & Leonini, 2004; Belletti et al., 2007); DeMiguel (1993) only included three transitive verbs, and Domínguez & Arche (2008; 2014) only included transitive verbs in object topicalizations, while also being the only study to include that structure. Therefore, I included
transitive and ditransitive in addition to unaccusative and unergative verbs, as well as object topicalization structures. Since Belletti et al. (2007) and DeMiguel (1993) found a possible interaction between preverbal object clitics and subject position, both transitive and ditransitive verbs were included with efforts made to drive participants to use clitics in order to examine their role in eliciting postverbal subjects. Finally, the only controlled production task in Spanish was done in the written mode, therefore I conducted mine in the oral mode. This afforded me the ability to include nuclear stress as a variable in the experiment, which has been understudied in L2 Spanish.

The majority of the studies in Table 2 included either a GJT or an acceptability judgment task, but only the first four studies included a component where participants corrected ungrammatical sentences, and these tasks contained very few target items. These four studies also included binary correct/incorrect options, rather than a Likert scale. Since all of the sentences being examined are grammatical, but only felicitous in certain contexts, Likert scale data could provide a more fine-grained analysis of relative (un)acceptability rather than simply right or wrong. This will also help capture any potential optionality of structures, rather than one or the other option being the only correct response. Lozano (2006) and Domínguez & Arche (2008; 2014) included Likert data, but they provided both a preverbal and postverbal subject target to be rated, thereby indicating to the participants which target structure was being examined in the study. My experimental design includes an acceptability judgment task to be comparable with these studies, but changes the rating protocol from those in Lozano (2006) and Domínguez and Arche (2008, 2014) by using a Likert scale in order to gain a more fine-grained view of acceptability, rather than whether a sentence is simply right or wrong. The acceptability judgment task also examined nuclear stress placement, which was not looked at by any of the L2
Spanish studies. The present study examined not only how L2 learners compare to NSs, but sought a more accurate picture of native use of postverbal subjects in order to contribute to the syntactic theory deriving them.

My dissertation focuses on the following research questions:

1. In which discourse contexts do native speakers and English-speaking L2 learners of Spanish produce postverbal subjects, as measured on an oral controlled production task?

2. With which verb types do native speakers and English-speaking L2 learners of Spanish produce postverbal subjects, as measured on an oral controlled production task?

3. In which discourse contexts do native speakers and English-speaking L2 learners of Spanish accept postverbal subjects as appropriate answers, as measured on an aural acceptability judgment task?

4. With which verb types do native speakers and English-speaking L2 learners of Spanish accept postverbal subjects as appropriate answers, as measured on an aural acceptability judgment task?

5. Are native speakers and L2 learners able to detect a mismatch between a focused constituent and nuclear stress, as measured on an aural acceptability judgment task?

Based on the answers to these questions, in Chapter 5, I propose a syntactic analysis that accounts for subject placement by native Spanish speakers in wide, narrow, and contrastive focus, with unaccusative, unergative, transitive, and ditransitive verbs, and with topicalized objects. Based on this syntactic analysis, I discuss the language learning task that the L2 learner must undergo in order to achieve native-like competence of postverbal subjects. I then explain the L2 learner data by appealing to both the Feature Reassembly Hypothesis and the Interface Hypothesis.
CHAPTER 4: RESEARCH DESIGN

The goal of this chapter is to address the research questions in this dissertation, namely, how L2 learners and NSs of Spanish produce and accept postverbal subjects in different focus contexts, including wide, narrow, and contrastive focus, with different verb types, including unaccusative, unergative, transitive, and ditransitive verbs, and with topicalized, preverbal objects. A controlled, experimental design was chosen over data collection from spontaneous production in order to control for the number and types of verbs produced and to control for the discourse contexts of the utterances. Choosing this design, while adding control of forms produced, causes a loss in naturalness of data elicited. However, these procedures are modified from experiments in previous research; therefore they allow for comparability with previous studies. To measure production of subject positions, a controlled production task was created, and to measure acceptance of postverbal subjects, an acceptability judgment task was created. This chapter provides a description of the relevant methodology, followed by results which will be discussed in Chapter 5 as pertaining to the theories discussed in Chapters 2 and 3.

1. Methodology
1.1. Participants

132 participants initially took part in the study: 95 English-speaking L2 learners and 37 NSs of Spanish. Of the NSs, 19 were from Spain and 18 were from a Latin American country, including Mexico (n=5), Colombia (n=6), Venezuela (n=2), Argentina (n=1), Chile (n=2), Peru (n=1), and Panama (n=1). NSs from a variety of dialects were selected in order to represent as faithfully as possible the variety of dialects to which L2 learners have exposure. Caribbean Spanish is widely known to demonstrate lower rates of postverbal subjects as compared to other varieties of Spanish in Latin America and Spain (Cabrera-Puche, 2008; Martínez-Sanz, 2008;
Mayol, 2012; Ticio, 2002, 2004; Toribio, 1994, 2000), therefore no participants from Cuba, Puerto Rico, or the Dominican Republic were chosen for participation in the study. Native participants were recruited from the Department of Spanish and Portuguese, the Department of Latin American Studies, and the Department of English as a Foreign Language at Georgetown and informally through colleagues in Madrid. The mean age for NSs is 31.53. NSs were defined as speakers born in a Spanish-speaking country, who claim Spanish as their first language, and who have received primary and secondary education in Spanish. The majority of the NS participants had advanced proficiency in English, but exposure to and knowledge of English was not controlled for in the selection of participants. This could potentially affect the results from these participants, as their Spanish may experience influence from English, a potential factor that will be brought up in the discussion. During analysis, the NSs from Spain and from Latin America were found to differ significantly in certain aspects, as will be seen below, therefore they were split into two groups.

The group of L2 learners was initially comprised of 95 participants, who were recruited from four levels. Sixty-one participants were recruited among students enrolled in second (n = 14), fourth (n = 24), or sixth (n = 23) semester of Spanish at Georgetown, and the remaining 34 participants were recruited informally at Georgetown and in Madrid from people who self-reported speaking Spanish at an advanced level, on a daily basis, and for work or school purposes. This included Spanish majors at Georgetown who had completed coursework above the sixth semester, graduate students in the Department of Spanish and Portuguese who teach Spanish, and colleagues living and working in Madrid.

After initial recruitment, participants’ proficiency was measured with the Elicited Imitation Task (EIT) test (Ortega, 2000, Ortega, Iwashita, Rabie, & Norris, 2002, see Appendix
C) as adapted by Bowden (2007). The EIT is a sentence-repetition task that provides aural input and elicits oral production, “which is particularly appealing for studies dealing with spoken language only” (Zárate, 2015). Ortega (2000) validated the reliability\textsuperscript{14} of the EIT as compared to the Simulated Oral Proficiency Interview (SOPI), a language assessment test used to measure global proficiency based on the American Council on the Teaching of Foreign Languages (ACTFL) guidelines, commonly used in both research and pedagogy. Based on EIT and SOPI scores from 15 fifth-semester college learners of L2 Spanish, Ortega (2000) found a Pearson correlation of $r=0.97$. Similarly, Ortega et al. (2003) found a Pearson correlation $r=0.88$ between EIT and SOPI scores from fourth- and sixth-semester L2 Spanish learners. Furthermore, the EIT has also been adapted and used with several languages (e.g., Iwashita, 2006, for Japanese; Tracy-Ventura, McManus, Norris, & Ortega, 2014, for French; Wu & Ortega, 2013, for Chinese; Mozgalina, 2015, for Russian; Maimone & Zach, in progress, for Portuguese), which have also shown high correlations with SOPI and cloze-type proficiency tests. The test produces a score on a scale from 0 to 120 (see Appendix D for scoring protocol).

Due to the subjective nature of the scoring protocol, the EIT was coded by three independent raters. To ensure interrater reliability, first, each rater scored the responses from the same three EITs using the scoring protocol from Ortega (2000) (see Appendix D). The raters then compared their scores and, where discrepancies arose, arguments for choosing the scores were discussed, scoring was clarified, and a consensus was made as to the most appropriate score. Based on the results from this process, three more EITs were chosen and each rater scored them. Once again, results were compared and interrater reliability was calculated by totaling the

\textsuperscript{14} Ortega (2000) does not examine the validity of her EIT in measuring proficiency, but only measures its reliability against other standardized measures. I recognize this as a shortcoming in using this proficiency measure, but chose to use this measure due to its ease of administration and standardized use in SLA research.
number of items where discrepancy arose divided by the total number of items, reaching an interrater reliability score of 86.67%.

Table 3 presents the descriptive statistics for EIT scores for the four initial recruitment groups, second-semester, fourth-semester, sixth-semester, and advanced. Three participants, all from second-semester, were removed from the study due to lack of an EIT score after their answers failed to be recorded, one participant was removed from the advanced group for being a heritage learner, and one participant was removed from the sixth-semester group as she reported a language other than English as her L1 and did not begin to study English until high school. This yielded a total L2 learner group of 90 participants. A one-way ANOVA and subsequent post hoc Scheffé showed a significant difference between all four groups on the EIT, $F(3,83) = 84.71$, $p = .000$ ($\eta^2 = .76$, observed power = 1.00), with a large effect size between groups\(^\text{15}\).

<table>
<thead>
<tr>
<th>Group</th>
<th>$n$</th>
<th>Mean</th>
<th>$SD$</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second-Semester</td>
<td>11</td>
<td>28.36</td>
<td>12.04</td>
<td>10.00 - 51.00</td>
</tr>
<tr>
<td>Fourth-Semester</td>
<td>24</td>
<td>53.57</td>
<td>21.99</td>
<td>21.00 - 93.00</td>
</tr>
<tr>
<td>Sixth-Semester</td>
<td>22</td>
<td>80.29</td>
<td>19.87</td>
<td>29.00 - 111.00</td>
</tr>
<tr>
<td>Advanced</td>
<td>33</td>
<td>109.63</td>
<td>11.12</td>
<td>80.00 - 120.00</td>
</tr>
<tr>
<td>Total group</td>
<td>90</td>
<td>77.45</td>
<td>33.83</td>
<td>10.00 - 120.00</td>
</tr>
</tbody>
</table>

Due to the overlap between the large ranges of scores for L2 groups, participants from the original recruitment were redistributed into four new groups based on percentile scores for the EIT. Four evenly distributed groups of EIT scores were established based on the 25\(^\text{th}\) (n=22, 2017).

\(^{15}\) Throughout this dissertation, effect sizes for ANOVAs will be based on Cohen (1988) for partial $\eta^2$, where 0.01 represents a small effect size, 0.06 represents a medium effect size, and .14 represents a large effect size.
range 10-45), 50th (n=23, range 46-83), 75th (n=23, range 84-111), and 100th (n=22, range 112-120) percentiles. A one-way ANOVA showed that there was a significant difference by percentile group, F(3,83)=393.24, p=.000, partial \( \eta^2 = 0.93 \), with a large effect size, and the post hoc Scheffé test indicated that all four percentile groups performed significantly different. In order to create a clear distinction in proficiency between each group, group boundaries were established so that the highest score of one group was not within one point of the lowest score of the next group, using the percentile group boundaries as a starting point. This yielded the range of proficiency scores for the four L2 learner groups presented in Table 4. A one-way ANOVA found a significant effect by group for the EIT scores, F(4,119) = 637.57, p=.000, partial \( \eta^2 = 0.95 \), with a large effect size. A post hoc Scheffé test indicated that all four participant groups are significantly different from one another, but the high advanced group was not significantly different from total possible score, as indicated with indices in Table 4, where non-matching indices indicate significant differences at \( p<0.05 \).

Table 4. Redistribution of L2 learner groups based on percentile range of EIT scores

<table>
<thead>
<tr>
<th>Group</th>
<th>( n ) (127)</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>21</td>
<td>28.26(_a)</td>
<td>1.92</td>
<td>10.00</td>
<td>38.00</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24</td>
<td>64.46(_b)</td>
<td>2.74</td>
<td>42.00</td>
<td>81.00</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>20</td>
<td>93.53(_c)</td>
<td>1.41</td>
<td>83.00</td>
<td>103.00</td>
</tr>
<tr>
<td>High Advanced</td>
<td>25</td>
<td>115.08(_{d,e})</td>
<td>.72</td>
<td>108.00</td>
<td>120.00</td>
</tr>
<tr>
<td>Total Possible</td>
<td></td>
<td>120.00(_e)</td>
<td>0.00</td>
<td>120.00</td>
<td>120.00</td>
</tr>
</tbody>
</table>

A language background questionnaire (see Appendix E) was administered which collected information such as first language (L1), how long learners have been studying Spanish, and in which language they received primary and secondary education. All L2 learners included
in the study reported being NSs of American English. Six learners reported having another L1 in addition to English, but they were still included in the study because they began acquiring English before age five and received all their primary and secondary education in English in the United States. Table 5 presents information pertaining to age of testing and first exposure for the L2 learner groups, measured in years.

Table 5. L2 learner exposure to Spanish

<table>
<thead>
<tr>
<th>Group</th>
<th>n (90)</th>
<th>Age at testing</th>
<th>Age of exposure</th>
<th>Years of study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Age at testing</td>
<td>Age of exposure</td>
<td>Years of study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Low</td>
<td>21</td>
<td>18.94</td>
<td>0.62</td>
<td>15.63</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24</td>
<td>19.09</td>
<td>0.94</td>
<td>12.52</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>20</td>
<td>20.50</td>
<td>5.38</td>
<td>11.10</td>
</tr>
<tr>
<td>High Advanced</td>
<td>25</td>
<td>31.53</td>
<td>4.70</td>
<td>13.27</td>
</tr>
</tbody>
</table>

A one-way ANOVA showed a significant difference for age of exposure between L2 groups, $F(3,82) = 4.34$, $p=.007$, partial $\eta^2 = .14$, power = 0.85, and for years of study, $F(3,83) = 27.23$, $p=.000$, $\eta^2 = .50$, power = 1.00, both with large effect sizes. Post hoc Scheffé tests showed that for age of exposure, low and low advanced participants are significantly different, and for years of study, low proficiency is significantly different from low advanced and high advanced, and high advanced is significantly different from all other learners groups. Age of exposure includes age of exposure to explicit instruction via formal classroom study and informal exposure via nannies or travel\(^{16}\), but there was no control for quantity or type of exposure in the study.

\(^{16}\) Due to the early age at which some participants claimed to have their first exposure to Spanish, some participants may in fact be child bilingual acquirers of Spanish, rather than second language learners, an inherent weakness in the study. However, they were included in the study because they self-identify as second language learners and claim to have begun formal instruction in middle school or later, even if they had minimal, informal exposure in primary school. Those who claim early exposure to the language, stated that exposure was inconsistent, limited to basic vocabulary and common phrases, and a passive rather than active skill. Many also claimed to have forgotten much of what they had learned at an earlier age until formal instruction began later in life.
time between age of exposure and age of testing. Exposure to study abroad or other immersion experiences was not controlled for\textsuperscript{17}.

All participants recruited from second-, fourth-, and sixth semester Spanish classes at Georgetown were students in non-intensive Spanish courses, consisting of three 50 minute classes per week for fifteen weeks. Students participated about half way through the semester. Their instructors were both native and L2 speakers from a variety of Spanish dialects, many of whom also participated in the study as NSs or advanced speakers, but the actual use of postverbal subjects during instruction was not controlled. The textbooks for second-semester, fourth-semester, and sixth-semester Spanish are \textit{Vistazos: Un curso breve} (VanPatten, Lee, Ballman, & Farley, 2009), \textit{Avance: Intermediate Spanish} (Bretz, Dvorak, Kirschner, Bransdorfer, & Kihyet, 2013), and \textit{Puntos de Encuentro: A Cross-Cultural Approach to Advanced Spanish} (De La Fuente & Cobeta, 2014), respectively.

None of these textbooks provide explicit instruction on the grammaticality of postverbal subjects or their appropriate uses as pertaining to the items being studied in this dissertation; however they do appear throughout the textbook, in activities, reading passages, or in other forms of input. For example, the second-semester \textit{Vistazos} book does include examples of postverbal subjects when explicitly teaching the use of the ‘personal a’ which marks animate objects in Spanish. This object marker precedes an animate direct object to differentiate it from an animate subject, since word order is flexible in Spanish; therefore some examples of postverbal subjects are included to help students learn to identify the subject and the object based on presence or absence of the marker a. However, nowhere does the book review why one would

\textsuperscript{17} While the language background questionnaire included a question about experience in Spanish-speaking countries, it elicited an open-ended response; therefore the amount of detail in the responses varied greatly. This made categorization according to experience abroad difficult, but future research should acknowledge the role that abroad and immersion experience may play in the acquisition of subject positions.
choose to use one word order or another nor are students tested on postverbal subject use. Postverbal subjects are also available through psychological verb constructions, such as *gustar* ‘to be pleasing,’ as discussed in Chapter 3 Section 4.1, which are highly frequent in the input and available as early as the first chapter of the beginner textbook. Furthermore, all three textbooks include explicit instruction on the formation of the passive *se*, a passive voice construction which most commonly yields a postverbal subject. As will be shown in the coding of the experimental results, some participants attempted to use this structure with topicalized objects, despite the task eliciting active voice sentences. Therefore, students do have exposure to postverbal subjects in their instruction, but not as pertains to the focus contexts and verb types studied here. Furthermore, since subject-verb word order variation rarely yields ungrammaticality, as discussed in Chapter 1, instructors of Spanish are not likely to provide explicit instruction on when postverbal subjects can be used, independently of the passive structures previously mentioned. It is possible that instructors may field questions from students pertaining to word order, but they are most likely to refer to the flexible nature of word order in Spanish for stylistic purposes, rather than to discuss the role of focus context or verb type.

1.2. Tasks

1.2.1. Object placement task

An object placement test (see Appendix G) was conducted in order to ensure that all participants knew to place object clitics in preverbal position. The task consisted of six transitive verbs requiring one clitic and six ditransitive verbs requiring two clitics. Unfortunately, the test could not include topicalized object items, which also require a preverbal clitic, since that would also serve as instruction on placing subjects in postverbal position, which would affect the results of the study. However, knowledge of the preverbal clitic in these contexts is not necessary to test
subject placement, so lack of practice should not confound results. All participants demonstrated correct clitic placement in preverbal position before completing further tasks. The object placement task also aimed at being a distractor for the controlled production task, since participants were focusing on object placement rather than subject placement. This also allowed the intransitive verbs, which don’t require clitics, to serve as distractors for the transitive verbs, which do require clitics.

1.2.2. Controlled oral production task

The ability to use postverbal subjects was measured using a controlled oral production task. An oral task was employed since subject placement is directly related to nuclear stress placement for the structures being examined, a factor that cannot be captured in a written task. Participants were shown a picture to provide the context and clicked to hear a question, which they answered out loud based on what they saw in the picture. In order to ensure familiarity with the vocabulary, all vocabulary was taken from the Spanish textbooks *Vistazos* (VanPatten, Lee, Ballman, & Farley, 2007) and *Sabías Que...* (VanPatten, Lee, Ballman, & Farley, 2009), which are used in introductory Spanish classes at Georgetown. Images were taken from the CD for instructors that accompanies *Puntos de Partida* (Knorre, 2008), another introductory Spanish textbook.

The controlled production task consisted of 90 items (see Appendix A). First, items were divided into three discourse contexts with 30 items in each group: narrow, wide, and contrastive focus, which was established by the type of question asked, as shown in the following examples in (4.1).

(4.1)  
\[
\text{a. ¿Quién corre?} \quad \text{Narrow focus}
\]

‘Who is running?’
b. ¿Qué pasa en el dibujo?  
‘What is happening in the picture?’

Wide focus

c. ¿Qué pasa con las palomitas?  
‘What is happening with the popcorn?’

Wide focus with topicalized object

d. ¿Compra el cuaderno Pedro?  
‘Is Pedro buying the notebook?’

Contrastive focus

To the best of my knowledge, no studies have examined contrastive focus, so this marks an important advance in the field. Second, each set of 30 items within each discourse context was subdivided by verb type: unaccusative, unergative, transitive, ditransitive, and topicalized object, with six items in each group. Unaccusative and unergative verbs were included to be comparable with previous research on postverbal subjects, as they are the principle verb types studied in relation to subject word order in Spanish. As discussed earlier in Chapter 1, subjects of unaccusative verbs show a marked tendency for postverbal position (Suñer, 1982; Contreras, 1976) in wide focus while unergative verbs must have a preverbal subject. Therefore, the use of postverbal subjects in wide focus by L2 learners can indicate whether or not learners make a distinction between the two verb types. It also serves to examine whether postverbal subject use is truly a factor that distinguishes between these verb types in Spanish, as questioned previously by Montrul (2005). Transitive and ditransitive verbs, which have been understudied in Spanish as related to postverbal subjects, as well as topicalized objects were included to extend previous research and to examine the role of objects and object clitics in subject placement.

For all items, the verb in the question was conjugated in the present indicative tense in order to accommodate the low-proficiency participants. The three different question types served as distractors for each other, so no other fillers were used since the task was already rather lengthy at 90 items. The conjugated verb form, either 3rd person singular or plural, that the
participants needed to use in their response always appeared at the top of the screen above the picture. This was done in order to oblige participants to use active voice sentences, rather than passive sentences, which would be an option for the topicalized object sentences. For the topicalized object items, the participants were prompted to begin their sentence with the object, which appeared above the picture in addition to the verb. Similarly, for the contrastive focus items, participants were prompted to begin their sentence with *No,...*, which appeared above the picture in addition to the verb. In order to ensure participants understood the instructions and could appropriately respond to the items, five practice items were presented at the start of the task. There was no time limit for completion of each item, and participants were permitted to listen to the questions more than once and ask questions if they did not understand a vocabulary word. All items were randomized for their order of presentation.

1.2.3. Acceptability judgment task

The ability to accept postverbal subjects as appropriate in certain contexts was measured with an acceptability judgment task, which took a similar format to the controlled oral production task. Participants were shown a picture and clicked to hear first a question and then an answer to the question. The participants were required to rate the answer sentence on a five-point Likert scale indicating whether or not they deemed the sentence as a natural and appropriate sounding way to answer the question given, with five being completely natural and appropriate and one being completely unnatural and inappropriate (see Appendix B). A five-point scale was employed rather than providing only two options (correct or incorrect) since it is not measuring grammaticality, but rather whether or not a grammatical sentence fits the context at hand. The participants were not told to rate the sentences based solely on subject position,
since this would inform them of the target item under investigation. Therefore, if they rated a sentence as less than a five, they were required to state a sentence that they deemed more appropriate. This allowed me to interpret whether the lower ratings were in fact due to subject placement or to other factors. The aural presentation of the answer sentences is crucial to this experiment in order to examine the relationship between nuclear stress placement and subject placement.

Like the controlled production task, the acceptability judgment task consisted of 90 items (see Appendix B): 30 for each of three discourse contexts (narrow, wide, and contrastive focus), which were in turn subdivided by verb type: unaccusative, unergative, transitive, ditransitive, and topicalized object, with six items in each group. Within each subgroup, two of the answer sentences contained a preverbal subject, two contained a postverbal subject, and two contained a preverbal subject with a nuclear stress mismatch. In the narrow and contrastive focus contexts, the mismatch consisted of a focused, preverbal subject with nuclear stress in sentence-final position. In the wide focus contexts, the mismatch was opposite, in that the preverbal subject received the nuclear stress even though it was not focused and the whole sentence is the new information. Examples of the possible answer types are shown for wide focus in (4.2), narrow focus in (4.3), and contrastive focus in (4.4), where the capital letters represent the word that bears nuclear stress.

(4.2)  Qué pasa en el dibujo?  (wide focus)
       ‘What is happening in the picture?’
   a. Arregla la ropa RAFAEL.  (postverbal)
   b. Rafael arregla la ROPA.  (preverbal)
   c. RAFAEL arregla la ropa.  (mismatch)

Rafael is arranging the clothes.

(4.3) ¿Quién le devuelve el disco a Margarita?  (narrow focus)
‘Who returns the disk to Margarita?’

a. Se lo devuelve ANITA. (postverbal)
b. ANITA se lo devuelve. (preverbal)
c. Anita se lo DEVUELVE. (mismatch)

‘Anita returns it to her.’

(4.4) ¿Llama a Marta Ricardo? (contrastive focus)
‘Is Ricardo calling Marta?’

a. No, la llama SERGIO. (postverbal)
b. No, SERGIO la llama. (preverbal)
c. No, Sergio la LLAMA. (mismatch)

‘No, Sergio is calling her.’

For narrow focus in (4.3) and contrastive focus in (4.4), the (a) answers should be rated higher than the (b) answers, but it is not expected that the (b) answers be rated as inappropriate. The (c) answers, on the other hand, should be rated as inappropriate because they do not answer the question provided. The answer in (4.3c) answers a wide focus question, such as ¿Qué pasa con el disco de Margarita? ‘What is happening to Margarita’s CD?’. The answer in (4.4c) answers a contrastive focus question that questions the verb rather than the subject, such as ¿Le escribe una carta a Marta Ricardo? ‘Is Ricardo writing Marta a letter?’. For wide focus in (4.2), the (a) answer should only be deemed appropriate with unaccusative verbs and topicalized objects. The (b) answer should be rated highest for unergative, transitive, and ditransitive verbs. The (c) answer should be rated inappropriate with all verb types, as it does not answer the question given. Rather, it answers a narrow focus question such as ¿Quién arregla la ropa? ‘Who is arranging the clothes?’.

Once again, for all items, the conjugated verb form that the participants needed to use in their response appeared on the screen in order to discourage the participants from changing the active voice to the passive voice. However, there was nothing in place to oblige them to keep the
topicalized object in preverbal position. In order to ensure that participants understood the instructions and could appropriately rate and correct the items, five practice items were presented at the start of the task. There was no time limit for completion of each item, and participants were permitted to listen to the questions and answers more than once and ask questions if they didn’t understand a vocabulary word. All items were randomized for their order of presentation.

1.2.4. Exit questionnaire

An exit questionnaire (see Appendix F) was administered to examine whether the participants were able to ascertain that the experiment was specifically analyzing subject placement, to see if L2 learners have any knowledge of the grammaticality of postverbal subjects and their specific uses, and to survey where they gained this knowledge. Table 6 shows that only a relatively low percentage of participants were able to determine the target item being analyzed, based on an exit questionnaire with a free-response question asking them what the study was about.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Subject word order</th>
<th>Object pronouns</th>
<th>General word order</th>
<th>General proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>21</td>
<td>15.40%</td>
<td>16.30%</td>
<td>14.30%</td>
<td>27.80%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24</td>
<td>23.10%</td>
<td>18.60%</td>
<td>25.00%</td>
<td>27.80%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>20</td>
<td>0.00%</td>
<td>27.90%</td>
<td>7.10%</td>
<td>27.80%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>25</td>
<td>46.20%</td>
<td>20.90%</td>
<td>21.40%</td>
<td>16.70%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>19</td>
<td>7.70%</td>
<td>2.30%</td>
<td>3.60%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>18</td>
<td>7.70%</td>
<td>14.00%</td>
<td>28.60%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
The ‘subject word order’ category refers to responses specifically mentioning subject placement. This awareness by participants of the importance of subject placement in the experiment may have affected performance on the task by leading to more explicit focus on subject placement in formulating their responses; therefore we should keep this in mind in interpreting the results, especially at the high advanced level. The ‘object pronoun’ category refers to answers that assumed the task was examining direct and/or indirect object placement, indicating the object clitic task served as a distractor to some extent. The ‘general word order’ category refers to answers that mentioned word order or syntax without making specific reference to parts of the sentence, specifically not mentioning the subject. Finally, the ‘general proficiency’ category refers to responses indicating that the experiment was examining overall proficiency or other components such as comprehension, production, speaking, listening, grammar, vocabulary, fluidity, naturalness, native-like-ness, or question-answering skills.

1.3. Procedure

Participants took part in two sessions in a computer lab at a time of their choosing. Participants recruited from Spanish classes at Georgetown were awarded three extra credit points on an exam in their Spanish class in exchange for their participation. Native speaking participants as well as the advanced learners recruited outside of Spanish classes were entered into a raffle to win a $50 Visa gift card in exchange for their participation. There were two raffles; one for NSs and one for non-native speakers.

Participants completed all sessions and tasks individually while being monitored by the researcher to ensure tasks were completed appropriately. Tasks were self-paced which resulted in session length varying across participants, but ranged from 30 to 60 minutes per session. During session one, the object placement test was conducted first, followed by the controlled production
task. The controlled production task was divided into two 45-item halves. After the first half, participants completed the EIT and then completed the second half of the controlled production task. This was done to give the participants a break from answering the questions. Session two was completed five to ten days after completing the production task, and consisted of the acceptability judgment task, which was also divided into two 45-item halves. After the first half, participants completed the language background questionnaire and then completed the second half. This was done to give the participants a break from evaluating the questions. The production task was completed prior to the acceptability judgment task so that items on the acceptability judgment task did not serve as additional input and affect performance on the production task. All responses for the production task, the EIT, and the ratings on the acceptability task were aurally recorded using Audacity software. Questionnaire responses were submitted via Google Forms, and the object placement test was administered with pencil and paper.

1.4. Coding and analysis

All responses on the production task were divided up equally and transcribed by the same three independent raters who transcribed and coded the EIT. Each response was coded by the author according to subject placement. Originally, there were two categories, preverbal subject and postverbal subject. However, due to the variety of participant responses, two more categories were added, yielding four category types: preverbal subject, postverbal subject, passive structure, and other structure.

18 Unfortunately, no interrater reliability was checked since there was only one rater. This is true of the reformulations on the acceptability judgment task as well. However, coding was discussed and verified with the dissertation director as to categorization of subjects.
The other-structure category consisted of sentences with null subjects, as in (4.5a), a response that did not match the question asked, as in (4.5b), and using the verb differently from the way it was intended which affected the variables being examined, as in (4.5c):

(4.5)  
   a. El taxi lo toman. (participant 2)  
        ‘The taxi (they) take it.’
   
       b. El taxi está recogiendo a los Torres. (participant 4)  
           ‘The taxi is picking up the Torres’s.’
   
       c. El billete tiene un sentimiento de sol. (participant 14)  
           ‘The ticket has a sentiment of sun.’

Eight NSs and one L2 learner also used cleft structures, as shown in (4.6). These are grammatical ways to answer the questions asked, but employ a syntactic structure that varies greatly from that of a simple sentence with a pre- or postverbal subject; therefore they were also grouped in the other category and will not be analyzed individually.

(4.6)  
   a. No, es Pilar quien baila. (participant 94)  
       ‘No, it is Pilar who dances.’
   
       b. Alberto es quien toma la foto. (participant 77)  
           ‘Alberto is the one who takes the picture.’
   
       c. Quien llega es el Sr. López. (participant 100)  
           ‘He who arrives is Mr. López.’

The passive structures were only obtained with items in which a topicalized object was elicited and included the use of the passive se with no subject present, as in (4.7a), use of the passive se with an ungrammatical subject, as in (4.7b), the periphrastic passive using the copula ser + past participle, as in (4.7c), and use of the agentive prepositional phrase por + agent ‘by agent,’ which occurred ungrammatically with the passive se, as in (4.7d). Many participants also
used a prepositional phrase *de* + agent, which was not grammatical but were deemed to be a learner realization of the agentive prepositional phrase and thus coded as passive, as in (4.7e).

(4.7)  

a. Las palomitas se comen.  
‘The popcorn is eaten.’  
(participant 74)

b. Las paredes se pintan Sergio.  
‘The walls are painted Sergio.’  
(participant 13)

c. Las revistas son vendidas por Jimena.  
‘The magazines are sold by Jimena.’  
(participant 14)

d. *El tractor se conduce por Paco.  
‘The tractor is driven by Paco.’  
(participant 24)

e. *La cama hace de Leya.  
‘The bed is made from Leya.’  
(participant 21)

There was one unexpected structure produced only with target items eliciting topicalized objects in which the verb was not used passively and the subject was in postverbal position preceded by the preposition *a*, as shown in (4.8):

(4.8)  

Las paredes pinta a Sergio.  
‘Sergio paints the walls.’  
(participant 37)

The structure was produced by 14 participants, including participants from low, intermediate, and low advanced, with 69 exemplars across those participants. It was produced with both intransitive verbs, where there is no logical object of the sentence, in addition to with transitive verbs. In determining how to code this structure, two possibilities were considered: a postverbal subject or a passive with the preposition *a* instead of *por* ‘by’ in the agentive prepositional phrase. As the example in (4.8) shows, the verb is in the active voice because there is no copula or passive *se*. We also see that the verb agrees with the subject and not the object. In a passive
structure, the verb agrees in person and number with the patient, in this case *las paredes* ‘the walls’ and not with the agent *Sergio*. All participants who demonstrated use of this structure demonstrated agreement with the subject in cases where the subject and object differed in number. Based on this evidence, these structures were coded as postverbal subjects.

However, it still needs to be understood why the learners are using the *a* with the postverbal subject. The preposition *a* is used to mark objects when they are animate and specific, an aspect known as the personal *a*. Since the object is canonically found in postverbal position, it is hypothesized that the learners are generalizing the use of the *a* with human nouns and employing the *a* as a subject marker when the subject occurs in the canonical object position. For most of the verbs employed, there is an inanimate object incapable of being conceived of as an agentive subject, such as in (4.8), where it is illogical for *las paredes* ‘the walls’ to be capable of painting *Sergio*. Therefore the human agent with an apparent object marker must be conceived of as the subject, which lends more support to the assumption that the postverbal nouns with the *a* marker are in fact subjects. Since the target items did not control for the number and person of the subjects and objects, there is very little evidence available to examine verbal agreement and the use of the *a* with subjects. Therefore it is beyond the scope of this dissertation to prove this to be the case and it will be left to future research.

All ratings from the acceptability task were computerized and all sentence reformulations were transcribed by the researcher. Ratings based on 5-point Likert data was converted into percentages for expository purposes in the results section, with a score of 5 equaling 100% acceptance and a score of 1 equaling 0% acceptance, but the 1-5 scores were used for data

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19 It could be suggested that these structures are more appropriately categorized in the “other” category. However, it was only produced by participants in the low, intermediate, and low advanced groups who show an overall low number of postverbal subjects. These structures will only affect the results of Section 2.2.5 with topicalized objects, and these structure will be considered when drawing conclusions about the performance of these three groups.
analysis. Reformulations of sentences rated as less than five were coded according to the same four categories used in the controlled production task described above, preverbal subject, postverbal subject, passive structure, and other structures. The same participants who used cleft structures on the production task used them in reformulations on the acceptability task and they were still coded as other. No instances of the supposed subject marker a appeared in the corrections, since those participants who used it on the production task, chose to reformulate topicalized object sentences by removing the preverbal object and using SVO word order with the lexical object in postverbal position.

2. Results – Controlled production task

2.1. Research question 1: In which discourse contexts do native speakers and English-speaking L2 learners of Spanish produce postverbal subjects?

In order to answer RQ1, regarding which discourse contexts elicit postverbal subjects in NSs and L2 learners, frequencies of each response type (preverbal, postverbal, other\textsuperscript{20}) on the controlled production task were calculated regardless of verb type. For this analysis, topicalized object items were excluded since they require postverbal subjects regardless of discourse context. Table 7 presents the frequencies of each answer type produced broken down by proficiency level and discourse context, with a graphic representation in Figure 2\textsuperscript{21}. The following hierarchy of focus contexts which yield postverbal subjects becomes apparent: wide focus < narrow focus < contrastive focus. Postverbal subjects are most common in contrastive focus, where all groups produced them and for L2 learners, frequency rises as proficiency increases. In narrow focus, only NSs from Spain and the high advanced learners produced a

\textsuperscript{20} With topicalized objects removed for this analysis, there were no passives produced.

\textsuperscript{21} Graphic representations and statistical analyses will focus only on comparison of pre- and postverbal subjects, as they are the only structures of interest for the present study.
notable amount of postverbal subjects. Finally, in wide focus, frequency is low for all groups. Only in contrastive focus do any groups, the high advanced learners and the NSs from Spain, show more postverbal than preverbal subjects. Perhaps the most interesting result is that the NSs from Spain are producing more postverbal subjects than the speakers from Latin America, across all three discourse focus contexts.

Table 7. Frequencies of answer types by focus context (topics removed)

<table>
<thead>
<tr>
<th>Focus Context</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wide Focus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>98.60%</td>
<td>0.90%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>99.80%</td>
<td>0.00%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>96.90%</td>
<td>2.90%</td>
<td>0.20%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>88.00%</td>
<td>12.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>91.20%</td>
<td>8.40%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>98.40%</td>
<td>1.10%</td>
<td>0.50%</td>
</tr>
<tr>
<td><strong>Narrow Focus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>98.80%</td>
<td>0.50%</td>
<td>0.70%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>98.70%</td>
<td>0.50%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>96.40%</td>
<td>3.10%</td>
<td>0.40%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>72.70%</td>
<td>27.10%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>60.50%</td>
<td>33.70%</td>
<td>5.80%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>88.90%</td>
<td>6.30%</td>
<td>4.70%</td>
</tr>
<tr>
<td><strong>Contrastive Focus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>77.10%</td>
<td>18.80%</td>
<td>4.10%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>69.50%</td>
<td>22.50%</td>
<td>8.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>58.60%</td>
<td>38.90%</td>
<td>2.50%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>22.60%</td>
<td>74.80%</td>
<td>2.50%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>21.30%</td>
<td>63.60%</td>
<td>15.10%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>52.10%</td>
<td>35.40%</td>
<td>12.50%</td>
</tr>
</tbody>
</table>

Figure 2. Frequencies of answer types by focus context (topics removed)
A 3x6 ANOVA, with focus context and proficiency group as independent variables and subject position as the dependent variable, was run to compare the ratio of pre- and postverbal subjects produced by each of the six groups across the three focus contexts. This analysis treated production of pre- and postverbal subjects as a continuous variable from 0-1, and thus compares the ratio of pre- to postverbal subjects rather than the frequencies of each in order to determine which subject position was produced significantly more often. A significant effect for focus context was found, $F(2, 10217)=803.76$, $p=.000$, partial $\eta^2=.14$, power=1.00, with a large effect size. I follow Cohen (1988) for partial $\eta^2$, where 0.01 represents a small effect size, 0.06 represents a medium effect size, and .14 represents a large effect size. The post hoc Scheffé test indicated a significant difference between the ratios of pre- to postverbal subjects between all three focus contexts, with contrastive focus producing the largest amount of postverbal subjects across groups. There was also a significant effect for proficiency, $F(5, 10217)=350.33$, $p=.000$, partial $\eta^2=.14$, power=1.00, with a large effect size. Post hoc Scheffé indicated a significant difference between all groups except low and intermediate and high advanced and NSs from Spain. A significant interaction between focus context and proficiency was also found, $F(10, 10217)=24.86$, $p=.000$, partial $\eta^2=.02$, power=1.00, with a small effect size.

In order to understand the interaction between proficiency and focus context, individual one-way ANOVAs and post hoc Scheffé tests were run for each proficiency group, with focus context as the independent variable and subject position ratio as the dependent variable. Significant differences between focus contexts were found for all six proficiency groups. For low, intermediate, and low advanced learners and NSs from Latin America, narrow and wide focus were not significantly different, but contrastive focus was significantly different from both wide and narrow focus, all with large effect sizes: Low: $F(2, 1269) = 88.73$, $p=.000$, partial
$\eta^2 = .12$, power = 1.00, Intermediate: $F(2, 1738) = 182.900$, $p = .000$, partial $\eta^2 = .17$, power = 1.00,
Low advanced: $F(2, 1326) = 202.12$, $p = .000$, partial $\eta^2 = .23$, power = 1.00, NSs from Latin America: $F(2, 1064) = 156.87$, $p = .000$, partial $\eta^2 = .23$, power = 1.00. For high advanced learners and NSs from Spain, there were significant differences between all three focus contexts with a large effect size: High advanced: $F(2, 1850) = 437.56$, $p = .000$, partial $\eta^2 = .32$, power = 1.00, NSs from Spain: $F(2, 1197) = 268.76$, $p = .000$, partial $\eta^2 = .31$, power = 1.00.

To compare the differences between the ratios of subject placement of each proficiency group within each focus context, individual one-way ANOVAs and post hoc Scheffe tests were run for each focus context with proficiency group as the independent variable and subject placement ratio as the dependent variable. For all three focus contexts, there was a significant difference by proficiency level, with a small effect size for wide focus: $F(5,3475) = 48.17$, $p = .000$, partial $\eta^2 = .07$, power = 1.00, a large effect size for narrow focus: $F(5,3444) = 135.14$, $p = .000$, partial $\eta^2 = .16$, power = 1.00, and a large effect size for contrastive focus: $F(5,3304) = 179.26$, $p = .000$, partial $\eta^2 = .21$, power = 1.00. For both wide and contrastive focus, the following proficiency hierarchy emerges, low and intermediate < low advanced and NSs from Latin America < high advanced and NSs from Latin America, where the low and intermediate learners produced significantly fewer postverbal subjects than the low advanced learners and the NSs from Latin America, who in turn produced significantly fewer than the high advanced learners and the NSs from Spain, who produced the most postverbal subjects and more than preverbals.

For narrow focus, the low, intermediate, and low advanced learners produced similar rates of postverbal subjects but significantly fewer than all other groups, and the NSs from Latin America, the NSs from Spain, and the high advanced learners were all significantly different from each other. This indicates that in wide and contrastive focus the low advanced learners
performed like NSs from Latin America and the high advanced learners performed like NSs from Spain, but no learner group performed like NSs in narrow focus.

In order to determine whether participants within the same proficiency group produced a significantly different amount of pre- and postverbal subjects within each focus context, chi-square analyses were run comparing frequencies of subject placement. There was a significant difference between pre- and postverbal subjects for all proficiency groups in all focus contexts:

Low, narrow: $X^2(1) = 420.04$, $p=.000$; Low, wide: $X^2(1) = 414.15$, $p=.000$; Low, contrastive: $X^2(1) = 153.39$, $p=.000$; Intermediate, narrow: $X^2(1) = 581.06$, $p=.000$; Intermediate, contrastive: $X^2(1) = 144.07$, $p=.000$; Low advanced, narrow: $X^2(1) = 391.76$, $p=.000$; Low advanced, wide: $X^2(1) = 396.51$, $p=.000$; Low advanced, contrastive: $X^2(1) = 17.76$, $p=.000$; High advanced, narrow: $X^2(1) = 129.67$, $p=.000$; High advanced, wide: $X^2(1) = 360.06$, $p=.000$; High advanced, contrastive: $X^2(1) = 174.01$, $p=.000$; NSs Spain, narrow: $X^2(1) = 32.65$, $p=.000$; NSs Spain, wide: $X^2(1) = 297.08$, $p=.000$; NSs Spain, contrastive: $X^2(1) = 90.50$, $p=.000$; NSs Latin America, narrow: $X^2(1) = 271.38$, $p=.000$; NSs Latin America, wide: $X^2(1) = 359.17$, $p=.000$; NSs Latin America, contrastive: $X^2(1) = 11.99$, $p=.001$. There is no analysis result for intermediate, wide focus because they produced no postverbal subjects. Only in contrastive focus are postverbal subjects produced significantly more than preverbs and only by the high advanced learners and the NSs from Spain. Even though all groups produced postverbal subjects in narrow focus, it was never at a higher frequency than preverbal subjects.

In answering RQ 1, results indicate that significantly more preverbal subjects are produced than postverbal subjects in wide focus and narrow focus by all groups. All groups produce significantly more postverbal subjects in contrastive focus as compared to the other two focus contexts, and high advanced learners and NSs from Spain produced significantly more
postverbal subjects than preverbal subjects in contrastive focus. Also in contrastive focus, the high and low advanced groups performed like NSs. Importantly, there seems to be a dialectal difference in subject placement between speakers from Latin America and speakers from Spain, for which an explanation will be provided in Chapter 5. Results indicate that the high advanced learners produced postverbal subjects at the same rate as NSs from Spain while the low advanced learners produced them at the same rate as NSs from Latin America. This is a recurrent finding throughout the results, and I argue that the advanced learners are not necessarily assimilating the NS norm of a particular dialect due to exposure to input from those regions, but rather the performance by the low advanced learners and the NSs from Latin America represent intermediary stages of language change which will be understood through the syntactic analysis of postverbal subjects. For the low advanced learners, this represents an intermediate stage in the acquisition process, while for the NSs from Latin America, this represents a variety of Spanish which differs from the canonical standard. I go into more detail on the apparent similarity between these two groups of speakers in Chapter 5.

2.2. Research question 2: With which verb types do native speakers and English-speaking L2 learners of Spanish produce postverbal subjects?

In order to answer RQ2, regarding which verb types elicit postverbal subjects in NSs and L2 learners, frequencies of each response type (preverbal, postverbal, other) were calculated based on verb type. In Table 8 we can see the distribution of pre- and postverbal subjects by verb type, regardless of focus, for the six participant groups, with a graphic representation in Figure 3. This is relevant in comparing the unaccusative verbs, which theoretically should permit postverbal subjects regardless of focus context, while all other verb types should ban postverbal subjects unless focus is taken into account. In Figure 3, we can see that more postverbal subjects
are produced with unaccusative verbs, which approach the same frequency as preverbal subjects by NSs from Spain and the high advanced learners.

Table 8. Frequencies of answer types by verb type

<table>
<thead>
<tr>
<th>Verb Type</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unaccusative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>88.60%</td>
<td>9.90%</td>
<td>1.50%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>86.20%</td>
<td>11.60%</td>
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</tr>
<tr>
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</tr>
<tr>
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<tr>
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<td><strong>Transitive</strong></td>
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<td>5.90%</td>
<td>0.90%</td>
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<tr>
<td>Intermediate</td>
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<td>Native – L.A.</td>
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<tr>
<td><strong>Ditransitive</strong></td>
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<tr>
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<td>4.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>86.10%</td>
<td>9.20%</td>
<td>4.70%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>85.40%</td>
<td>12.20%</td>
<td>2.40%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>67.50%</td>
<td>31.20%</td>
<td>1.30%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>63.30%</td>
<td>29.90%</td>
<td>6.70%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>85.90%</td>
<td>12.00%</td>
<td>2.10%</td>
</tr>
</tbody>
</table>

A 4x6 ANOVA was run, with verb type and proficiency group as independent variables and ratio of subject placement as the dependent variable, to compare production of postverbal subjects between groups across verb types. A significant effect for verb type was found, F(3, 8438)=36.90, p=.000, partial η²=.01, power=1.00, with a small effect size, and the post hoc Scheffé indicated that the ratio of subject placement for unaccusative verbs was significantly different from that of all other verb types, as we saw in Figure 3. Based on this finding, it becomes apparent that postverbal subjects are produced significantly more with unaccusative
verbs, consistent with the theoretical underpinnings (Suñer, 1982; Contreras, 1978), but only to a small degree as indicated by the small effect size. There was also a significant effect for proficiency group, $F(5, 8438) = 213.17, p=.000$, partial $\eta^2=.11$, power=1.00, with a large effect size.

Figure 3. Frequencies of answer types by verb type

An interaction was also found between verb type and proficiency group, $F(15, 8438)=2.97, p=.000$, partial $\eta^2=.01$, power=1.00, once again with a small effect size. To understand the interaction, first, a one-way ANOVA and post hoc Scheffé tests were run on each proficiency group separately with verb type as the independent variable. No significant difference was found by verb type for the low proficiency group, $F(3,1268) = 2.30, p=.08$, partial $\eta^2=.01$, power=0.58. For intermediate learners, the ratio of pre- to postverbal subjects for unaccusative verbs was significantly different from transitive and unergative verbs, $F(3, 1737) = 6.86, p=.000$, partial $\eta^2=.01$, power=0.98, with a small effect for more postverbals with unaccusative verbs. For the low advanced learners, the ratio for unaccusative verbs was significantly different from all other verb types, $F(3, 1325) = 7.97, p.000$, partial $\eta^2=.02$. 


power=0.99, with a small effect size for more postverbals with unaccusatives. For the high advanced learners, the ratio for unaccusative verbs was significantly different from transitive and ditransitive, but not unergative verb types, $F(3, 1849) = 16.95$, $p=.000$, partial $\eta^2=.03$, power=1.00, indicating they may not be distinguishing between the two types of intransitive verbs based on subject position (Montrul, 2009), or may be overgeneralizing the unaccusative postverbal subjects to unergatives, as found in previous production research (Hertel, 2003). This is similar to the pattern found for NSs from Spain, whose ratio for unaccusatives was significantly different from ditransitive and transitive, but not unergative, verbs, $F(3, 1196) = 5.49$, $p=.001$, partial $\eta^2=.01$, power=0.94, with a small effect size. Finally, for the NSs from Latin America, the ratio for unaccusative verbs was significantly different from all other verb types, $F(3, 1063) = 7.56$, $p=.000$, partial $\eta^2=.02$, power=0.99, with a small effect size for more postverbal subjects with unaccusative verbs. This data indicates that unaccusative verbs do in fact elicit more postverbal subjects; however, all of the effect sizes are relatively small, indicating that verb type does not play a strong role in determining subject placement. Importantly, unaccusative verbs do not pattern significantly differently from unergative verbs regarding subject placement, as commonly assumed in generative and L2 research on subject placement in Spanish.

Second, a one-way ANOVA and post hoc Scheffé tests were run on each verb type separately with proficiency group as the independent variable. For unaccusative verbs, there was a significant difference by group, $F(5,2108) = 61.63$, $p=.000$, partial $\eta^2=.13$, power = 1, with a medium effect size, where the ratio of pre- to postverbal subjects falls into the same hierarchy seen above for focus: low and intermediate < low advanced and NSs from Latin America < high advanced and NSs from Spain. The same effect for proficiency group was found with unergative
verbs, $F(5,3433) = 73.02$, $p=.000$, partial $\eta^2=.15$, power=1, with a large effect size, transitive verbs, $F(5,2118) = 48.82$, $p=.000$, partial $\eta^2=.10$, power=1, and ditransitive verbs, $F(5,2099) = 35.89$, $p=.000$, partial $\eta^2=.08$, power=1, both with medium effect sizes, where the ratio for the high advanced learners and the NSs from Spain was significantly different from the other groups. With all verb types, the high advanced learners performed like NSs from Spain, producing the most postverbal subjects, but never more than preverbal subjects. With unaccusative verbs, the low advanced learners were able to perform like NSs from Latin America, and even the low, intermediate, and low advanced learners performed like NSs from Latin America on unergative, transitive, and ditransitive verbs.

In order to compare frequency of preverbal to postverbal subjects within each proficiency group, chi-square analyses were conducted. Significant differences were found between frequency of pre- and postverbal subjects in all proficiency groups and with all verb types except with unaccusative verbs for high advanced learners, $X^2(1) = 0.22$, $p=.64$, and for NSs from Spain, $X^2(1) = 0.97$, $p=.33$, where the frequencies were not significantly different; low, unaccusative: $X^2(1) = 203.84$, $p=.000$, low, unergative: $X^2(1) = 250.48$, $p=.000$, low, transitive, $X^2(1) = 248.51$, $p=.000$, low, ditransitive, $X^2(1) = 246.72$, $p=.000$; intermediate, unaccusative, $X^2(1) = 255.64$, $p=.000$, intermediate, unergative: $X^2(1) = 350.22$, $p=.000$, intermediate, transitive, $X^2(1) = 355.06$, $p=.000$, intermediate, ditransitive, $X^2(1) = 277.78$, $p=.000$; low advanced, unaccusative, $X^2(1) = 98.38$, $p=.000$, low advanced, unergative: $X^2(1) = 163.94$, $p=.000$, low advanced, transitive, $X^2(1) = 212.80$, $p=.000$, low advanced, ditransitive: $X^2(1) = 183.56$, $p=.000$, high advanced, unergative, $X^2(1) = 9.13$, $p=.003$, high advanced, transitive, $X^2(1) = 76.17$, $p=.000$, high advanced, ditransitive: $X^2(1) = 62.55$, $p=.000$; NSs from Spain, unergative: $X^2(1) = 18.50$, $p=.000$, NSs from Spain, transitive: $X^2(1) = 27.33$, $p=.000$, NSs from
Spain, ditransitive: $X^2(1) = 38.62$, p=.000, NSs from Latin America, unaccusative: $X^2(1) = 69.06$, p=.000, NSs from Latin America, unergative: $X^2(1) = 141.63$, p=.000, NSs from Latin America, transitive: $X^2(1) = 160.48$, p=.000, NSs from Latin America, ditransitive: $X^2(1) = 157.69$, p=.000.

In answering RQ2 regarding which verb types elicit postverbal subjects, the data reveals that only unaccusative verbs yield a higher frequency of postverbal subjects but with only a small effect size. Once again, there is a dialectal difference between the speakers from Spain and those from Latin America, and the high advanced learners are performing similarly to the former, while the low advanced performed similarly to the latter. Once again, in the Chapter 5, I will argue that the advanced learners are not necessarily approximating the performance of a particular dialectal variety, but that the dialectal varieties represent different stages of language change, through which the learners pass in the process of acquisition. Since verb type alone did not seem to play a large role in determining subject position, I now look at the interaction between verb type and focus type.

2.2.1. Unaccusative verbs

Table 9 presents the frequencies of answer types in each discourse context for unaccusative verbs. The pattern of postverbal subject production for unaccusative verbs in Figure 4 mirrors the hierarchy shown in Figure 2 for discourse context, wide focus < narrow focus < contrastive focus, indicating that focus context plays a stronger role in determining subject position than verb type for both L2 learners and NSs; however, we will see an interaction between the two factors. Once again, we see the highest number of postverbal subjects in contrastive focus unaccusatives, followed by narrow focus, and the lowest amount in wide focus.
A 3x6 ANOVA, with focus context and proficiency group as independent variables and subject position as the dependent variable, was run to compare the ratio of pre- and postverbal subjects produced by each of the six proficiency groups across the three focus contexts with unaccusative verbs. A significant effect for focus context was found, F(2,2096) = 559.58, p=.000, partial $\eta^2$.35, power=1.00, with a large effect size. The post hoc Scheffé test confirmed that the wide < narrow < contrastive hierarchy is significant with unaccusative verbs. A significant effect for proficiency group was also found, producing the proficiency hierarchy seen previously, low and intermediate < low advanced and NSs from Latin America < high advanced and NSs from Spain, F(5,2096)=103.15, p=.000, partial $\eta^2$.20, power=1.00, with a large effect size. A significant interaction between focus context and proficiency was also found, F(10,2101)=13.80, p=.000, partial $\eta^2$.06, power=1.00, with a medium effect size.

Table 9. Frequencies of answer types for unaccusative verbs by focus

<table>
<thead>
<tr>
<th>Focus</th>
<th>Low</th>
<th>Intermediate</th>
<th>Low Advanced</th>
<th>High Advanced</th>
<th>Native – Spain</th>
<th>Native – L.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preverbal</td>
<td>97.20%</td>
<td>99.30%</td>
<td>94.60%</td>
<td>82.10%</td>
<td>86.90%</td>
<td>94.70%</td>
</tr>
<tr>
<td>Postverbal</td>
<td>1.90%</td>
<td>0.00%</td>
<td>4.50%</td>
<td>17.90%</td>
<td>13.10%</td>
<td>3.20%</td>
</tr>
<tr>
<td>Other</td>
<td>0.90%</td>
<td>0.70%</td>
<td>0.90%</td>
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<td>0.00%</td>
<td>2.10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus</th>
<th>Low</th>
<th>Intermediate</th>
<th>Low Advanced</th>
<th>High Advanced</th>
<th>Native – Spain</th>
<th>Native – L.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrow</td>
<td>99.10%</td>
<td>99.30%</td>
<td>94.60%</td>
<td>62.80%</td>
<td>54.60%</td>
<td>86.30%</td>
</tr>
<tr>
<td>Focus</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>0.90%</td>
<td>0.00%</td>
<td>4.50%</td>
<td>37.20%</td>
<td>38.90%</td>
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<tr>
<td>Intermediate</td>
<td>0.00%</td>
<td>0.70%</td>
<td>0.00%</td>
<td>6.50%</td>
<td>8.40%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>94.60%</td>
<td>4.50%</td>
<td>0.00%</td>
<td>6.50%</td>
<td>8.40%</td>
<td>0.90%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>62.80%</td>
<td>37.20%</td>
<td>0.00%</td>
<td>6.50%</td>
<td>8.40%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>54.60%</td>
<td>38.90%</td>
<td>0.00%</td>
<td>8.40%</td>
<td>8.40%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>86.30%</td>
<td>5.30%</td>
<td>0.90%</td>
<td>8.40%</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Focus</th>
<th>Low</th>
<th>Intermediate</th>
<th>Low Advanced</th>
<th>High Advanced</th>
<th>Native – Spain</th>
<th>Native – L.A.</th>
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<td>Focus</td>
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<td></td>
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<td></td>
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<tr>
<td>Low</td>
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<td>34.70%</td>
<td>58.90%</td>
<td>91.00%</td>
<td>79.40%</td>
<td>58.50%</td>
</tr>
<tr>
<td>Intermediate</td>
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<td>1.90%</td>
<td>15.00%</td>
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</tr>
<tr>
<td>Low Advanced</td>
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<td>58.90%</td>
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<td>1.90%</td>
<td>15.00%</td>
<td>14.90%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>7.10%</td>
<td>91.00%</td>
<td>1.90%</td>
<td>15.00%</td>
<td>14.90%</td>
<td>14.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>5.60%</td>
<td>79.40%</td>
<td>15.00%</td>
<td>14.90%</td>
<td>14.90%</td>
<td>14.90%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>26.60%</td>
<td>58.50%</td>
<td>14.90%</td>
<td>14.90%</td>
<td>14.90%</td>
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</table>
In order to understand the interaction, individual one-way ANOVAs were run on each proficiency group. Significant differences between focus contexts were found for all six proficiency groups, however a post hoc Scheffé test indicated that the wide < narrow < contrastive hierarchy is only significant for high advanced, $F(2, 461) = 153.41, p=.000$, partial $\eta^2=.40$, power=1.00, and the NSs from Spain, $F(2, 296) = 112.64, p=.000$, partial $\eta^2=.43$, power=1.00, both with large effect sizes. For all other groups, narrow and wide focus show no significant difference, but they are significantly different from contrastive, with the hierarchy wide and narrow < contrastive, low: $F(2, 316) = 32.59, p=.000$, partial $\eta^2=.17$, power=1.00, intermediate: $F(2, 436) = 85.21, p=.000$, partial $\eta^2=.28$, power=1.00, low advanced: $F(2, 330) = 101.57, p=.000$, partial $\eta^2=.38$, power=1.00, NSs from Latin America: $F(2, 257) = 118.80, p=.000$, partial $\eta^2=.48$, power=1.00, all with large effect sizes.

![Figure 4](image.png)

**Figure 4. Frequencies of answer types for unaccusative verbs by focus**

To compare the differences between the ratios of subject placement of each proficiency group within each focus context, individual one-way ANOVAs and post hoc Scheffé tests were run for each focus context. For contrastive focus, the same hierarchy of proficiency as was seen
above in Figure 2 emerges, low and intermediate < low advanced and NSs from Latin America < high advanced and NSs from Spain, $F(5,674) = 53.37$, $p = .000$, partial $\eta^2 = .28$, power = 1.00, with a large effect size. For narrow and wide focus, the hierarchy changes to low, intermediate, low advanced, and NSs Latin America < high advanced & NSs Spain, narrow focus $F(5,705) = 43.85$, $p = .000$, partial $\eta^2 = .24$, power = 1.00 with a large effect size for and wide focus $F(5,717) = 11.13$, $p = .000$, partial $\eta^2 = .07$, power = 1 with a medium effect size. Crucially, with unaccusative verbs in contrastive focus, both advanced learner groups and both NS groups produced significantly more postverbal subjects than preverbal subjects, indicating that the verb type and the focus type have an interaction. While unaccusative verbs alone did not appear to favor postverbal position, when combined with contrastive focus, unaccusative verbs strongly favor postverbal position.

Finally, chi-square analyses were conducted to determine whether the frequencies of subject placement within each group were significantly different within unaccusative verbs. Significant differences were found for subject placement by all groups in all focus contexts except the NSs from Spain in narrow focus, $\chi^2(1) = 2.86$, $p = .09$, and low advanced in contrastive focus, $\chi^2(1) = 3.97$, $p = .05$; low, narrow: $\chi^2(1) = 104.04$, $p = .000$, low wide: $\chi^2(1) = 99.15$, $p = .000$, low, contrast: $\chi^2(1) = 20.35$, $p = .000$; intermediate, contrast: $\chi^2(1) = 10.17$, $p = .000$; low advanced, narrow: $\chi^2(1) = 91.90$, $p = .000$, low advanced, wide: $\chi^2(1) = 91.90$, $p = .000$; high advanced, narrow: $\chi^2(1) = 10.26$, $p = .001$, high advanced, wide: $\chi^2(1) = 64.10$, $p = .000$, high advanced, contrast: $\chi^2(1) = 111.48$, $p = .000$; NSs Spain, wide: $\chi^2(1) = 58.33$, $p = .000$, NSs Spain, contrast: $\chi^2(1) = 68.58$, $p = .000$, NSs Latin America, narrow: $\chi^2(1) = 68.15$, $p = .000$, NSs Latin America, wide: $\chi^2(1) = 81.39$, $p = .000$, $p < .05$, NSs Latin America, contrast: $\chi^2(1) = 11.25$, $p = .000$. 
In narrow focus, the NSs from Spain produced more pre- than postverbal subjects, but not significantly. In contrastive focus, the low advanced learners produced more post- than preverbal subjects, but not significantly. It is important to note that in contrastive focus, high advanced, low advanced, NSs from Spain, and NSs from Latin America all produced more post than preverbal subjects. However, in Figure 2 in Section 2.1. of the current chapter, we saw that only high advanced and NSs from Spain produced more post than preverbal subjects in contrastive focus without consideration of verb type. Therefore, we can see the interaction between verb type and focus context; where the preference for postverbal subjects with unaccusative verbs assumed in previous research is only evident contrastive focus.

### 2.2.2. Unergative verbs

<table>
<thead>
<tr>
<th>Focus</th>
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<th>Postverbal</th>
<th>Other</th>
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</thead>
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<tr>
<td></td>
<td>Intermediate</td>
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<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>96.40%</td>
<td>3.60%</td>
<td>0.00%</td>
</tr>
<tr>
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<td>High Advanced</td>
<td>82.70%</td>
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<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
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<td>11.10%</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Native – L.A.</td>
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<tr>
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<td>0.70%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
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</tr>
<tr>
<td></td>
<td>High Advanced</td>
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</tr>
<tr>
<td></td>
<td>Native – Spain</td>
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<td>10.20%</td>
</tr>
<tr>
<td></td>
<td>Native – L.A.</td>
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<td>3.20%</td>
<td>4.20%</td>
</tr>
<tr>
<td>Contrastive Focus</td>
<td>Low</td>
<td>81.50%</td>
<td>17.60%</td>
<td>0.90%</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>79.30%</td>
<td>16.00%</td>
<td>4.70%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>59.80%</td>
<td>39.30%</td>
<td>0.90%</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>20.50%</td>
<td>77.60%</td>
<td>1.90%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>19.40%</td>
<td>64.80%</td>
<td>15.70%</td>
</tr>
<tr>
<td></td>
<td>Native – L.A.</td>
<td>50.00%</td>
<td>33.00%</td>
<td>17.00%</td>
</tr>
</tbody>
</table>

*Where no chi-square result is presented, no postverbal subjects were produced.*
Table 10 presents the frequencies of answer types in each discourse context for unergative verbs. In Figure 5, once again the wide < narrow < contrastive hierarchy emerges with unergative verbs, but unlike with unaccusative verbs, the low advanced and NSs from Latin America no longer produced more postverbal than preverbal subjects in contrastive focus. The same statistical analyses that were run here, beginning with a 3x6 ANOVA comparing subject placement by focus position and proficiency group, which found the focus context hierarchy to be significant, $F(2,2101) = 288.24, p=.000$, partial $\eta^2=.22$, power=1.00, with a large effect size. There was also a significant effect for group, producing the same proficiency hierarchy as seen for unaccusatives, low, intermediate < low advanced, NSs from Latin America < high advanced, NSs from Spain, $F(5,2096)=103.15, p=.000$, partial $\eta^2=.20$, power=1.00, with a large effect size. An interaction between group and focus was found, $F(10,2096)=14.00, p=.000$, partial $\eta^2=.06$, power=1.00, with a medium effect size.

![Figure 5. Frequencies of answer types for unergative verbs by focus](image)

Figure 5. Frequencies of answer types for unergative verbs by focus
Individual one-way ANOVAs and subsequent post hoc Scheffé tests for each proficiency group with unergative verbs indicate that once again, the focus hierarchy remains for high advanced, $F(2, 460) = 89.26$, $p=.000$, partial $\eta^2=.28$, power=1.00, and NSs from Spain, $F(2, 293) = 69.05$, $p=.000$, partial $\eta^2=.32$, power=1.00, both with large effect sizes, but no significant difference is found between narrow and wide focus for the other groups, where the hierarchy becomes wide, narrow < contrastive: low, $F(2, 319) = 22.99$, $p=.000$, partial $\eta^2=.13$, power=1.00, intermediate, $F(2, 438) = 29.85$, $p=.000$, partial $\eta^2=.12$, power=1.00, low advanced, $F(2, 331) = 51.80$, $p=.000$, partial $\eta^2=.24$, power=1.00, and NSs from Latin America, $F(2, 260) = 44.77$, $p=.000$, partial $\eta^2=.26$, power=1.00, all with large effect sizes.

Individual one-way ANOVAs and subsequent post hoc Scheffé tests for each focus type showed that the proficiency hierarchy, low, intermediate < low advanced, NSs from Latin America < high advanced, NSs from Spain, remains significant with unergative verbs in contrastive focus, $F(5,677) = 51.93$, $p=.000$, partial $\eta^2=.28$, power=1.00, with a large effect size, and switches to low, intermediate, low advanced, NSs from Latin America < high advanced, NSs from Spain in narrow focus, $F(5,703) = 36.76$, $p=.000$, partial $\eta^2=.21$, power=1.00, with a large effect size. In wide focus, there is a significant difference by group, $F(5,721) = 13.33$, $p=.000$, partial $\eta^2=.09$, power = 1.00, with a medium effect size, but the situation becomes more complicated. The low advanced group is not significantly different from either NS group, the high advanced group is not significantly different from the NSs from Spain, but is significantly different from the low advanced and the NSs from Latin America.

Finally, the frequencies of pre- and postverbal subjects with unergative verbs within each proficiency group within each focus context were compared using a chi-squared analysis. The frequencies of subject position were significantly different for all groups in all contexts, with
only the NSs from Spain, \(X^2(1) = 26.39, p=.000\), and the high advanced, \(X^2(1) = 51.77, p=.000\), producing significantly more postverbals in contrastive focus. All other contexts demonstrated more pre- than postverbal subject: low, contrast: \(X^2(1) = 44.50, p=.000\); intermediate, contrast: \(X^2(1) = 63.11, p=.000\); low advanced, narrow: \(X^2(1) = 103.14, p=.000\), low advanced, wide: \(X^2(1) = 96.57, p=.000\), low advanced, contrast: \(X^2(1) = 4.77, p=.03\); high advanced, narrow: \(X^2(1) = 17.56, p=.000\), high advanced, wide: \(X^2(1) = 66.69, p=.000\); NSs from Spain, wide: \(X^2(1) = 65.33, p=.000\), NSs from Spain, narrow: \(X^2(1) = 15.68, p=.000\), NSs from Latin America, narrow: \(X^2(1) = 79.40, p=.000\), NSs from Latin America, wide: \(X^2(1) = 90.04, p=.000\). The only exception was NSs from Latin America in contrastive focus, \(X^2(1) = 3.28, p=.07\), where there was no significant difference in subject positions.

With unergative verbs, we still see the most postverbal subjects with contrastive focus, the high advanced learners performing like NSs from Spain, and the low advanced learners performing like NSs from Latin America. There is a significant preference for postverbal subjects by high advanced learners and NSs from Spain in contrastive focus with unergative verbs. However, the high advanced L2 learners produced more postverbals than the NSs from Spain, but this difference is not significant. Although unergative verbs seemed to pattern like unaccusative verbs in terms of subject position in Section 2.2 when focus context was not considered, we don’t see the interaction with focus context that we saw with unaccusative verbs. Unaccusative and unergative verbs will be compared in detail in the discussion in Chapter 5.

### 2.2.3. Transitive verbs

Table 11 presents the frequencies of answer types in each discourse context for transitive verbs. In Figure 6, we see that the focus hierarchy is still evident, wide < narrow < contrastive. A 3x6 ANOVA comparing subject placement by group and by focus found a significant effect for
focus context with transitive verbs, \( F(2,2106) = 194.79, \ p = .000, \ \text{partial } \eta^2 = .16, \ \text{power} = 1.00 \), with a large effect size, and the post hoc Scheffé test revealed a significant difference between all three focus contexts. The same ANOVA also found a significant effect for group, \( F(5,2106) = 65.96, \ p = .000, \ \text{partial } \eta^2 = .14, \ \text{power} = 1.00 \), with a large effect size, and the post hoc Scheffé showed that advanced learners and NSs from Spain performed significantly different from the other groups. However, the ANOVA shows an interaction between group and focus, \( F(10,2106) = 16.65, \ p = .000, \ \text{partial } \eta^2 = .07, \ \text{power} = 1.00 \), with a medium effect size, so individual one-way ANOVAs were run on each proficiency group and on each focus context separately to interpret the interaction.

One-way ANOVAs and post hoc Scheffé tests for transitive verbs within each proficiency group show that the focus hierarchy wide < narrow < contrastive only obtains with the NSs from Spain, \( F(2, 300) = 59.56, \ p = .000, \ \text{partial } \eta^2 = .28, \ \text{power} = 1.00 \), with a large effect

<table>
<thead>
<tr>
<th>Focus</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wide Focus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>98.10%</td>
<td>1.90%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>96.40%</td>
<td>3.60%</td>
<td>0.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>91.70%</td>
<td>8.30%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>96.30%</td>
<td>3.70%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Narrow Focus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>98.10%</td>
<td>0.00%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>97.30%</td>
<td>0.70%</td>
<td>2.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>97.30%</td>
<td>2.70%</td>
<td>0.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>82.10%</td>
<td>17.90%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>58.50%</td>
<td>39.60%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>86.30%</td>
<td>7.40%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Contrastive Focus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>83.30%</td>
<td>15.70%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>78.70%</td>
<td>13.30%</td>
<td>8.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>75.00%</td>
<td>24.10%</td>
<td>0.90%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>35.30%</td>
<td>62.20%</td>
<td>2.60%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>28.70%</td>
<td>55.60%</td>
<td>15.80%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>64.20%</td>
<td>24.20%</td>
<td>11.60%</td>
</tr>
</tbody>
</table>
size, while all other groups showed no significant difference between wide and narrow focus, while still showing significant difference for contrastive focus: low, $F(2, 317) = 15.69$, $p=.000$, partial $\eta^2=.09$, power=1.00, intermediate, $F(2, 432) = 22.58$, $p=.000$, partial $\eta^2=.10$, power=1.00, low advanced, $F(2, 332) = 20.38$, $p=.000$, partial $\eta^2=.11$, power=1.00, and NSs from Spain, $F(2, 264) = 19.83$, $p=.000$, partial $\eta^2=.13$, power=1.00, all with medium effect sizes, and high advanced learners, $F(2, 461) = 88.81$, $p=.000$, partial $\eta^2=.28$, power=1.00, with a large effect size.

Figure 6. Frequencies of answer types for transitive verbs by focus

One-way ANOVAs for transitive verbs within each focus context with proficiency group as the independent variable showed that there is a significant main effect for group in all three focus contexts. In wide focus, $F(5,722) = 4.58$, $p<0.05$, partial $\eta^2=.03$, power = 0.97, there was a small effect size, and the post hoc Scheffé indicated significant differences between intermediate, high advanced, and NSs from Latin America, but no differences between other groups. This seems to indicate that the high advanced group is over-producing postverbal subjects in a context
where the NSs are not producing them frequently. In narrow focus, $F(5,707) = 32.51$, $p<0.05$, partial $\eta^2=.19$, power=1.00, there was a larger effect size for group, and the post hoc Scheffé indicated that the NSs from Spain performed significantly different from all other groups. The high advanced group performed like NSs from Latin America, who also performed like all three other L2 groups, but the high advanced performed significantly different from all other learners. The high advanced learners are producing more postverbal subjects than NSs from Latin America in narrow focus, but have not quite reached the frequency of production of NSs from Spain. In contrastive focus, $F(5,677) = 35.75$, $p<0.05$, partial $\eta^2=.21$, power=1.00, there is a large effect size for group, with the high advanced and the NSs from Spain producing significantly more postverbal subjects than any other group and producing more than preverbal subjects.

Finally, based on chi-square analyses, the differences between frequency of pre- and postverbal subjects within each proficiency group within each focus context are significant, except for NSs from Spain in narrow focus, which approaches significance at $X^2(1) = 3.85$, $p=.05$, low, wide: $X^2(1) = 100.15$, $p=.000$, low, contrast: $X^2(1) = 49.80$, $p=.000$; intermediate, narrow: $X^2(1) = 143.03$, $p=.000$, intermediate, contrast: $X^2(1) = 69.59$, $p=.000$; low advanced, narrow: $X^2 (1) = 100.32$, $p=.000$, low advanced, wide: $X^2(1) = 96.57$, $p=.000$, low advanced, contrast: $X^2(1) = 29.27$, $p=.000$; high advanced, narrow: $X^2(1) = 64.10$, $p=.000$, high advanced, wide: $X^2(1) = 108.33$, $p=.000$, high advanced, contrast: $X^2(1) = 11.61$, $p=.000$; NSs Spain, wide: $X^2(1) = 92.59$, $p=.000$, NSs from Spain, contrast: $X^2(1) = 9.24$, $p=.002$, NSs from Latin America, narrow: $X^2 (1) = 63.20$, $p=.000$, NSs from Latin America, contrast: $X^2(1) = 17.19$, $p=.000$. Once again, with transitive verbs, this significant difference translates to significantly more post- than preverbal subjects in contrastive focus by NSs from Spain and high advanced learners.
Since previous research found that subject placement might be confounded with the use of object clitics (Belletti, Bennati, Sorace, 2007), I examined transitive verb items to see what percentage of responses contained preverbal clitics. I only looked at narrow focus and contrastive focus contexts since the wide focus contexts used in the experiment cannot have object clitics since the object would be a part of the new information and requires a fully specified lexical noun. Although all participants were instructed to use clitics whenever possible, this did not occur with all transitive verbs. However, this actually adds to the analysis as it allows the comparison between presence and absence of a clitic, which wouldn’t be possible if all items contained clitics. Table 12 presents the frequencies with which each participant group used clitics in their responses.

Table 12. Frequency of clitic use with transitive verb responses

<table>
<thead>
<tr>
<th></th>
<th>with Clitic</th>
<th>without Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrow Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>41.10%</td>
<td>58.90%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>59.20%</td>
<td>40.80%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>67.00%</td>
<td>33.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>57.10%</td>
<td>42.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>42.30%</td>
<td>57.70%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>19.10%</td>
<td>80.90%</td>
</tr>
<tr>
<td><strong>Contrastive Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>39.80%</td>
<td>60.20%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>66.90%</td>
<td>33.10%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>67.00%</td>
<td>33.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>74.30%</td>
<td>25.70%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>59.30%</td>
<td>40.70%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>45.90%</td>
<td>54.10%</td>
</tr>
</tbody>
</table>

The frequencies of preverbal and postverbal subjects for responses with and without clitics were calculated, which are shown in Table 13 and graphically in Figure 7 for narrow focus and Figure 8 for contrastive focus. Since the low, intermediate, and low advanced learners produced an overall low frequency of postverbal subjects with transitive verbs in narrow focus,

---

23 This could be due to several factors such as participants not knowing that an object clitic could be used or preferring to use a sentence without an object clitic.
as was shown above in Figure 6, the presence or absence of a clitic did not affect subject placement, which was overwhelmingly preverbal, as shown in Figure 7. One-way ANOVAs for each of the three lower proficiency groups confirm no significant effect for clitics, intermediate, F(1, 144) = 1.44, p=.23, partial η²=.01, power=0.22, and low advanced, F(1, 110) = 0.00, p=.99, partial η²=.00, power=0.05. For the high advanced learners, the one-way ANOVA found a significant effect for clitics, F(1, 154) = 19.91, p=.000, partial η²=.11, power=0.99, with a medium effect size, where significantly more postverbal subjects were produced with a clitic than without a clitic, but the preverbal subjects are still used more frequently, which a chi-square analysis found to be significant X²(1) = 15.38, p=.000.

Table 13. *Frequencies of answer types with transitive verbs with clitics*

<table>
<thead>
<tr>
<th>Focus</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrow</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>+ Clitic</td>
<td>97.70%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>98.40%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>+ Clitic</td>
<td>98.90%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>98.30%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>+ Clitic</td>
<td>97.30%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>97.30%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>+ Clitic</td>
<td>70.80%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>97.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>+ Clitic</td>
<td>15.90%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>91.70%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>+ Clitic</td>
<td>58.80%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>Contrastive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>+ Clitic</td>
<td>86.00%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>81.50%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>+ Clitic</td>
<td>80.80%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>77.60%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>+ Clitic</td>
<td>73.30%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>78.40%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>+ Clitic</td>
<td>26.50%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>64.10%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>+ Clitic</td>
<td>5.60%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>73.00%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>+ Clitic</td>
<td>43.60%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>95.70%</td>
</tr>
</tbody>
</table>

---

24 There is no analysis for the low proficiency since there were no postverbal subjects.
A similar pattern emerges for the NSs from Latin America as we saw for the high advanced learners in narrow focus. A one-way ANOVA found a significant effect for the presence of a clitic, $F(1, 87) = 49.27, p=.000$, partial $\eta^2=.36$, power=1.00, with a large effect size, indicating this group also produced significantly more postverbal subjects with a clitic than without one. The NSs from Latin America still produced more preverbal than postverbal subjects with a clitic, but the chi-square found no significant difference, $X^2(1) = 0.53$, $p=.47$. The NSs from Spain, also showed a significant effect for presence of a clitic, $F(1,102) = 141.94$, $p=.000$, partial $\eta^2=.58$, power=1.00, with a large effect size, where postverbals were significantly more frequent with than without a clitic. However, the presence of a clitic yielded significantly more postverbal than preverbal subjects by NSs from Spain with transitive verbs in narrow focus, $X^2(1) = 20.46$, $p=.000$.

![Figure 7. Frequencies of answer types with transitive with clitics verbs in narrow focus](image)

Clitics also play a role in subject placement in contrastive focus, as shown in Figure 8. Once again, one-way ANOVAs show that clitic placement has no significant effect on low, $F(1,$
161

105) = .81, p=.37, partial $\eta^2=0.14$, intermediate, $F(1, 136) = 2.40$, p=.12, partial $\eta^2=0.02$, power=0.34, or low advanced, $F(1, 109) = .22$, p=.63, partial $\eta^2=0.00$, power=0.08, learners. In fact, although not significant, all three groups actually produced more postverbal subjects without clitics than with clitics, which is the opposite pattern as the NSs and high advanced learners, indicating no sensitivity to the role of clitics in licensing postverbal subjects. Clitic placement had a significant effect on the high advanced learners, $F(1, 150) = 19.78$, p=.000, partial $\eta^2=0.12$, power=0.99, the NSs from Spain, $F(1, 88) = 95.65$, p=.000, partial $\eta^2=0.52$, power=1.00, and the NSs from Latin America, $F(1, 82) = 39.12$, p=.000, partial $\eta^2=0.32$, power=1.00, with large effect sizes, all of whom produced significantly more postverbal subjects with a clitic than without one.

Chi-squared analyses showed that the high advanced group produced significantly more post- than preverbal subjects with a clitic, $X^2(1) = 24.86$, p=.000, as did the NSs from Spain, $X^2(1) = 42.67$, p=.000. The NSs from Latin America produced the same pattern, but the difference was not significant, $X^2(1) = 0.42$, p=.52.
2.2.4. Ditransitive verbs

Table 14. Frequencies of answer types for ditransitive verbs by focus

<table>
<thead>
<tr>
<th>Focus</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>95.50%</td>
<td>4.50%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>92.60%</td>
<td>5.60%</td>
<td>1.90%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>100.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>98.10%</td>
<td>0.90%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>98.70%</td>
<td>1.30%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>96.40%</td>
<td>3.60%</td>
<td>0.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>79.50%</td>
<td>20.50%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>65.70%</td>
<td>29.60%</td>
<td>4.60%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>90.40%</td>
<td>9.60%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Contrastive Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>74.10%</td>
<td>14.80%</td>
<td>11.10%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>60.00%</td>
<td>26.00%</td>
<td>14.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>59.50%</td>
<td>33.30%</td>
<td>7.20%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>27.60%</td>
<td>68.60%</td>
<td>3.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>31.50%</td>
<td>54.60%</td>
<td>13.90%</td>
</tr>
<tr>
<td>Native – L.A.</td>
<td>67.40%</td>
<td>26.30%</td>
<td>6.30%</td>
</tr>
</tbody>
</table>

Table 14 presents the frequencies of answer types in each discourse context for ditransitive verbs, with a graphic representation in Figure 9, where once again we see the wide < narrow < contrastive focus hierarchy emerge, where frequency of postverbal subjects rises for L2 learners in contrastive focus as proficiency increases. A 3x6 ANOVA was conducted to compare the ratio of pre- to postverbal subjects by focus context and by group, which found a significant effect for focus, $F(2,2087) = 275.59, p=.000$, partial $\eta^2=.21$, power=1.00, with a large effect size, and the post hoc Scheffé indicated that the hierarchy is significant. There was a significant effect for proficiency group as well, $F(5,2087) = 49.44, p=.000$, partial $\eta^2=.11$, power=1.00, with a medium effect size, and the post hoc Scheffé indicated that the proficiency hierarchy seen previously, low, intermediate, low advanced and NSs from Latin America < high advanced, NSs from Spain is significant for ditransitive verbs. There was also a significant interaction between
focus and group, $F(10,2087) = 12.50$, $p=.000$, partial $\eta^2=.06$, power=1.00, with a medium effect size.

Figure 9. Frequencies of answer types for ditransitive verbs by focus

To understand the interaction between focus and proficiency with ditransitive verbs, individual one-way ANOVAs and post hoc Scheffé tests were run first on each proficiency group and second on each focus context. Looking first at proficiency group, the focus hierarchy was obtained with the high advanced, $F(2, 459) = 135.47$, $p=.000$, partial $\eta^2=.37$, power=1.00, and with the NSs from Spain, $F(2, 299) = 50.22$, $p=.000$, partial $\eta^2=.25$, power=1.00, both with large effect sizes. However, no significant difference was found between wide and narrow focus for the other four groups, while there was still a significant difference for contrastive focus: low, $F(2, 308) = 18.78$, $p=.000$, partial $\eta^2=.11$, power=1.00, with a medium effect size, intermediate, $F(2, 423) = 57.05$, $p=.000$, partial $\eta^2=.21$, power=1.00, with a large effect size, low advanced, $F(2, 324) = 48.74$, $p=.000$, partial $\eta^2=.23$, power=1.00, with a large effect size, and NSs from Latin America, $F(2, 274) = 19.47$, $p=.000$, partial $\eta^2=.12$, power=1.00, with a medium effect size.
When one-way ANOVAs were used to compare proficiency groups within each focus context with ditransitive verbs, there was a significant effect for group for wide focus, $F(5,717) = 4.88, p=.000$, partial $\eta^2=.03$, power = 0.98, with a small effect size, and in contrastive focus, $F(5,654) = 26.44, p=.000$, partial $\eta^2=.17$, power=1.00, with a large effect size, maintaining the low, intermediate, low advanced, NSs from Latin America < high advanced, NSs from Spain hierarchy, where high advanced and NSs from Spain produced more postverbal than preverbal subjects. It is noteworthy that the high advanced are actually producing the most postverbal subjects than NSs from Spain in contrastive focus, but the difference is not significant. For narrow focus, there was a significant effect for group, $F(5,716) = 19.91, p=.000$, partial $\eta^2=.12$, power=1.00, with a medium effect size. In narrow focus, the ratio of subject placement for the low, intermediate, low advanced and NSs from Latin America was not significantly different, meaning these groups performed native-like. The high advanced group performed similar to both NS groups, but each NS group performed statistically different from each other. Once again, the high advanced group is producing more postverbal subjects than the NSs from Latin America, but has not quite reached the frequency of those from Spain.

Finally, chi-square analyses were conducted to compare frequencies of subject positions within each proficiency group within each focus context. There was a significant difference between frequency of pre- and postverbal subjects for all proficiency groups in all focus contexts, low, narrow: $X^2(1) = 103.04, p=.000$, low, contrast: $X^2(1) = 42.67, p=.000$; intermediate, narrow: $X^2(1) = 142.11, p=.000$, intermediate, contrast: $X^2(1) = 20.16, p=.000$; low advanced, narrow: $X^2(1) = 96.57, p=.000$, low advanced, contrast: $X^2(1) = 8.17, p=.004$; high advanced, narrow: $X^2(1) = 54.26, p=.000$, high advanced, wide: $X^2(1) = 129.26, p=.000$, high advanced, contrast: $X^2(1) = 27.31, p=.000$; NSs from Spain, narrow: $X^2(1) = 14.77, p=.000$, NSs
from Spain, wide: $X^2(1) = 83.36$, $p=.000$, NSs from Spain, contrast: $X^2(1) = 6.72$, $p=.010$, NSs from Latin America, narrow: $X^2(1) = 61.45$, $p=.000$, NSs from Latin America, contrast: $X^2(1) = 17.09$, $p=.000$. Once again with ditransitives, the high advanced learners and the NSs from Spain produced significantly more post- than preverbal subjects in contrastive focus.

**Table 15. Frequency of clitic use with ditransitive verb responses**

<table>
<thead>
<tr>
<th>Focus</th>
<th>1 or 2 Clitics</th>
<th>without Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrow</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>48.10%</td>
<td>51.90%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>76.70%</td>
<td>23.30%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>87.50%</td>
<td>12.50%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>89.10%</td>
<td>10.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>77.70%</td>
<td>22.30%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>95.70%</td>
<td>4.30%</td>
</tr>
<tr>
<td><strong>Contrastive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>46.30%</td>
<td>53.70%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>83.80%</td>
<td>16.20%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>86.50%</td>
<td>13.50%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>95.40%</td>
<td>4.60%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>88.50%</td>
<td>11.50%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>94.30%</td>
<td>5.70%</td>
</tr>
</tbody>
</table>

As with transitive verbs, the responses to ditransitive verbs were also analyzed for inclusion of preverbal clitic pronouns. Table 15 presents the frequency with which ditransitive responses contained one clitic, just the dative, or two clitics, the dative and the accusative, or no clitic. Table 16 presents the frequency of pre- and postverbal subjects based on presence or absence of the clitics, regardless of number of clitics. Graphic representation of pre- and postverbal subject frequency by clitic use is in Figure 10 for narrow focus and Figure 11 for contrastive focus.

For ditransitive verbs in narrow focus in Figure 10, a 2x3 ANOVA was run with both clitic presence and proficiency group as independent variables and ratio of subject placement as the dependent variable. A significant effect for group was found, $F(1,710) = 8.93$, $p=.000$, partial $\eta^2=.06$, power=1.00, with a medium effect size, with the high advanced learners performing the
same as both NS groups, but the NS groups performed significantly different. The low, intermediate, and low advanced groups performed similar to the NSs from Latin America, but significantly different from the high advanced and the NSs from Spain. No significant effect was found for clitic presence, $F(5,710) = 2.96$, $p=.086$, partial $\eta^2=.00$, power=.41, indicating that the presence or absence of a clitic made no difference in the ratio of pre- to postverbal subjects with ditransitive verbs in narrow focus. There was also no interaction between proficiency group and clitic presence, $F(5,710) = 2.18$, $p=.055$, partial $\eta^2=.02$, power=.72. Therefore, it seems that for ditransitive verbs in narrow focus, the presence of an object clitic does not yield more frequent postverbal subjects, as was found for transitive verbs.

Table 16. Frequencies of answer types with ditransitive verbs with clitics

<table>
<thead>
<tr>
<th></th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrow Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>+ Clitic</td>
<td>100.00%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>98.20%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>+ Clitic</td>
<td>99.10%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>97.10%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>+ Clitic</td>
<td>96.90%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>92.90%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>+ Clitic</td>
<td>77.00%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>100.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>+ Clitic</td>
<td>66.30%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>78.30%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>+ Clitic</td>
<td>90.00%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>100.00%</td>
</tr>
<tr>
<td><strong>Contrastive Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>+ Clitic</td>
<td>77.50%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>87.50%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>+ Clitic</td>
<td>69.20%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>70.80%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>+ Clitic</td>
<td>59.60%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>92.90%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>+ Clitic</td>
<td>26.10%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>71.40%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>+ Clitic</td>
<td>28.40%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>90.90%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>+ Clitic</td>
<td>69.90%</td>
</tr>
<tr>
<td></td>
<td>- Clitic</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
For ditransitive verbs in contrastive focus in Figure 11, another 2x3 ANOVA was run to examine the role of proficiency and clitic placement on the ratio of pre- to postverbal subjects. In this context, there was a significant effect for proficiency, $F(1,644) = 3.56$, $p=.004$, partial $\eta^2=.03$, power=0.92, with a small effect size, producing the familiar low, intermediate, low advanced, NSs from Latin America $<$ high advanced, NSs from Spain hierarchy pattern. There
was also a significant effect for clitic presence, F(5,644) = 26.59, p=.000, partial η²=.04, power=0.99, with a small effect size, with significantly more postverbal subjects with clitics than without clitics. Crucially, there was an interaction between proficiency and clitics, F(5,644) = 3.35, p=.005, partial η²=.03, power=0.90, although with a small effect size.

To understand the interaction between group and clitic presence, individual one-way ANOVAs were run on each proficiency group, and no significant effect for the clitics was found for low, F(1,94) = 1.67, p=.199, partial η²=.02, power=0.25, intermediate, F(1, 126) = 0.02, p=.879, partial η²=.00, power=0.05, or NSs from Latin America, F(1, 86) = 2.11, p=.15, partial η²=.36, power=0.30. Significantly more postverbal subjects were produced with versus without a clitic for the low advanced, F(1, 101) = 6.06, p=.016, partial η²=.06, power=0.68, high advanced, F(1, 147) = 7.01, p=.009, partial η²=.05, power=0.75, and NSs from Spain, F(1, 90) = 19.60, p=.000, partial η²=.18, power=0.99. The low advanced group still produced more pre- than postverbal subjects with a clitic, but the difference is not significant as measured on a chi-squared test, X²(1) = 3.25, p=.072. The high advanced group and the NSs from Spain produced more post- than preverbal subjects with a clitic, and both differences are significant, high advanced: X²(1) = 32.56, p=.000 and NSs from Spain: X²(1) = 15.12, p=.000.

In answering RQ2, verb type alone does not appear to be a strong predictor of subject position. When focus is considered, the same pattern for focus, wide < narrow < contrastive, emerged regardless of verb type, with NSs from Spain and high advanced learners adhering most faithfully to that hierarchy. Unaccusative verbs were shown to elicit more postverbal subjects than other verbs, an effect which was small when examined independently, but which was amplified and more apparent when in interaction with contrastive focus.
2.2.5. Topicalized objects

Table 17 presents the frequencies of answer types for topicalized objects, regardless of focus context since topicalized objects should yield postverbal subjects regardless of discourse context. This is the only context where the passive structure appears. In the graphic representation in Figure 12, it is obvious that the high advanced learners and both NS groups show an overwhelming preference for postverbal subjects. It can also be seen that low, intermediate, and low advanced learners are starting to produce a higher frequency of postverbal subjects.

<table>
<thead>
<tr>
<th></th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>Passive</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>45.70%</td>
<td>30.60%</td>
<td>13.90%</td>
<td>9.90%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>37.40%</td>
<td>26.40%</td>
<td>26.20%</td>
<td>10.10%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>41.30%</td>
<td>38.30%</td>
<td>16.80%</td>
<td>3.60%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>6.20%</td>
<td>83.10%</td>
<td>9.90%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>2.80%</td>
<td>95.40%</td>
<td>0.30%</td>
<td>1.50%</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>6.70%</td>
<td>78.70%</td>
<td>11.30%</td>
<td>3.20%</td>
</tr>
</tbody>
</table>

A one-way ANOVA was run, with group as the independent variable and ratio of subject positions as the dependent variable, to compare the frequency of pre- and postverbal subjects. There was a significant difference by proficiency group, $F(5, 1767) = 164.09, p=.000$, partial $\eta^2=.31$, power=1.00, with a large effect size. Post hoc Scheffé showed that low, intermediate, and low advanced learners performed significantly different from high advanced learners and NSs from both Spain and Latin America. To compare frequency of pre- and postverbal subjects within each proficiency group, chi-square analyses were conducted. All groups except the low advanced, $X^2(1) = .38$, $p=.540$, showed a significant difference between pre- and postverbal subjects. The low, $X^2(1) = 9.72$, $p=.002$, and intermediate, $X^2(1) = 8.43$, $p=.004$, learners produced significantly more pre- than postverbal subjects. The high advanced, $X^2(1) = 309.07$,
p=.000, the NSs from Spain, $X^2(1) = 282.02, p=.000$, and the NSs from Latin America, $X^2(1) = 170.99, p=.000$, all produced significantly more post- than preverbal subjects. Figure 12 demonstrates that as proficiency increases, frequency of postverbal subjects with topicalized objects increases as well, while preverbal subjects decrease.

Figure 12. Frequencies of answer types for topicalized objects regardless of focus

Comparisons were also done on topicalized-objects by focus context to see if the performance is affected by focus. Table 18 presents the frequencies for each answer type with topicalized objects divided by focus type. In Figure 13, we see a similar pattern as what we saw in Figure 12 (no focus). A 3x6 ANOVA was run to compare the ratio of subject placement by proficiency group and focus context. A significant effect was found for focus context, $F(2,1755) = 14.72, p=.000$, partial $\eta^2=.02$, power=0.99, with a small effect size but unlike previously, the post hoc Scheffé indicated that there was no significant difference between wide and narrow focus, but only with contrastive focus. There was also a significant effect for proficiency group,

Recall from the coding in Section 1.4. of this chapter that some of the items categorized as postverbal subjects with topicalized objects contained a possible a subject marker. It could be argued that these would be better categorized as an “other” structure, which would make the frequencies of postverbal subjects for low, intermediate, and low advanced learners slightly lower. However, it has no effect on high advanced learners or NSs, who did not produce these structures at all.
F(5, 1755) = 167.40, p=.000, partial $\eta^2=.32$, power=1.00, with a large effect size. Post hoc Scheffé indicated that low, intermediate, and low advanced performed significantly different from high advanced, NSs from Spain and NSs from Latin America. Finally, there was an interaction between focus and group, F(10,1755) = 2.39, p=.008, partial $\eta^2=.01$, power=0.94, with a small effect size.

Table 18. Frequencies of answer types for topicalized objects by focus

<table>
<thead>
<tr>
<th>Focus Level</th>
<th>Focus Type</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Focus</td>
<td>Low</td>
<td>48.10%</td>
<td>24.10%</td>
<td>19.40%</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>38.30%</td>
<td>25.50%</td>
<td>24.20%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>44.60%</td>
<td>33.00%</td>
<td>15.20%</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>7.70%</td>
<td>81.90%</td>
<td>7.70%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>0.90%</td>
<td>98.10%</td>
<td>0.90%</td>
</tr>
<tr>
<td></td>
<td>Native – L.A.</td>
<td>7.40%</td>
<td>70.50%</td>
<td>15.80%</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td>Low</td>
<td>50.90%</td>
<td>29.60%</td>
<td>10.20%</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>38.00%</td>
<td>24.00%</td>
<td>31.30%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>51.80%</td>
<td>28.60%</td>
<td>18.80%</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>9.00%</td>
<td>79.50%</td>
<td>11.50%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>3.70%</td>
<td>95.40%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Native – L.A.</td>
<td>9.70%</td>
<td>76.30%</td>
<td>12.90%</td>
</tr>
<tr>
<td>Contrastive Focus</td>
<td>Low</td>
<td>38.00%</td>
<td>38.00%</td>
<td>12.00%</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>35.80%</td>
<td>29.70%</td>
<td>23.00%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>27.30%</td>
<td>53.60%</td>
<td>16.40%</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>1.90%</td>
<td>87.80%</td>
<td>10.30%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>3.70%</td>
<td>92.50%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Native – L.A.</td>
<td>3.20%</td>
<td>89.40%</td>
<td>5.30%</td>
</tr>
</tbody>
</table>

To understand the interaction, first, individual one-way ANOVAs were run on each proficiency group with focus context as the independent variable, and no significant differences were found for focus for low, F(2, 244) = 2.64, p=.073, partial $\eta^2=.02$, power=0.52, intermediate, F(2, 282) = .487, p=.615, partial $\eta^2=.00$, power=0.13, NSs from Spain, F(2, 314) = 1.06, p=.347, partial $\eta^2=.00$, power=0.24, or NSs from Latin America, F(2, 238) = 1.94, p=.147, partial $\eta^2=.02$, power=0.40. The low advanced, F(2, 263) = 9.86, p=.000, partial $\eta^2=.07$, power=0.40, with a medium effect size, and the high advanced, F(2, 414) = 3.93, p=.020, partial $\eta^2=.02$, power=0.70,
with a small effect size, yielded a significant difference between contrastive focus and wide/narrow focus. For the high advanced learners, this indicates that focus seems to play a stronger role than the preverbal topic in obtaining postverbal subjects, while the low advanced learners are in the process of acquiring the subject distribution.

Figure 13. *Frequencies of answer types with topicalized objects by focus*

Second, individual one-way ANOVAs were run on each focus context with proficiency group as the independent variable, and a significant difference was found by group in each context. For wide focus, $F(5,574) = 63.48$, $p=.000$, partial $\eta^2=.36$, power = 1.00, a large effect size was found, and the post hoc Scheffé showed that the ratio of pre- to postverbal subjects for low, intermediate, and low advanced learners is significantly different from that of the high advanced learners, the NSs from Spain, and the NSs from Latin America. In narrow focus, $F(5,589) = 59.94$, $p=.000$, partial $\eta^2=.34$, power=1.00, a large effect was also found, which revealed the exact same pattern on the post hoc Scheffe. In contrastive focus, $F(5,592) = 47.72$, $p=.000$, partial $\eta^2=.29$, power=1.00, a large effect was found, in which the low advanced learners
separated themselves from the low and intermediate learners, but are still significantly different from the high advanced, NSs from Spain, and the NSs from Latin America.

Finally, chi-squares were run to compare the frequency of pre- and postverbal subjects within each proficiency group and within each focus context. Significantly more post- than preverbal subjects were produced in all three focus contexts by the high advanced, the NSs from Spain, and the NSs from Latin America: high advanced, narrow: $X^2(1) = 87.68, p=.000$, high advanced, wide: $X^2(1) = 95.14, p=.000$, high advanced, contrast, $X^2(1) = 128.26, p=.000$; NSs from Spain, wide: $X^2(1) = 103.04, p=.000$, NSs from Spain, narrow: $X^2(1) = 91.60, p=.000$, NSs from Spain, contrast: $X^2(1) = 87.62, p=.000$; NSs from Latin America, narrow: $X^2(1) = 48.05, p<.05$, NSs from Latin America, wide: $X^2(1) = 48.65, p<.05$, NSs from Latin America, contrast: $X^2(1) = 75.41, p>.05$. The low group produced significantly more pre- than postverbal subjects in wide, $X^2(1) = 8.67, p=.003$, and narrow, $X^2(1) = 6.08, p=.014$, focus, but there was no difference in contrastive focus, $X^2(1) = .00, p=1.00$. The intermediate group produced significantly more pre- than postverbal subjects in narrow focus, $X^2(1) = 4.74, p=.029$, but no difference in wide, $X^2(1) = 3.80, p=.051$, and contrastive, $X^2(1) = 0.84, p=.361$. The low advanced group produced significantly more pre- than postverbal subjects in narrow focus, $X^2(1) = 7.51, p=.006$, and significantly more post- than preverbal subjects in contrastive focus, $X^2(1) = 9.45, p=.002$, but had no significant difference in wide focus, $X^2(1) = 1.94, p=.163$.

In answering research question two, regarding which verbs elicit postverbal subjects from NSs and L2 learners, NSs are most likely to use postverbal subjects with transitive verbs with a topicalized object (e.g. *Los platos, los lava Ana María* ‘The plates, Ana María washes them’) followed by transitive verbs with a preverbal clitic but no fronted object (e.g. *Los lava Ana María* ‘Ana María washes them’). All of the L2 learner groups were able to produce postverbal
subjects in topicalized object sentences, regardless of focus, where the high-advanced performed like NSs, both from Spain and Latin America. However, for the low, intermediate, and low-advanced learners, focus context mediated production with transitive verbs with clitics, as they only produced postverbal subjects in contrastive focus but not narrow focus.

3. Results – Acceptability judgment task

3.1. Research question 3: In which discourse contexts do native speakers and English-speaking L2 learners of Spanish accept postverbal subjects as appropriate answers?

Table 19. Mean acceptance (%) of subject placement by focus

<table>
<thead>
<tr>
<th>Context:</th>
<th>Target:</th>
<th>Group:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Focus</td>
<td>Low</td>
<td>97.37</td>
<td>9.12</td>
<td>69.21</td>
</tr>
<tr>
<td>Intermediate</td>
<td>98.15</td>
<td>8.80</td>
<td>74.13</td>
<td>21.94</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>97.88</td>
<td>8.86</td>
<td>83.13</td>
<td>21.34</td>
</tr>
<tr>
<td>High Advanced</td>
<td>93.80</td>
<td>14.51</td>
<td>91.00</td>
<td>15.37</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>95.63</td>
<td>11.21</td>
<td>75.00</td>
<td>23.00</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>97.50</td>
<td>8.32</td>
<td>76.88</td>
<td>23.47</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td>Low</td>
<td>98.55</td>
<td>7.32</td>
<td>70.26</td>
</tr>
<tr>
<td>Intermediate</td>
<td>98.70</td>
<td>7.99</td>
<td>78.04</td>
<td>21.54</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>99.00</td>
<td>6.26</td>
<td>85.25</td>
<td>20.50</td>
</tr>
<tr>
<td>High Advanced</td>
<td>90.80</td>
<td>16.88</td>
<td>97.20</td>
<td>7.24</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>91.09</td>
<td>13.24</td>
<td>96.56</td>
<td>9.76</td>
</tr>
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<td>Native – Lat. Am.</td>
<td>98.13</td>
<td>6.37</td>
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<td>13.81</td>
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<td>Contrastive Focus</td>
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<td>96.58</td>
<td>11.91</td>
<td>76.97</td>
</tr>
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<td>Intermediate</td>
<td>98.04</td>
<td>8.13</td>
<td>80.33</td>
<td>22.66</td>
</tr>
<tr>
<td>Low Advanced</td>
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<td>9.30</td>
<td>88.63</td>
<td>17.32</td>
</tr>
<tr>
<td>High Advanced</td>
<td>82.90</td>
<td>20.49</td>
<td>97.10</td>
<td>9.06</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>86.09</td>
<td>16.75</td>
<td>96.09</td>
<td>11.79</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>90.78</td>
<td>12.77</td>
<td>95.63</td>
<td>13.03</td>
</tr>
</tbody>
</table>

In order to answer research question number three, regarding which subject positions are rated as acceptable in which focus contexts by NSs and L2 learners, mean ratings for each subject position (preverbal or postverbal in the rated sentence) in each focus context were calculated and are presented in Table 19. It can be seen in Figure 14, that for the L2 learners, acceptance of postverbal subjects increases with proficiency in all three focus contexts. Both NS
groups show relatively high rates of acceptance of postverbal subjects in narrow and contrastive focus, and relatively low rates of acceptance of postverbal subjects in wide focus. A one-way ANOVA was conducted on each target subject position divided by proficiency group with focus context as the independent variable and acceptability rating as the dependent variable to examine role of focus on the ratings.

For preverbal targets, the low, intermediate, and low advanced groups showed no significant difference in ratings in the different focus contexts: low, $F(2, 453) = 1.62$, $p=.20$, partial $\eta^2 = .00$, power = 0.34, intermediate $F(2, 549) = 0.33$, $p=.72$, partial $\eta^2 = .00$, power = 0.10, low advanced $F(2, 477) = 2.36$, $p=.095$, partial $\eta^2 = .01$, power = 0.48. Both NS groups and the high advanced group showed significant differences in ratings of preverbal subjects across the three contexts. The high advanced group, $F(2,597) = 20.79$, $p=.000$, partial $\eta^2 = .07$, power = 1.00, and the NSs from Latin America, $F(2, 381) = 23.32$, $p=.000$, partial $\eta^2 = .11$, power = 1.00, showed medium effect sizes for focus context, and post hoc Scheffé tests revealed significantly lower ratings for preverbal targets in contrastive focus compared to both other contexts, but no difference between wide and narrow focus. The NSs from Spain, $F(2, 381) = 15.01$, $p=.000$,
partial $\eta^2 = .07$, power = 0.99, showed a medium effect size for focus context, and a post hoc Scheffé test revealed a significant difference in ratings of preverbal subjects, which got lower from wide, to narrow, to contrastive focus.

For postverbal targets, all proficiency groups showed significant differences in their ratings by focus context. The low proficiency, $F(2, 453) = 4.66, p=.01$, partial $\eta^2 = .02$, power = 0.78, had a small effect size for focus context with significantly lower ratings in wide focus versus contrastive focus, but neither were significantly different from narrow focus. The intermediate group, $F(2, 549) = 3.72, p=.03$, partial $\eta^2 = .01$, power = 0.68, and the low advanced proficiency with a small effect size, $F(2, 480) = 3.14, p=.04$, partial $\eta^2 = .01$, power = 0.60 showed the same pattern with small effect sizes. The high advanced, $F(2, 597) = 20.42, p=.000$, partial $\eta^2 = .06$, power = 1.00, NSs from Spain, $F(2, 381) = 76.31, p=.000$, partial $\eta^2 = .29$, power = 1.00, and NSs from Latin America, $F(2, 380) = 42.08, p=.000$, partial $\eta^2 = .18$, power = 1.00, all showed significantly lower ratings on postverbal targets in wide focus compared to the other two contexts which didn’t significantly differ from each other, with a small effect size for high advanced and large effect sizes for both NS groups. These results indicate that the NSs do not highly distinguish between contrastive and narrow focus in acceptance of postverbal subjects, with similar ratings between the two, unlike the production data, but they do distinguish in the acceptance of preverbs, with lower ratings in contrastive focus, similar to production data. The NSs also distinguish wide focus from narrow and contrastive focus, as in the production data, rating preverbal subjects higher and postverbal subjects lower. The L2 learners do not show strong differences between focus contexts.

Proficiency groups were compared to each other within each focus context using individual one-way ANOVAs comparing ratings of pre- and postverbal subjects. In wide focus,
preverbal subjects showed a significant difference in rating by group, F(5, 946) = 4.62, p = .000, partial \( \eta^2 = .02 \), power = 0.98, with a small effect size. A post hoc Scheffé test showed that high advanced learners rated preverbal subjects significantly lower than low advanced and intermediate, but there were no other significant differences. For postverbal subjects in wide focus, there was a significant difference in ratings across groups, F(5, 946) = 22.59, p = .000, partial \( \eta^2 = .11 \), power = 1.00, with a medium effect size. A post hoc Scheffé test indicated that the high advanced learners rated postverbal subjects significantly higher than all other groups except low advanced. It also showed that low and intermediate groups did not rate postverbal subjects significantly different from either NS group. Interestingly, the high advanced group is performing the least like NSs by accepting postverbal subjects in wide focus at a high rate, while the low and intermediate groups are performing native-like.

In narrow focus, preverbal subjects showed a significant difference by group, F(5, 946) = 22.06, p = .000, partial \( \eta^2 = .10 \), power = 0.99, with a medium effect size. A post hoc Scheffé test revealed that the high advanced learners and the NSs from Spain rated preverbal subjects significantly lower than all other groups in narrow focus. For postverbal subjects in narrow focus, there was a significant difference in ratings by group, F(5, 945) = 62.67, p = .000, partial \( \eta^2 = .25 \), power = 1.00, with a large effect size. A post hoc Scheffé test showed no significant difference between both NS groups and high advanced, but low, intermediate, and low advanced were all significantly different from all other groups. Here, we see acceptance of postverbals increase significantly as proficiency improves.

In contrastive focus, preverbal subjects showed a significant difference by group, F(5, 946) = 35.49, p = .000, partial \( \eta^2 = .16 \), power = 1.00, with a large effect size. A post hoc Scheffé showed that the low, intermediate, and low advanced groups showed no differences amongst
them but rated preverbal subjects significantly lower than all other groups. The high advanced group rated preverbal subjects similarly to NSs from Spain, but significantly lower than NSs from Latin America, who in turn did not significantly differ from the NSs from Spain. For postverbal subjects in contrastive focus, there was a significant difference by group, \( F(5, 946) = 41.92, p=.000, \) partial \( \eta^2 = .18, \) power \( = 1.00, \) with a large effect size. A post hoc Scheffé test indicated that the NSs from Spain, NSs from Latin America, and the high advanced group did not rate postverbal subjects significantly different, but the low and intermediate groups rated postverbal subjects significantly lower than the low advanced group, and all three rated them significantly lower than the NSs and high advanced.

Finally, individual one-way ANOVAS were conducted on each proficiency group to compare the mean ratings for pre- and postverbal subjects within each proficiency group and within each focus context. For wide focus, all groups except the high advanced group rated preverbal subjects as significantly better than postverbal subjects: low, \( F(1, 302) = 161.83, p=.000, \) partial \( \eta^2 = .35, \) power \( = 1.00, \) intermediate, \( F(1, 366) = 190.06, p=.000, \) partial \( \eta^2 = .34, \) power \( = 1.00, \) low advanced \( F(1, 318) = 65.18, p=.000, \) partial \( \eta^2 = .17, \) power \( = 1.00, \) NSs from Spain \( F(1, 254) = 83.17, p=.000, \) partial \( \eta^2 = .25, \) power \( = 1.00, \) and NSs from Latin America \( F(1, 254) = 87.81, p=.000, \) partial \( \eta^2 = .26, \) power \( = 1.00, \) all with large effect sizes. The high advanced group did not rate the two subject positions as significantly different in wide focus, giving both high ratings, \( F(1, 398) = 3.51, p=.06, \) partial \( \eta^2 = .01, \) power \( = 0.46. \)

For narrow focus, all groups showed significantly different ratings of the two subject positions. The low, \( F(1, 302) = 199.50, p=.000, \) partial \( \eta^2 = .40, \) power \( = 1.00, \) intermediate \( F(1, 366) = 148.70, p=.000, \) partial \( \eta^2 = .29, \) power \( = 1.00, \) and low advanced, \( F(1, 318) = 65.86, p=.000, \) partial \( \eta^2 = .17, \) power \( = 1.00, \) groups rated preverbal subjects as significantly better with
large effect sizes, as did the NSs from Latin America, $F(1, 254) = 18.86, p = .000$, partial $\eta^2 = .04$, power = 1.00, with a small effect size. The high advanced group, $F(1, 398) = 24.29, p = .000$, partial $\eta^2 = .06$, power = 1.00, and the NSs from Spain, $F(1, 254) = 14.16, p = .000$, partial $\eta^2 = .07$, power = 1.00, both rated postverbal subjects as significantly better, but with small effect sizes.

For contrastive focus, all groups showed significantly different ratings of the two subject positions. The low, $F(1, 302) = 88.55, p = .000$, partial $\eta^2 = .23$, power = 1.00, and intermediate, $F(1, 366) = 99.64, p = .000$, partial $\eta^2 = .21$, power = 1.00, learners rated preverbal subjects as significantly better than postverbal subjects with large effect sizes, while the low advanced group, $F(1, 318) = 29.03, p = .000$, partial $\eta^2 = .08$, power = 1.00, showed the same pattern with a medium effect size. The high advanced, $F(1, 398) = 80.39, p = .000$, partial $\eta^2 = .17$, power = 1.00, and NSs from Spain, $F(1, 254) = 30.50, p = .000$, partial $\eta^2 = .11$, power = 1.00, rated postverbal subjects as significantly better than preverbal subjects with large effect sizes, and the NSs from Latin America showed the same pattern, $F(1, 254) = 9.02, p = .003$, partial $\eta^2 = .03$, power = 0.85, with a small effect size.

In order to understand whether these ratings reflect a preference for pre- or postverbal subjects, or whether sentences were rated based on other information in the sentence, the reformulated sentences were analyzed for subject placement, whether they contained a pre- or postverbal subject. The frequencies of subject positions in the reformulations by focus type are presented in Table 20. Statistical analysis will not be conducted since responses are based on a variable amount of participants and target items, but trends will be examined.
On target items that contained a preverbal subject in wide focus and were rated as less than 5, the low and intermediate learners still used preverbal subjects in their reformulations, indicating some other reason for the low rating. The majority of other reformulations included
changing the object clitic, for example changing *Se lo da Anita ‘Anita gives it to her’ to ‘*Le lo da Anita,’ which does not change the meaning, but indicates a focus on the variation in indirect object clitic, which will not be examined as it is not the focus of the study. Therefore, the reformulations indicate that these learners are not necessarily sensitive to subject placement on this task. In the same contexts, preverbal subjects in wide focus, the low-advanced and the high-advanced learner groups did reformulate the preverbal sentences in wide focus contexts using postverbal subjects some of the time, indicating a growing sensitivity to subject placement, with the latter group reformulating with postverbal to a higher degree, similarly to NSs from Spain. The low advanced learners performed more like the NSs from Latin America. However, in wide focus contexts with postverbal targets, all of the groups overwhelmingly changed the position to preverbal subject, indicating a preference for preverbal subjects in wide focus, as predicted by previous research and theoretical assumptions. The verbs in wide focus that are reformulated using postverbal subjects could be unaccusative verbs, which would favor postverbal subjects following theoretical assumptions in Suñer (1982) and Contreras (1976), and I examine these contexts in Section 3.2.1. of this chapter.

In narrow focus contexts, when a target containing a preverbal subject was deemed less than 5, the low and intermediate learners showed the majority of reformulations with preverbal subjects, again indicating lack of acceptability due to some other factor. The low advanced and high advanced learners demonstrated the ability to reformulate the items using postverbal subjects, with the high advanced learners performing like NSs from Spain, both of whom who switched pre- to postverbal most frequently, while NSs from Latin America still preferred preverbals. For targets with postverbal subjects in narrow focus, all groups reformulated the
majority with preverbal subjects. Together, these results indicate no clear preference for pre- or postverbal subjects in narrow focus, and that the ratings may be caused by other factors.

In contrastive focus, low and intermediate learners started reformulating very few preverbal subjects with postverbal subjects, but the majority still contained preverbal subjects. The majority of target items with postverbal subjects were still reformulated with preverbal subjects by low and intermediate learners. Together, these results reveal that the lower proficiency learners still have a preference for preverbal subjects. The frequency of postverbal subjects in reformulations increased with proficiency, where the high-advanced group performed like NSs from Spain for targets containing preverbal subjects. These results indicate a preference for postverbal subjects in contrastive focus by NSs from Spain but not necessarily by those from Latin America, and that this competence is achievable by high advanced L2 learners.

In answering research question three, regarding which focus contexts yield acceptability of postverbal subjects by NSs and L2 learners, the NSs demonstrated that postverbal subjects are highly acceptable in narrow and contrastive focus, with little difference between the two contexts, but unacceptable in wide focus. The NSs also show the lowest acceptance of preverbal subjects in contrastive focus, with little difference between wide and narrow focus. The L2 learners show development of the same preferences as proficiency improves. The low, intermediate, and low advanced L2 learners show native-like performance in wide focus, while the high advanced show equal acceptance rates of both subject positions in wide focus, deviating from native norms. In narrow and contrastive focus, the high advanced group performed like NSs, more so like NSs from Spain in narrow focus and like both NSs in contrastive focus. As we saw with focus on the production task, there is some dialectal difference in acceptance between NSs from Spain and NSs from Latin America.
3.2. **Research question 4:** With which verb types do native speakers and English-speaking L2 learners of Spanish accept postverbal subjects as appropriate answers?

Table 21. *Mean acceptance (%) of subject placement by verb type*

<table>
<thead>
<tr>
<th>Verb Type</th>
<th>Preverbal Mean</th>
<th>Preverbal SD</th>
<th>Postverbal Mean</th>
<th>Postverbal SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaccusative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>96.39</td>
<td>12.75</td>
<td>69.65</td>
<td>23.23</td>
</tr>
<tr>
<td>Intermediate</td>
<td>99.63</td>
<td>2.71</td>
<td>74.93</td>
<td>21.76</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>96.57</td>
<td>11.24</td>
<td>86.33</td>
<td>18.51</td>
</tr>
<tr>
<td>High Advanced</td>
<td>87.89</td>
<td>18.56</td>
<td>95.60</td>
<td>10.07</td>
</tr>
<tr>
<td>Native – Spain</td>
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<td>17.37</td>
<td>91.46</td>
<td>14.14</td>
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<tr>
<td>Native – Lat. Am.</td>
<td>93.39</td>
<td>12.98</td>
<td>90.83</td>
<td>16.39</td>
</tr>
<tr>
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<td></td>
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<td>Low Advanced</td>
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<td>80.17</td>
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<td>High Advanced</td>
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<td>93.20</td>
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<td>Native – Spain</td>
<td>92.29</td>
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<td>82.92</td>
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<td>Native – Lat. Am.</td>
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<td>90.83</td>
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</tbody>
</table>

In order to answer research question number four, regarding which subject positions are rated as acceptable with which verb types by NSs and L2 learners, mean ratings for each subject position for each verb type were calculated. In Table 21 we can see the mean ratings of pre- and postverbal subjects by verb type, regardless of focus, for the six participant groups. In Figure 15, we can see the variation in ratings across proficiency groups and verb types, where we see ratings of postverbal subjects increase as proficiency increases. We also see that the high advanced group always has the highest ratings of postverbal subjects in all verb types, even higher than NSs.
In order to compare the ratings of pre- and postverbal subjects within groups, individual one-way ANOVAs were run on each proficiency group by subject position with verb type as the independent variable and rating as the dependent variable. For preverbal subjects, only the intermediate group showed a difference in ratings by verb type, $F(3, 548) = 5.32, p = .001$, partial $\eta^2 = .03$, power = 0.93, with a small effect size, and a post hoc Scheffé showed that this group rated preverbal subjects with ditransitive verbs significantly lower than unaccusative and unergative verbs, but not differently from transitive verbs. All other groups showed no difference in ratings of preverbal subjects by verb type: low, $F(3, 452) = 1.53, p = .21$, partial $\eta^2 = .01$, power = 0.41, low advanced, $F(3, 476) = 2.73, p = .04$, partial $\eta^2 = .02$, power = 0.66, high advanced, $F(3, 596) = 1.82, p = .14$, partial $\eta^2 = .01$, power = 0.47, NSs from Spain, $F(3, 380) = 3.74, p = .01$, partial $\eta^2 = .03$, power = 0.81, NSs from Latin America, $F(3, 380) = 2.41, p = .07$, partial $\eta^2 = .01$, power = 0.60. For low advanced and NSs from Spain, the effect for verb type was significant for preverbal subjects, but the post hoc Scheffé showed no significant differences.

For postverbal subjects, the high advanced group, $F(3, 596) = 2.26, p = .08$, partial $\eta^2 = .01$, power = 0.57, and the NSs from Latin America, $F(3, 379) = 2.61, p = .05$, partial $\eta^2 = .02$, power = 0.64, showed no significant differences in their ratings of postverbal subjects by verb type.
type. The other four groups all showed significant differences by verb type but with small effect sizes. For the low group, F(3, 452) = 6.34, p=.000, partial $\eta^2 = .04$, power = 0.97, a post hoc Scheffe revealed that postverbal subjects with unergative verbs were rated significantly lower than with ditransitive and transitive verbs, but that no difference was found between unaccusative verbs and other types. For the intermediate group, F(3, 548) = 6.60, p=.000, partial $\eta^2 = .04$, power = 0.97, a post hoc Scheffé showed that postverbal subjects with ditransitive verbs were rated significantly higher than all other types. For the low advanced group, F(3, 476) = 4.71, p=.003, partial $\eta^2 = .03$, power = 0.89, a post hoc Scheffé indicated that postverbal subjects with ditransitive verbs were rated significantly higher than with transitive verbs, but no other differences were significant. For the NSs from Spain, F(3, 380) = 5.47, p=.001, partial $\eta^2 = .04$, power = 0.94, a post hoc Scheffé showed that postverbal subjects with transitive verbs were rated significantly lower than with ditransitive and unaccusative verbs, but no differences were found with unergative verbs. Overall, where differences were found by verb type, the effect sizes were small indicating that verb type does not play a strong role in the acceptability of postverbal subjects, similarly to what was found in production. Specifically, unaccusative verbs did not show significant differences in subject placement compared to other verb types, which would have been predicted by previous acquisition (Lozano, 2006; Domínguez & Arche, 2008; 2014) and theoretical (Suñer, 1982; Contreras, 1976) research.

In order to compare the ratings of pre- and postverbal subjects between groups, individual one-way ANOVAs were run on each subject position in each focus context, with group as the independent variable and rating as the dependent variable. With unaccusative verbs, preverbal subject ratings showed a significant difference by group, F(5, 827) = 20.10, p=.000, partial $\eta^2 = .11$, power = 1.00, with a medium effect size. A post hoc Scheffé showed that the NSs from
Spain rated preverbal subjects with unaccusative verbs significantly lower than NSs from Latin America. The high advanced group did not differ significantly from either NS group. There were no significant differences in the ratings of the low, intermediate, and low advanced group. With postverbal subjects with unaccusative verbs, there was a significant effect for group, $F(5, 708) = 40.77, p=.000$, partial $\eta^2 = .22$, power = 1.00, with a large effect size. A post hoc Scheffé showed that the low and intermediate learners rated postverbal subjects significantly lower than all other groups. Neither the low advanced nor the high advanced significantly differed from either of the NS groups, but the high advanced learners rated postverbal subjects significantly higher than low advanced.

For unergative verbs, both preverbal and postverbal subjects showed a significant difference in ratings by group: preverbal $F(5, 708) = 22.02, p=.000$, partial $\eta^2 = .14$, power = 1.00, postverbal $F(5, 708) = 42.19, p=.000$, partial $\eta^2 = .23$, power = 1.00, both with large effect sizes. A post hoc Scheffé for preverbal subjects with unergative verbs revealed that the high advanced group rated them significantly lower than all other groups. There were no significant differences between the two NS groups, and none of the other learner groups performed significantly different from the NSs from Latin America, but did perform significantly different from the NSs from Spain. A post hoc Scheffé for postverbal subjects with unergative verbs revealed that the NS groups did not significantly differ from each other, and the low advanced group did not differ significantly from either group. The high advanced group rated postverbal subjects as significantly higher than speakers from Latin America, but did not differ from speakers from Spain. The low and intermediate group differed significantly from all groups.

With transitive verbs, both subject positions showed significant differences by group: preverbal $F(5, 708) = 12.22, p=.000$, partial $\eta^2 = .08$, power = 1.00, postverbal $F(5, 707) = 12.51,$
p=.000, partial $\eta^2 = .08$, power = 1.00, both with medium effect sizes. A post hoc Scheffé test for preverbal subjects with transitive verbs indicated once again that the two NS groups did not significantly differ in their ratings. The low, intermediate, and low advanced group did not significantly differ from the NSs from Latin America, but did rate them higher than speakers from Spain. The high advanced group performed like NSs from Spain, but rated preverbals significantly lower than NSs from Latin America. A post hoc Scheffé for postverbal subjects with transitive verbs revealed that the high advanced group rated them significantly higher than all other groups except the NSs from Latin America, while no other groups significantly differed.

With ditransitive verbs, both subject positions showed a significant difference in ratings by group: preverbal subjects, $F(5, 589) = 5.18$, p=.000, partial $\eta^2 = .04$, power = 0.99, postverbal subjects, $F(5, 708) = 16.20$, p=.000, partial $\eta^2 = .10$, power = 1.00, both with medium effect sizes. A post hoc Scheffé for preverbal subjects with ditransitives indicated that the high advanced group rated preverbals significantly lower than the low advanced group, but there were no other differences. A post hoc Scheffé for postverbal subjects with ditransitives found no significant differences in ratings of postverbal subjects by low advanced, high advanced, NSs from Spain, or NSs from Latin America. The intermediate group did not perform significantly differently from NSs from Latin America, but the low group did rate postverbal subjects as significantly lower.

For all four verb types, there were no significant differences in acceptability between the NSs from Spain and Latin America, unlike what we saw for production. The high and low advanced groups also always performed like at least one of the NS groups, but tend to differ from each other, which is similar to the production results. Finally, to determine whether or not the ratings for pre- and postverbal subjects were significantly different within each proficiency
group, individual one-way ANOVAs were run on each proficiency group within each verb type, with subject position as the independent variable and rating as the dependent variable.

For unaccusative verbs, neither NS group showed a significant difference in ratings of pre- versus postverbal subjects: NSs from Spain F(1, 206) = 3.78, p=.05, partial $\eta^2 = .02$, power = 0.49, NSs from Latin America F(1, 206) = 1.58, p=.21, partial $\eta^2 = .00$, power = 0.24. The low and intermediate groups showed a significant effect for subject position, low F(1, 245) = 130.44, p=.000, partial $\eta^2 = .35$, power = 1.00, intermediate F(1, 297) = 203.92, p=.000, partial $\eta^2 = .41$, power = 1.00, with large effect sizes, both rating preverbs as significantly higher than postverbs. The low advanced group showed the same pattern of ratings, F(1, 258) = 29.96, p=.000, partial $\eta^2 = .10$, power = 1.00, but with a medium effect size. The high advanced group, rated postverbs significantly better than preverbs, F(1, 323) = 20.70, p=.000, partial $\eta^2 = .06$, power = 0.99, with a medium effect size.

For unergative verbs, the NSs from Spain showed no significant difference in ratings by subject position, F(1, 190) = 240.42, p=.17, partial $\eta^2 = .01$, power = 0.29, while the NSs from Latin America rated preverbs as significantly better, F(1, 190) = 18.26, p=.000, partial $\eta^2 = .09$, power = 0.99, with a medium effect size. The low, intermediate, and low advanced groups rated preverbal subjects as significantly better than postverbs, low, F(1, 226) = 202.51, p=.000, partial $\eta^2 = .47$, power = 1.00, and intermediate, F(1, 274) = 187.25, p=.000, partial $\eta^2 = .41$, power = 1.00, with a large effect sizes, low advanced F(1, 238) = 191.25, p=.000, partial $\eta^2 = .14$, power = 1.00, with a medium effect size. The high advanced group showed significant effect size for subject position, rating postverbs as significantly higher than preverbs, F(1, 298) = 253.30, p=.000, partial $\eta^2 = .06$, power = 0.99, with a medium effect size.
For transitive verbs, all groups rated preverbs as significantly better than postverbs, except the high advanced group who showed no significant effect for subject position $F(1, 298) = 2.12, p=.15$, partial $\eta^2 = .01$, power = 0.31. There was a large effect size for low, $F(1, 226) = 82.21, p=.000$, partial $\eta^2 = .27$, power = 1.00, intermediate, $F(1, 274) = 98.18, p=.000$, partial $\eta^2 = .26$, power = 1.00, and low advanced, $F(1, 238) = 82.41, p=.000$, partial $\eta^2 = .26$, power = 1.00, groups. There is a medium effect size for the NSs from Spain, $F(1, 190) = 10.97, p=.001$, partial $\eta^2 = .06$, power = 0.91, and for NSs from Latin America, $F(1, 189) = 25.54, p=.000$, partial $\eta^2 = .12$, power = 0.99.

For ditransitive verbs, the NSs from Spain showed no significant effect for subject position on ratings, $F(1, 174) = .04, p=.85$, partial $\eta^2 = .01$, power = 0.05, while the NSs from Latin America showed a significant effect favoring preverbs, $F(1, 174) = 5.72, p=.02$, partial $\eta^2 = .03$, power = 0.66, with a small effect size. The low, intermediate, and low advanced groups showed significant effect for subject position, rating preverbal significantly higher, low $F(1, 207) = 58.17, p=.000$, partial $\eta^2 = .47$, power = 1.00, intermediate $F(1, 251) = 26.06, p=.000$, partial $\eta^2 = .41$, power = 0.99, low advanced $F(1, 218) = 18.78, p=.000$, partial $\eta^2 = .14$, power = 0.99, all with large effect sizes, while the high advanced showed significantly favored postverbals, $F(1, 273) = 10.26, p=.002$, partial $\eta^2 = .06$, power = 0.89, with a medium effect size. The most curious result is that for all verb types, the high advanced group shows higher ratings for postverbal subjects than both NS groups, differing from performance on the production task.
Table 22. Reformulation types based on target subject position and verb type

<table>
<thead>
<tr>
<th>Reformulation type:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unaccusative</strong></td>
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<td></td>
</tr>
<tr>
<td>Preverbal Target</td>
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<td>Low</td>
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<td>0.00%</td>
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<tr>
<td>Intermediate</td>
<td>66.70%</td>
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<td>100.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>19.10%</td>
<td>77.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
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<td>82.70%</td>
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<tr>
<td>Native – LA</td>
<td>12.50%</td>
<td>87.50%</td>
</tr>
<tr>
<td>Postverbal Target</td>
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<td></td>
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<tr>
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<td>97.80%</td>
<td>2.20%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>93.20%</td>
<td>6.80%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>92.90%</td>
<td>7.10%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>78.10%</td>
<td>6.30%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>90.00%</td>
<td>10.00%</td>
</tr>
<tr>
<td><strong>Unergative</strong></td>
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<td>0.00%</td>
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<tr>
<td>Intermediate</td>
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<td>50.00%</td>
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<tr>
<td>Low Advanced</td>
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<td>70.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>12.50%</td>
<td>83.90%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>7.10%</td>
<td>75.00%</td>
</tr>
<tr>
<td>Native – LA</td>
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<td>73.30%</td>
</tr>
<tr>
<td>Postverbal Target</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>97.70%</td>
<td>2.30%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>93.50%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>79.40%</td>
<td>5.90%</td>
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<td>Native – LA</td>
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<td><strong>Transitive</strong></td>
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<td>Preverbal Target</td>
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<td>Low</td>
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<td>0.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>66.70%</td>
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</tr>
<tr>
<td>High Advanced</td>
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<td>72.10%</td>
</tr>
<tr>
<td>Native – Spain</td>
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<td>73.30%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>21.40%</td>
<td>78.60%</td>
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<tr>
<td>Postverbal Target</td>
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<tr>
<td>Low</td>
<td>93.70%</td>
<td>6.30%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>97.40%</td>
<td>2.60%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>98.20%</td>
<td>0.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>83.30%</td>
<td>16.70%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>62.50%</td>
<td>25.00%</td>
</tr>
<tr>
<td>Native – LA</td>
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<td>8.30%</td>
</tr>
<tr>
<td><strong>Ditransitive</strong></td>
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<td>Preverbal Target</td>
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<td>Native – LA</td>
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<td>8.30%</td>
</tr>
<tr>
<td>Intermediate</td>
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<td>12.50%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>83.30%</td>
<td>16.70%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>20.60%</td>
<td>79.40%</td>
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<tr>
<td>Native – LA</td>
<td>28.00%</td>
<td>56.00%</td>
</tr>
<tr>
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<td>Low</td>
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<tr>
<td>Intermediate</td>
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<tr>
<td>Low Advanced</td>
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<tr>
<td>High Advanced</td>
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<td>6.20%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>72.20%</td>
<td>27.80%</td>
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<tr>
<td>Native – LA</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
In Table 22, we can see the distribution of reformulations by verb type. For unaccusative verbs, we see the majority of preverbal subjects reformulated to postverbal position by low advanced, high advanced, NSs from Spain and NSs from Latin America, and the intermediate group also reformulated in this way to a lesser degree, indicating that the ratings were in fact due to subject position. For postverbal targets, there are relatively few reformulations that still contained postverbal subjects, since the majority contained preverbal subjects for all groups. This comparison of pre- and postverbal targets indicates no clear preference for one subject position or the other with unaccusatives. Similar patterns emerge for unergative, transitive, and ditransitive verbs, indicating that verb type does not play a strong role in determining subject position. This could also be indicative that the participants are rating the sentences on something other than verb type, most probably focus. Those postverbals there were corrected to preverbal may be from wide focus, and those preverbs that were corrected to postverbal could be form contrastive focus. Curiously, the low learners produced a large percentage of postverbal subjects with ditransitive verbs, which could indicate a role for the length of a verb phrase in yielding postverbal subjects.

Overall, verb type does not appear to play a strong role in determining acceptability of subject position; therefore, I look at the interaction between verb type and focus. Mean ratings for each verb type were calculated within each focus context. Although each verb type group only contains six target items and each subject position only contains two items, inferential statistics were conducted but results must be taken with caution. Percentages of pre- and postverbal subjects in the sentence reformulations were also calculated for each verb type, based on subject position and focus of the target sentence, but results will not be discussed as each percentage is based on a variable number items (1-2) per participant and a variable number of
participants, since not all rated the same sentences as less than 5. The reader is referred in Appendix H where the data is presented.

For each verb type, I ran three sets of one-way ANOVAs. First, I split the data by proficiency group and subject position and examined the effect for focus, using a one-way ANOVA with focus context as the independent variable and rating and the dependent variable. Second, I split the data by focus context and subject position and examined the effect for proficiency group, using a one-way ANOVA with group as the independent variable and rating as the dependent variable. Finally, I split the data by focus context and group and examined the effect for subject position, using a one-way ANOVA with subject position as the independent variable and rating as the dependent variable. When significant differences were found in the ANOVAs, post hoc Scheffé tests were conducted. I repeated the same set of analyses for unaccusative, unergative, transitive, and ditransitive verbs and topicalized object structures.

3.2.1. Unaccusative verbs

Table 23 presents the mean acceptance rates in percentages for unaccusative verbs in each of the three focus contexts and for preverbal and postverbal targets. In Figure 16, we can see that NSs show higher acceptance of preverbal subjects in wide focus, they differ from each other in narrow focus, and higher acceptance of postverbal subjects in contrastive focus. We also see the L2 groups approximate this trend as proficiency rises.

First, I examined the differences in ratings between each focus context, running one-way ANOVAs on each proficiency group and subject position independently, with focus as the independent variable. For preverbal subjects with unaccusatives, both NS groups showed a significant effect for focus, NSs from Spain, F(2, 109) = 6.72, p=.002, partial $\eta^2 = .11$, power = 0.91, with a medium effect, and NSs from Latin America, F(2, 109) = 14.56, p=.000, partial $\eta^2 = .14$, power =
.21, power = 0.99, with a large effect. Post hoc Scheffé tests for each NS group showed significantly lower ratings for preverbal subjects in contrastive focus as compared to the other two contexts which did not differ. None of the L2 groups showed significant differences in ratings of preverbal subjects by focus context: low $F(2, 130) = 2.83$, $p=.06$, partial $\eta^2 = .04$, power = 0.55, intermediate $F(2, 158) = 0.64$, $p=.53$, partial $\eta^2 = .01$, power = 0.16, low advanced $F(2, 137) = 0.55$, $p=.58$, partial $\eta^2 = .01$, power = 0.14, high advanced $F(2, 172) = 2.89$, $p=.06$, partial $\eta^2 = .02$, power = 0.56.

For postverbal subjects with unaccusatives, only the NSs from Spain showed a significant effect for focus context, $F(2, 93) = 11.85$, $p=.000$, partial $\eta^2 = .20$, power = 0.99, with a large effect size, rating postverbals significantly lower in wide focus, while no other group showed a difference: low $F(2, 111) = 2.01$, $p=.14$, partial $\eta^2 = .04$, power = 0.41, intermediate $F(2, 117) = 1.49$, $p=.23$, partial $\eta^2 = .02$, power = 0.31, low advanced $F(2, 147) = 1.94$, $p=.15$, partial $\eta^2 = .01$.  

<table>
<thead>
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<th>Context:</th>
<th>Target:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Focus</td>
<td>Group:</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Low</td>
<td>96.14</td>
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<td>10.06</td>
<td>87.00</td>
</tr>
<tr>
<td>High Advanced</td>
<td>89.07</td>
<td>18.97</td>
<td>93.60</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>91.25</td>
<td>15.93</td>
<td>82.50</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>95.42</td>
<td>11.84</td>
<td>86.25</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td>Group:</td>
<td>Mean</td>
<td>SD</td>
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<td>64.74</td>
</tr>
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<td>Intermediate</td>
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</tr>
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<td>11.59</td>
<td>82.00</td>
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<td>91.20</td>
<td>16.74</td>
<td>95.60</td>
</tr>
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<td>95.63</td>
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<td>Native – Lat. Am.</td>
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<td>3.54</td>
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<td>Contrastive Focus</td>
<td>Group:</td>
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<td>2.95</td>
<td>76.96</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>95.00</td>
<td>12.61</td>
<td>90.00</td>
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<tr>
<td>High Advanced</td>
<td>82.80</td>
<td>18.96</td>
<td>97.60</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>78.13</td>
<td>19.25</td>
<td>96.25</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>84.38</td>
<td>15.85</td>
<td>95.63</td>
</tr>
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</table>
.03, power = 0.40, high advanced F(2, 147) = 2.00, p=.14, partial η² = .03, power = 0.41, and NSs from Latin America F(2, 93) = 2.72, p=.07, partial η² = .06, power = 0.53. Therefore, it appears that the L2 learners are unable to use focus to rate subject positions with unaccusative verbs.

Figure 16. Mean acceptance (%) of subject placement for unaccusative verbs

Second, I compared ratings by groups within each focus context and for each subject position using one-way ANOVAs with group as the independent variable. For preverbal subjects in wide focus with unaccusatives, there was a significant effect for group, F(5, 351) = 5.96, p=.000, partial η² = .08, power = 0.99, with a medium effect size, and a post hoc Scheffé indicated that the NS groups did not significantly differ, and the high advanced, low, and low advanced group did not significantly differ from either NS group. For postverbal subjects in wide focus with unaccusatives, there was a significant effect for group, F(5, 232) = 9.25, p=.000, partial η² = .17, power = 1.00, with a large effect size, and a post hoc Scheffé indicated that low and intermediate learners did not differ significantly from NSs from Spain and intermediate, low advanced, and high advanced did not differ from either NSs.

For preverbal subjects in narrow focus with unaccusatives, there was a significant effect for group, F(5, 232) = 7.28, p=.000, partial η² = .14, power = 0.99, with a large effect size, and a
post hoc Scheffé indicated that NSs from Spain and high advanced rated preverbs significantly lower than NSs from Latin America, low, and intermediate. The low advanced group did not show significant differences. For postverbal subjects in narrow focus, there was a significant effect for group, $F(5, 232) = 22.99, p=.000$, partial $\eta^2 = .33$, power = 1.00, with a large effect size, and a post hoc Scheffé showed no significant differences between high advanced and both NS groups, as well as no significant difference between low advanced and NSs from Latin America, while the intermediate and low learners rated postverbals as significantly lower than both NS groups. This is similar to the pattern we saw in the production data.

For preverbal subjects in contrastive focus with unaccusatives, there was a significant difference by group, $F(5, 232) = 11.17, p=.000$, partial $\eta^2 = .19$, power = 1.00, with a large effect size, and a post hoc Scheffé showed no significant differences between the NS groups and the high advanced group. Remarkably, the low group did not rate preverbal subjects significantly different from either NS group, and the intermediate group also showed no significant difference from the NSs from Latin America. For postverbs in contrastive focus, there was a significant effect for group, $F(5, 232) = 41.16, p=.000$, partial $\eta^2 = .23$, power = 1.00, with a large effect size, and a post hoc Scheffé showed that the low and intermediate learners rated postverbal subjects significantly lower than all other groups, which did not differ.

Finally, I examined the effect for subject position within each group and each context, using a one-way ANOVA with subject position as the independent variable. For wide focus with unaccusatives, all groups except high advanced showed a significant difference in ratings by subject position. The high advanced group showed no significant difference in ratings between pre- and postverbal subjects, $F(1, 123) = 2.22, p=.14$, partial $\eta^2 = .02$, power = 0.32. The low, intermediate, and low advanced groups and both NS groups all rated preverbs as significantly
better than postverbals, with a large effect for low, F(1, 93) = 55.78, p = .000, partial $\eta^2 = .38$, power = 1.00, and intermediate, F(1, 113) = 80.23, p = .000, partial $\eta^2 = .42$, power = 1.00, and a medium effect for low advanced, F(1, 98) = 13.07, p = .000, partial $\eta^2 = .12$, power = 0.95, NSs from Spain, F(1, 78) = 5.81, p = .018, partial $\eta^2 = .07$, power = 0.66, and NSs from Latin America, F(1, 78) = 7.26, p = .009, partial $\eta^2 = .09$, power = 0.76.

For narrow focus with unaccusatives, the low, intermediate, and low advanced learners and the NSs from Latin America showed a significant difference in ratings by subject position, rating preverbs as significantly better than postverbs: low F(1, 74) = 101.96, p = .000, partial $\eta^2 = .58$, power = 1.00, intermediate F(1, 90) = 84.59, p = .000, partial $\eta^2 = .48$, power = 1.00, low advanced, F(1, 78) = 16.04, p = .000, partial $\eta^2 = .17$, power = 0.98, NSs from Latin America F(1, 62) = 11.21, p = .001, partial $\eta^2 = .15$, power = 0.91, with large effect sizes. The high advanced and the NSs from Spain showed a significant effect for subject position, rating postverbals as significantly better than preverbs in narrow focus, high advanced F(1, 98) = 2.64, p = .11, partial $\eta^2 = .03$, power = 0.36, NSs from Spain F(1, 62) = 2.86, p = .096, partial $\eta^2 = .04$, power = 0.38, but with small effect sizes.

For contrastive focus with unaccusatives, the low and intermediate learners showed a significant effect for subject position, rating preverbs as significantly better, low F(1, 74) = 13.18, p = .001, partial $\eta^2 = .15$, power = 0.95, intermediate F(1, 90) = 43.43, p = .000, partial $\eta^2 = .33$, power = 1.00, with large effect sizes. The intermediate group showed no significant effect for subject position, rating both positions similarly high, F(1, 78) = 2.47, p = .12, partial $\eta^2 = .03$, power = 0.34. The high advanced learners and both NS groups rated postverbals as significantly better than preverbs: high advanced, F(1, 98) = 26.15, p = .000, partial $\eta^2 = .21$, power = 0.99, and NSs from Spain, F(1, 62) = 22.89, p = .000, partial $\eta^2 = .27$, power = 0.99, both with a large
effect size, and for NSs from Latin America F(1, 62) = 8.50, p=.005, partial $\eta^2 = .12$, power = 0.82, with a medium effect size.

### 3.2.2. Unergative verbs

Table 24 presents the mean acceptance rates in percentages for unergative verbs in each of the three discourse contexts for preverbal and postverbal targets. In Figure 17, we see low acceptance of postverbal subjects by NSs in wide focus, with higher rates of acceptance moving to narrow and contrastive focus. In all three contexts, we see acceptability of postverbal subjects increase with proficiency, to the point where low and high advanced show higher acceptability than NSs. The statistical validity of these comparisons will now be conducted.

<table>
<thead>
<tr>
<th>Target:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context:</strong></td>
<td><strong>Group:</strong></td>
<td>Mean</td>
</tr>
<tr>
<td><strong>Wide Focus</strong></td>
<td>Low</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>96.00</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>98.13</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>98.75</td>
</tr>
<tr>
<td><strong>Narrow Focus</strong></td>
<td>Low</td>
<td>98.95</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>99.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>90.40</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>93.75</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>98.13</td>
</tr>
<tr>
<td><strong>Contrastive Focus</strong></td>
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<td>97.89</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>97.83</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>95.00</td>
</tr>
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<td></td>
<td>High Advanced</td>
<td>75.60</td>
</tr>
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<td></td>
<td>Native – Spain</td>
<td>86.25</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>91.25</td>
</tr>
</tbody>
</table>

First, I examined the differences in ratings between each focus context, running one-way ANOVAs on each proficiency group and subject position independently, with focus as the independent variable. For preverbal subjects with unergatives, low and intermediate learners
showed no effect for focus: low $F(2, 111) = 1.56$, $p=.21$, partial $\eta^2 = .03$, power = 0.33, intermediate, $F(2, 135) = 3.79$, $p=.03$, partial $\eta^2 = .05$, power = 0.68. The low advanced group showed a significant effect for focus, $F(2, 117) = 5.32$, $p=.01$, partial $\eta^2 = .08$, power = 0.83, with a medium effect size, where ratings in contrastive focus were significantly lower than in wide, but no difference was found with narrow focus. The high advanced group and both NS groups showed significantly lower ratings in contrastive focus as compared to the other two contexts: high advanced, $F(2, 147) = 17.44$, $p=.000$, partial $\eta^2 = .19$, power = 1.00, and NSs from Spain, $F(2, 93) = 8.27$, $p=.000$, partial $\eta^2 = .15$, power = 0.96 both with large effect sizes, and NSs from Latin America, $F(2, 93) = 6.30$, $p=.003$, partial $\eta^2 = .12$, power = 1.00, with a medium effect size.

Figure 17. Mean acceptance (%) of subject placement for unergative verbs

For postverbal subjects with unergatives, significant differences by focus context were only found for the NS groups: NSs from Spain $F(2, 93) = 21.18$, $p=.000$, partial $\eta^2 = .31$, power = 1.00, NSs from Latin America $F(2, 93) = 9.26$, $p=.000$, partial $\eta^2 = .16$, power = 0.97, both with large effect sizes. Both groups rated postverbal subjects as significantly lower in wide as compared to narrow and contrastive focus. None of the other groups showed significant differences by focus: low $F(2, 111) = .53$, $p=.59$, partial $\eta^2 = .01$, power = 0.14, intermediate $F(1,
135) = .06, p=.94, partial $\eta^2 = .00$, power = 0.06, low advanced $F(2, 117) = .53$, p=.59, partial $\eta^2 = .01$, power = 0.14, high advanced $F(2, 147) = 3.10$, p=.05, partial $\eta^2 = .04$, power = 0.59.

Second, I compared ratings by groups within each focus context and for each subject position using one-way ANOVAs with group as the independent variable. In wide focus, preverbal subjects showed no difference by group, $F(5, 232) = 4.09$, p=.001, partial $\eta^2 = .08$, power = 0.95. Postverbal subjects in wide focus with unergative verbs showed a significant effect for group, $F(5, 232) = 10.63$, p=.000, partial $\eta^2 = .19$, power = 1.00, with a large effect size. A post hoc Scheffé indicated that the high advanced learners rated postverbal subjects significantly higher than both NS groups, and interestingly, the low and intermediate learners showed no significant differences from either NS group.

In narrow focus with unergatives, preverbal subjects showed a significant difference by group, $F(5, 232) = 6.25$, p=.000, partial $\eta^2 = .12$, power = 0.99, with a medium effect size. The high advanced group rated preverbal subjects as significantly lower than all other learner groups, but there were no other significant differences. For postverbal subjects in narrow focus, there was also a significant effect for group, $F(5, 232) = 24.16$, p=.000, partial $\eta^2 = .34$, power = 1.00, with a large effect size. Neither NS group rated postverbal subjects significantly different than preverbal subjects, nor did neither advanced group differ significantly from either NS group. However the high advanced group rated postverbal subjects significantly higher than the low advanced group. The low and intermediate groups rated postverbal subjects significantly worse than all other groups.

In contrastive focus with unergatives, preverbal subjects showed a significant effect for group, $F(5, 232) = 16.09$, p=.000, partial $\eta^2 = .26$, power = 1.00, with a large effect size. There were no significant differences between NSs from Latin America and NSs from Spain. The high
advanced had no significant difference with the NSs from Spain, but rated preverbal subjects as significantly worse than the NSs from Latin America. There were no significant differences between the low advanced learners and both NS groups. There were also no significant differences between the low and intermediate learners and the NSs from Latin America. For postverbal subjects in contrastive focus, there was a significant effect for group $F(5, 232) = 18.24$, $p=.000$, partial $\eta^2 = .28$, power = 1.00, with a large effect size. There were no significant difference between the high advanced, low advanced, NSs from Spain and NSs from Latin America. The low rated postverbals significantly lower than the low advanced, but there were no differences between low advanced and intermediate.

Finally, I examined the effect for subject position within each group and each context, using a one-way ANOVA with subject position as the independent variable. In wide focus with unergatives, all groups except the high advanced, showed a significant difference in ratings by subject position: low $F(1, 74) = 72.25$, $p=.000$, partial $\eta^2 = .49$, power = 1.00, intermediate 86.59, $p=.000$, partial $\eta^2 = .49$, power = 1.00, low advanced $F(1, 78) = 19.42$, $p=.000$, partial $\eta^2 = .20$, power = 0.99, NSs from Spain $F(1, 62) = 31.24$, $p=.000$, partial $\eta^2 = .34$, power = 1.00, NSs from Latin America $F(1, 62) = 32.88$, $p=.000$, partial $\eta^2 = .35$, power = 1.00, all with large effect sizes, rating preverbal subjects as significantly better than postverbal subjects. The high advanced group showed no significant difference for subject position, with high ratings for both, $F(1, 98) = 2.58$, $p=.11$, partial $\eta^2 = .03$, power = 0.35.

In narrow focus with unergatives, all groups except the NSs from Spain, $F(1, 62) = 3.49$, $p=.07$, partial $\eta^2 = .05$, power = 0.45, showed a significant effect for subject position. The high advanced learners rated postverbal subjects significantly higher, $F(1, 98) = 5.55$, $p=.02$, partial $\eta^2 = .05$, power = 0.65, with a small effect size. The NSs from Latin America rated preverbals
significantly higher, $F(1, 62) = 8.96, p=.01$, partial $\eta^2 = .12$, power = 0.81, with a medium effect size. The other three L2 groups rated preverbal as higher than postverbal: low $F(1, 74) = 70.95$, $p=.000$, partial $\eta^2 = .49$, power = 1.00, intermediate $F(1, 90) = 82.40$, $p=.000$, partial $\eta^2 = .48$, power = 1.00, low advanced $F(1, 78) = 20.06$, $p=.000$, partial $\eta^2 = .21$, power = 0.99, with large effect sizes.

In contrastive focus with unergatives, all groups except the NSs from Latin America showed significant differences by subject position. The NSs from Latin America rated both positions similarly high, $F(1, 62) = 1.35$, $p=.25$, partial $\eta^2 = .02$, power = 0.21, but with a small effect size, while the NSs from Spain rated postverbal subjects significantly higher, $F(1, 62) = 6.15$, $p=.02$, partial $\eta^2 = .09$, power = 0.69, with a medium effect size. The high advanced also rated postverbal subjects higher, $F(1, 98) = 34.89$, $p=.000$, partial $\eta^2 = .26$, power = 1.00, with a large effect size. The low advanced group rated preverbal subjects higher than postverbals, $F(1, 78) = 4.19$, $p=.04$, partial $\eta^2 = .05$, power = 0.53, with a small effect size, and the low, $F(1, 90) = 36.20$, $p=.000$, partial $\eta^2 = .29$, power = 1.00, and intermediate, $F(1, 74) = 57.78$, $p=.000$, partial $\eta^2 = .44$, power = 1.00, groups rated preverbs higher than postverbs as well, with large effect sizes.

### 3.2.3. Transitive verbs

Table 25 presents the mean acceptance rates in percentages for transitive verbs in each of the three discourse contexts for preverbal and postverbal targets. In Figure 18, we can see overall low ratings of postverbal subjects in wide focus, except by the high advanced group, but these ratings increase sharply in narrow and contrastive focus. For the first time, it appears that the postverbal subject ratings are higher in narrow versus contrastive focus.
Table 25. *Mean acceptance (%) of subject placement for transitive verbs*

<table>
<thead>
<tr>
<th>Context:</th>
<th>Target:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group:</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Wide Focus</td>
<td>Low</td>
<td>98.95</td>
<td>4.53</td>
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<td>Intermediate</td>
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<td>Low Advanced</td>
<td>99.50</td>
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<td>High Advanced</td>
<td>97.20</td>
<td>10.70</td>
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<td>Native – Spain</td>
<td>99.38</td>
<td>3.54</td>
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<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>99.38</td>
<td>3.54</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td>Low</td>
<td>96.84</td>
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<td></td>
<td>Intermediate</td>
<td>97.39</td>
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<tr>
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<td>Low Advanced</td>
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<td>0.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>90.00</td>
<td>16.29</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>88.13</td>
<td>15.12</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>97.50</td>
<td>6.72</td>
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<tr>
<td>Contrastive Focus</td>
<td>Low</td>
<td>97.37</td>
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<td></td>
<td>Intermediate</td>
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<td>High Advanced</td>
<td>84.40</td>
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<td>Native – Spain</td>
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<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>93.75</td>
<td>9.42</td>
</tr>
</tbody>
</table>

Figure 18. *Mean acceptance (%) of subject placement for transitive verbs*

First, I examined the differences in ratings of transitive verbs between each focus context, running one-way ANOVAs, with subsequent post hoc Scheffé tests, on each proficiency group and subject position independently, with focus as the independent variable. For preverbal subjects with transitive verbs, the low, intermediate, and low advanced groups show no significant difference by focus context: low F(2, 111) = 0.51, p=.61, partial η² = .01, power =
0.13, intermediate $F(2, 135) = 1.35, p=.26$, partial $\eta^2 = .02$, power = 0.29, low advanced $F(2, 117) = 1.02, p=.37$, partial $\eta^2 = .02$, power = 0.22. For the other three groups, there was a significant effect for focus with ratings for contrastive focus being significantly lower than wide focus, but no difference with narrow focus: NSs from Spain, $F(2, 93) = 8.16, p=.001$, partial $\eta^2 = .15$, power = 0.95, with a large effect size, and NSs from Latin America, $F(2, 93) = 5.38, p=.006$, partial $\eta^2 = .10$, power = 0.83, and high advanced learners, $F(2, 147) = 7.34, p=.001$, partial $\eta^2 = .09$, power = 0.94, with medium effect sizes. For postverbal subjects with transitive verbs, all groups showed significantly lower ratings in wide focus: NSs from Spain, $F(2, 93) = 41.44, p=.000$, partial $\eta^2 = .47$, power = 1.00, NSs from Latin America, $F(2, 93) = 41.43, p=.000$, partial $\eta^2 = .47$, power = 1.00, and high advanced, $F(2, 147) = 18.29, p=.000$, partial $\eta^2 = .20$, power = 1.00, all with large effect sizes, low, $F(2, 111) = 7.46, p=.001$, partial $\eta^2 = .12$, power = 0.94, and intermediate, $F(2, 135) = 11.13, p=.000$, partial $\eta^2 = .14$, power = 0.99, with medium effect sizes, and low advanced, $F(2, 117) = 3.95, p=.02$, partial $\eta^2 = .06$, power = 0.70, with a small effect size.

Second, I compared ratings by groups within each focus context and for each subject position using one-way ANOVAs with group as the independent variable. With preverbal subjects in wide focus with transitive verbs, there was no significant difference by group, $F(5, 232) = 1.14, p=.34$, partial $\eta^2 = .02$, power = 0.40, but for postverbals in wide focus there was a significant effect for group, $F(5, 232) = 7.78, p=.000$, partial $\eta^2 = .14$, power = 0.99, with a large effect size, where the high advanced learners rated postverbals significantly higher than all groups except low advanced, meaning the low and intermediate groups performed like NSs.

In narrow focus with transitive verbs, there was a significant effect for group with preverbals, $F(5, 232) = 6.01, p=.000$, partial $\eta^2 = .12$, power = 0.99, with a medium effect size.
The NSs from Spain rated preverbal subjects significantly worse than NSs from Latin America. The high advanced group and the low group had no significant differences with either NS group. The intermediate had no differences from NSs from Latin America, but significantly differed from Spain and low advanced. For postverbals in narrow focus, there was a significant effect for group, $F(5, 232) = 7.94$, $p=.000$, partial $\eta^2 = .15$, power $= 1.00$, with a large effect size. There were no significant differences between NSs from Spain, NSs from Latin America, high advanced, and low advanced groups. There were no significant differences between intermediate, low advanced, and NSs from Spain. There were no significant differences between low, intermediate, and low advanced.

In contrastive focus with transitive verbs, preverbal subjects showed a significant effect for subject position, $F(5, 232) = 7.18$, $p=.000$, partial $\eta^2 = .13$, power $= 0.99$, with a medium effect size. The high advanced learners rated preverbal subjects significantly worse than all learner groups but not than both NS groups. However, there were no significant differences between the two NS groups and the three lower learner groups. For postverbal subjects in contrastive focus, there was a significant effect for subject position, $F(5, 232) = 6.67$, $p=.000$, partial $\eta^2 = .13$, power $= 0.99$, with a medium effect size. The high advanced group rated postverbal subjects as significantly better than all other learner groups, but not than the two NS groups. Once again, there were no significant differences between the two NS groups and the three lower learner groups.

Finally, I examined the effect for subject position within each group and each context, using a one-way ANOVA with subject position as the independent variable. In wide focus with transitive verbs, all groups showed a significant difference in ratings of the two subject positions, all rating preverbal as significantly better than postverbal: low $F(1, 74) = 76.38$, $p=.000$, partial
\[ \eta^2 = .51, \text{ power} = 1.00, \]  
\[ \text{intermediate F}(1, 90) = 135.58, p=.000, \text{ partial } \eta^2 = .60, \text{ power} = 1.00, \]  
\[ \text{low advanced F}(1, 78) = 48.73, p=.000, \text{ partial } \eta^2 = .38, \text{ power} = 1.00, \]  
\[ \text{high advanced F}(1, 98) = 17.73, p=.000, \text{ partial } \eta^2 = .15, \text{ power} = 0.99, \]  
\[ \text{NSs from Spain F}(1, 62) = 90.31, p=.000, \text{ partial } \eta^2 = .59, \text{ power} = 1.00, \]  
\[ \text{NSs from Latin America F}(1, 62) = 79.41, p=.000, \text{ partial } \eta^2 = .56, \text{ power} = 1.00, \]  
all with large effect sizes.

In narrow focus with transitive verbs, the NSs from Latin America showed no significant difference by subject position, rating both pre- and postverbal subjects similarly high, F(1, 62) = 0.12, p=.73, \eta^2 = .00, power = 0.06. The high advanced and the NSs from Spain rated postverbal subjects as significantly better: high advanced F(1, 98) = 11.95, p=.001, \eta^2 = .11, power = 0.93, NSs from Spain F(1, 62) = 6.16, p=.02, \eta^2 = .09, power = 0.69, with medium effect sizes. The lower three L2 groups showed significantly higher ratings for preverbal subjects: low, F(1, 74) = 11.95, p=.001, \eta^2 = .14, power = 0.93, and low advanced F(1, 78) = 16.62, p=.000, \eta^2 = .17, power = 0.98, with large effect sizes, and intermediate, F(1, 90) = 13.21, p=.000, \eta^2 = .13, power = 0.95, with a medium effect size.

In contrastive focus with transitive verbs, neither NS group showed a significant effect for subject position, rating both pre- and postverbal subjects similarly: Spain F(1, 62) = 0.89, p=.35, \eta^2 = .01, power = 0.15, Latin America F(1, 62) = 0.03, p=.85, \eta^2 = .00, power = 0.05. The three lower proficiency groups all showed significant effects of subject position: low F(1, 74) = 18.36, p=.000, \eta^2 = .20, power = 0.99, intermediate F(1, 90) = 16.21, p=.000, \eta^2 = .15, power = 0.98, low advanced F(1, 78) = 23.57, p=.000, \eta^2 = .23, power = 0.99, with large effect sizes, rating preverbal subjects significantly higher than postverbals. The high advanced learners rated postverbals as significantly higher, F(1,98) = 13.59, p=.000, \eta^2 = .12, power = 0.95, with a medium effect size. No analyses were
conducted based on presence or absence of preverbal object clitics because all target items in narrow and contrastive focus contained a clitic, and all items in wide focus did not.

### 3.2.4. Ditransitive verbs

Table 26 presents the mean acceptance rates in percentages for ditransitive verbs in each of the three discourse contexts for preverbal and postverbal targets. In Figure 19, we can see that once again, acceptance of postverbal subjects rises as proficiency increases in all three contexts, with ratings appearing to be the highest in contrastive focus. Once again we see the high advanced group showing high acceptance in wide focus, surpassing the other groups.

<table>
<thead>
<tr>
<th>Target:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context:</strong></td>
<td><strong>Group:</strong></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Wide Focus</td>
<td>Low</td>
<td>92.63</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>87.83</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>92.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>96.80</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>96.25</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>97.50</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td>Low</td>
<td>98.42</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>97.39</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>100.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>91.60</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>92.50</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>97.50</td>
</tr>
<tr>
<td>Contrastive Focus</td>
<td>Low</td>
<td>97.89</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>98.70</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>99.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>88.80</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>90.63</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>93.75</td>
</tr>
</tbody>
</table>

First, I examined the differences in ratings between each focus context, running one-way ANOVAs, with subsequent post hoc Scheffé tests where necessitated, on each proficiency group and subject position independently, with focus as the independent variable. With preverbal
subjects with ditransitive verbs, only the low, intermediate, and low advanced learners showed a significant difference for focus context. These learners rated preverbs in wide focus significantly lower than narrow and contrastive: low F(2, 92) = 3.22, p=.04, partial $\eta^2 = .07$, power = 0.60, intermediate F(2, 112) = 6.61, p=.002, partial $\eta^2 = .11$, power = 0.91, low advanced F(2, 97) = 7.59, p=.001, partial $\eta^2 = .14$, power = 0.94, all with medium effect sizes. The high advanced, NSs from Spain and NSs from Latin America showed no difference by focus for preverbal subjects: high advanced F(2, 122) = 2.27, p=.11, partial $\eta^2 = .04$, power = 0.45, NSs from Spain F(2, 77) = 1.09, p=.34, partial $\eta^2 = .03$, power = 0.23, NSs from Latin America F(2, 77) = 2.14, p=.12, partial $\eta^2 = .05$, power = 0.43.

![Figure 19. Mean acceptance (%) of subject placement for ditransitive verbs](image)

With postverbal subjects with ditransitive verbs, the intermediate, low advanced, and high advanced groups showed no difference by focus context, intermediate F(2, 135) = 1.17, p=.31, partial $\eta^2 = .02$, power = 0.25, low advanced F(2, 117) = 2.59, p=.08, partial $\eta^2 = .04$, power = 0.51, high advanced F(2, 147) = 2.33, p=.10, partial $\eta^2 = .03$, power = 0.47. The low learners showed significantly lower ratings for postverbal subject in narrow focus versus wide and contrastive focus, F(2, 111) = 4.26, p=.02, partial $\eta^2 = .07$, power = 0.73, with a medium
effect size. The NSs from Spain, F(1, 93) = 13.62, p=.000, partial η² = .23, power = 0.99, rated postverbals in wide focus significant lower than narrow and contrastive focus, and NSs Latin America, F(1, 93) = 8.33, p=.000, partial η² = .15, power = 0.96, rated postverbals in wide focus significant lower than contrastive focus, with narrow focus showing no difference from either, both with large effect sizes.

Second, I compared ratings by groups within each focus context and for each subject position using one-way ANOVAs with group as the independent variable. In wide focus with ditransitive verbs, neither preverbal subjects, F(5, 113) = 1.45, p=.21, partial η² = .06, power = 0.49, nor postverbal subjects, F(5, 232) = 2.43, p=.04, partial η² = .06, power = 0.76, showed significant differences by group. In narrow focus with ditransitive verbs, preverbal showed a significant effect for group, F(5, 232) = 4.37, p=.001, partial η² = .09 power = 0.97, with a medium effect size. A post hoc Scheffé indicated that high advanced rated preverbal subjects significantly lower than low advanced, but with no other significant differences. Postverbal subjects in narrow focus also showed a significant effect for group, F(5, 232) = 15.68, p=.000, partial η² = .25, power = 1.00, this time with a large effect size. The low learners rated postverbal subjects significantly lower than all other groups, and intermediate rated them significantly lower than the high advanced group, with no other significant differences.

In contrastive focus with ditransitive verbs, preverbal subjects show a significant effect for group, F(5, 232) = 7.16, p=.000, partial η² = .13, power = 0.99, with a medium effect size. There were no significant differences between high advanced, NSs from Spain, and NSs from Latin America, or between NSs from Spain, NSs from Latin America, low, and intermediate. There were also no significant differences between NSs from Latin America, low, intermediate, and low advanced. High advanced rated preverbal subjects significantly lower than low
advanced, intermediate, and low. For postverbal subjects in contrastive focus, there was also a significant effect for group, F(5, 22) = 9.19, p=.000, partial $\eta^2 = .17$, power = 1.00, with a large effect size. Low and intermediate learners rated postverbal subjects significantly lower than NSs from Spain and Latin America. There were no significant differences in ratings for both advanced and both NS groups.

Finally, I examined the effect for subject position within each group and each context, using a one-way ANOVA with subject position as the independent variable. In wide focus with ditransitive verbs, both NS groups showed a significant effect for subject position, rating preverbals as significantly better than postverbals: NSs from Spain F(1, 46) = 5.53, p=.02, partial $\eta^2 = .11$, power = 0.63, NSs from Latin America F(1, 46) = 6.18, p=.02, partial $\eta^2 = .12$, power = 0.68, both with a medium effect size. No learner group showed a significant difference in ratings by subject position: low F(1, 55) = 3.68, p=.06, partial $\eta^2 = .06$, power = 0.47, intermediate F(1, 67) = 1.07, p=.31, partial $\eta^2 = .02$, power = 0.18, low advanced F(1, 58) = 1.44, p=.24, partial $\eta^2 = .02$, power = 0.22, high advanced F(1, 73) = 0.86, p=.36, partial $\eta^2 = .01$, power = 0.15. This is the first time we see that the three lower proficiency groups do not show a definitive preference for preverbal subjects in wide focus, so there may be some unknown intervening variable, such as the presence of the dative clitic le with the ditransitive verbs.

In narrow focus with ditransitive verbs, low, intermediate, and low advanced learners showed a significant effect for subject position, rating preverbal subjects as significantly better:
low F(1, 74) = 64.15, p=.000, partial $\eta^2 = .46$, power = 1.00, intermediate F(1, 90) = 17.26, p=.000, partial $\eta^2 = .16$, power = 0.98, low advanced F(1, 78) = 13.50, p=.000, partial $\eta^2 = .15$, power = 0.95, with large effect sizes. The high advanced group rated postverbals as significantly better, F(1, 98) = 6.17, p=.02, partial $\eta^2 = .06$, power = 0.69, with a small effect size. Neither NS
group rated either position as significantly different: Spain $F(1, 62) = 2.13$, $p=.15$, partial $\eta^2 = .03$, power = 0.30, Latin America $F(1, 62) = 4.08$, $p=.05$, partial $\eta^2 = .06$, power = 0.51.

In contrastive focus with ditransitive verbs, all groups rated pre- and postverbal subjects significantly differently. The low, intermediate, and low advanced group rated preverbal subjects as significantly better: low $F(1, 74) = 17.37$, $p=.000$, partial $\eta^2 = .19$, power = 0.98, with a large effect size, intermediate $F(1, 90) = 12.82$, $p=.00$, partial $\eta^2 = .13$, power = 0.94, with a medium effect size, and low advanced $F(1, 78) = 5.69$, $p=.02$, partial $\eta^2 = .07$, power = 0.65, with a small effect size and low power. The high advanced and both NSs rated postverbal subjects as significantly better than preverbs: high advanced $F(1, 98) = 11.40$, $p=.001$, partial $\eta^2 = .10$, power = 0.92 and NSs from Latin America $F(1, 62) = 7.09$, $p=.01$, partial $\eta^2 = .10$, power = 0.45, both with medium effect sizes and low power, and a large effect size for NSs from Spain $F(1, 62) = 12.13$, $p=.001$, partial $\eta^2 = .16$, power = 0.93. No analyses were conducted based on presence or absence of preverbal object clitics because all target items in narrow and contrastive focus contained two clitics, and all items in wide focus did not.

### 3.2.5. Topicalized-objects

Table 27 presents the mean acceptance rates in percentages for topicalized-object structures regardless of discourse contexts, since a postverbal subject should be employed regardless, for preverbal and postverbal targets. In Figure 20, we can see that the low, intermediate, and low advanced learners show relatively low rates of acceptance of both pre- and postverbal subjects, which may indicate low acceptance of the topic structure rather than the subject position. On the other hand, the high advanced, NSs from Spain, and NSs from Latin America show clear preferences for postverbal subjects. Once again, I ran one-way ANOVAs to test the significance of the distribution in ratings.
Table 27. Mean acceptance (%) of subject placement for topicalized objects (no focus)

<table>
<thead>
<tr>
<th>Target:</th>
<th>Preverbal</th>
<th></th>
<th>Postverbal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Low</td>
<td>66.14</td>
<td>24.11</td>
<td>63.33</td>
<td>22.72</td>
</tr>
<tr>
<td>Intermediate</td>
<td>66.67</td>
<td>22.58</td>
<td>65.22</td>
<td>22.71</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>65.00</td>
<td>24.49</td>
<td>63.67</td>
<td>26.06</td>
</tr>
<tr>
<td>High Advanced</td>
<td>66.40</td>
<td>26.35</td>
<td>88.80</td>
<td>15.80</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>65.42</td>
<td>22.75</td>
<td>93.54</td>
<td>14.36</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>55.63</td>
<td>23.79</td>
<td>83.33</td>
<td>19.18</td>
</tr>
</tbody>
</table>

Figure 20. Mean acceptance (%) of subject placement for topicalized objects (no focus)

In a one way ANOVA comparing groups by target position, as expected based on Figure 23, the low, intermediate, and low advanced groups showed no significant difference in ratings by subject position: low F(1, 226) = 0.82, p=.37, partial $\eta^2 = .00$, power = 0.15, intermediate F(1, 274) = 0.28, p=.60, partial $\eta^2 = .00$, power = 0.08, low advanced F(1, 238) = 0.17, p=.68, partial $\eta^2 = .00$, power = 0.07. The high advanced, NSs from Spain, and NSs from Latin America all showed a significant effect for subject position, with a medium effect for high advanced, F(1, 298) = 79.74, p=.000, partial $\eta^2 = .10$, power = 1.00, and large effects for NSs from Spain F(1,
$F(1, 190) = 104.89, p=.000, \text{ partial } \eta^2 = .16, \text{ power } = 1.00$ and Latin America $F(1, 190) = 78.94, p=.000, \text{ partial } \eta^2 = .29, \text{ power } = 1.00$.

One-way ANOVAs were then run to compare groups within each subject position. For preverbal subjects, there was a significant effect for group, $F(5, 708) = 3.14, p=.008, \text{ partial } \eta^2 = .02, \text{ power } = 0.88$, with a small effect size, where the intermediate and the high advanced rated preverbals significantly higher than NSs from Latin America. For postverbal subjects, there was a significant effect for group, $F(5, 708) = 52.54, p=.000, \text{ partial } \eta^2 = .27, \text{ power } = 1.00$, with a large effect size, where NSs from Latin America rated postverbals lower than NSs from Spain, but with high advanced learners not differing significantly from either group. Also, the low, intermediate, and low advanced rated postverbals lower than all other groups, as evident in Figure 20 above.

Table 28. Frequencies of reformulation types based on target subject for topicalized-object targets

<table>
<thead>
<tr>
<th></th>
<th>Reformulation type:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preverbal</td>
</tr>
<tr>
<td>Preverbal Target</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>95.10%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>99.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>89.70%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>25.20%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>14.30%</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>63.20%</td>
</tr>
<tr>
<td>Postverbal Target</td>
<td></td>
</tr>
<tr>
<td>Beginner</td>
<td>87.50%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>97.10%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>94.10%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>51.60%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>26.10%</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>81.50%</td>
</tr>
</tbody>
</table>

If we look at the reformulation types in Table 28, we see that low and intermediate learners replace preverbal subjects with postverbal subjects very infrequently, but the low advanced learners have begun to reformulate with more postverbal subjects, indicating a growing
sensitivity for postverbal position with topicalized objects. The high-advanced learners performed like NSs from Spain in more postverbal than preverbal subject reformulations. However, we see that all groups also reformulate postverbal subjects as preverbal subjects, which seems to indicate the opposite trend. In addition to changing subject position, many participants also changed object position by removing the topicalization and putting the object in postverbal position or using only an object clitic. Therefore, reformulations were examined for presence or absence of a preverbal topic, and the frequencies are presented in Table 29. It can be seen that the low, intermediate, and low-advanced learners removed the majority of topics from targets with preverbal subjects, as did the high-advanced to a lesser degree, while the NSs from Spain produced a higher frequency of topics than non-topics, and the NSs from Latin America produced some topics as well while still preferring no topic. The majority of topics were also removed from postverbal targets by all groups.

<table>
<thead>
<tr>
<th></th>
<th>Reformulation type:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Topic</td>
</tr>
<tr>
<td><strong>Preverbal</strong></td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>80.00%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>92.90%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>89.30%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>81.80%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>42.60%</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>68.50%</td>
</tr>
<tr>
<td><strong>Postverbal</strong></td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>93.40%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>98.80%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>96.10%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>95.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>100.00%</td>
</tr>
<tr>
<td>Native – Lat. Am.</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

If we examine the reformulations that do and do not have topics to see whether they also have pre- or postverbal subjects, the results are more revealing, as shown in Table 30. It can be
seen that when topics are removed, the low, intermediate, and low advanced produced very few reformulations with postverbal subjects, consistent with their production data. Both the high advanced and the NSs from Spain produced more reformulations with than without postverbal subjects, while the NSs from Latin America produced some postverbal but the majority preverbal when no topic was used. These results indicate that the lower ratings are based more on a rejection of the topicalized object and less on subject position. Production of postverbal subjects without topics by high advanced and NSs from Spain could be reflective of contrastive or narrow focus. When the participants do include a topicalized object in their reformulation, all groups demonstrate some postverbal subjects in their reformulations, matching the production data, and frequency of postverbal subjects increases with proficiency. Once again we see a difference between the NSs from Spain and Latin America.

<table>
<thead>
<tr>
<th>Reformulation type:</th>
<th>Reformulation type:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Without Topic</strong></td>
<td>Low</td>
<td>94.00%</td>
<td>5.30%</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>96.00%</td>
<td>4.00%</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>35.80%</td>
<td>63.30%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>9.10%</td>
<td>90.90%</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>68.40%</td>
<td>31.60%</td>
</tr>
<tr>
<td><strong>With Topic</strong></td>
<td>Low</td>
<td>73.30%</td>
<td>13.30%</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>85.70%</td>
<td>14.30%</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>41.70%</td>
<td>58.30%</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>16.70%</td>
<td>77.80%</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>20.50%</td>
<td>74.40%</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>65.20%</td>
<td>30.40%</td>
</tr>
</tbody>
</table>

Analyses were also conducted on topicalized object structures, examining the acceptance of subject positions with topicalized objects as mediated by focus context. Table 31 presents the mean acceptance rates in percentages for topicalized object sentences in each of the three
discourse contexts for preverbal and postverbal targets. In Figure 21, we see the same pattern as earlier in Figure 20 in which low, intermediate, and low-advanced learners show low acceptance rates for both subject positions with topicalized objects in all three focus contexts. Again, this is indicative of a lack of acceptance of topics rather than subjects. The NSs and high-advanced learners show a strong acceptance of postverbal subjects over preverbal subjects in all three focus contexts. To test the significance, the same process of analyses that I conducted for each verb type was followed here.

### Table 31. Mean acceptance (%) of subject placement for topicalized objects by focus

<table>
<thead>
<tr>
<th>Context:</th>
<th>Target:</th>
<th>Group:</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Wide Focus</td>
<td>Low</td>
<td>63.68</td>
<td>22.71</td>
<td>67.89</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>68.26</td>
<td>22.93</td>
<td>64.78</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>69.00</td>
<td>23.07</td>
<td>61.50</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>72.80</td>
<td>26.11</td>
<td>90.40</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>66.88</td>
<td>23.06</td>
<td>93.13</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>62.50</td>
<td>22.00</td>
<td>83.75</td>
</tr>
<tr>
<td>Narrow Focus</td>
<td>Low</td>
<td>63.16</td>
<td>24.84</td>
<td>57.89</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>63.04</td>
<td>21.90</td>
<td>63.91</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>57.50</td>
<td>24.47</td>
<td>62.50</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>58.40</td>
<td>25.18</td>
<td>86.00</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>61.88</td>
<td>19.91</td>
<td>94.38</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>48.75</td>
<td>23.79</td>
<td>78.75</td>
</tr>
<tr>
<td>Contrastive Focus</td>
<td>Low</td>
<td>71.58</td>
<td>24.44</td>
<td>64.21</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>68.70</td>
<td>22.96</td>
<td>66.96</td>
</tr>
<tr>
<td></td>
<td>Low Advanced</td>
<td>68.50</td>
<td>24.76</td>
<td>67.00</td>
</tr>
<tr>
<td></td>
<td>High Advanced</td>
<td>68.00</td>
<td>26.19</td>
<td>90.00</td>
</tr>
<tr>
<td></td>
<td>Native – Spain</td>
<td>67.50</td>
<td>25.27</td>
<td>93.13</td>
</tr>
<tr>
<td></td>
<td>Native – Lat. Am.</td>
<td>55.63</td>
<td>24.22</td>
<td>87.50</td>
</tr>
</tbody>
</table>
First, I examined the differences in ratings between each focus context, running one-way ANOVAs on each proficiency group and subject position independently, with focus as the independent variable. Post hoc Scheffé tests were run to understand significant results. For preverbal subjects, only the high advanced group showed a difference by focus context, $F(2, 147) = 4.03, p=.02$, partial $\eta^2 = .05$, power = 0.71, with a small effect size, rating preverbals significantly worse in narrow versus wide focus, but no difference with contrastive. All others showed no difference by focus: low $F(2, 111) = 1.47, p=.24$, partial $\eta^2 = .03$, power = 0.31, intermediate $F(2, 135) = 0.89, p=.41$, partial $\eta^2 = .01$, power = 0.20, low advanced $F(2, 117) = 2.91, p=.06$, partial $\eta^2 = .05$, power = 0.56, NSs from Spain $F(2, 93) = 0.58, p=.56$, partial $\eta^2 = .01$, power = 0.14, NSs from Latin America $F(2, 93) = 2.77, p=.07$, partial $\eta^2 = .06$, power = 0.53. For postverbal subjects, no group showed differences by focus: low $F(2, 111) = 1.91, p=.15$, partial $\eta^2 = .03$, power = 0.39, intermediate $F(2, 135) = 0.22, p=.81$, partial $\eta^2 = .00$, power = 0.08, low advanced $F(2, 117) = 0.50, p=.61$, partial $\eta^2 = .01$, power = 0.13, high advanced $F(2, 147) = 1.19, p=.31$, partial $\eta^2 = .02$, power = 0.26, NSs from Spain $F(2, 93) = 0.08, p=.08$, partial $\eta^2 = .00$, power = 0.06, NSs from Latin America $F(2, 93) = 1.70, p=.19,$
partial $\eta^2 = .04$, power = 0.35. This indicates that the syntactic condition of the preverbal topic has a much stronger impact on subject position than focus context.

Second, I compared ratings by groups within each focus context and for each subject position using one-way ANOVAs with group as the independent variable. For preverbal subjects in wide focus, there were no significant differences by group, $F(5, 232) = 1.04$, $p = .39$, partial $\eta^2 = .02$, power = 0.37. For postverbal subjects in wide focus, there was a large effect for group $F(5, 232) = 16.79$, $p = .000$, partial $\eta^2 = .27$, power = 1.00, where high advanced, NSs from Spain, and NSs from Latin America rated postverbs significantly higher than low advanced, intermediate, and low.

For preverbal subjects in narrow focus, there were no significant differences by group, $F(5, 232) = 1.86$, $p = .10$, partial $\eta^2 = .04$, power = 0.63, but there were significant differences by group for postverbal subjects in narrow focus, $F(5, 232) = 19.00$, $p = .000$, partial $\eta^2 = .29$, power = 1.00, with a large effect size. Once again, high advanced, NSs from Spain, and NSs from Latin America rated postverbs significantly higher than low advanced, intermediate, and low.

For preverbal subjects in contrastive focus, there was no significant difference by group, $F(5, 232) = 1.71$, $p = .13$, partial $\eta^2 = .04$, power = 0.59, but group difference is significant for postverbal subjects in contrastive focus, $F(5, 232) = 17.91$, $p = .000$, partial $\eta^2 = .28$, power = 1.00, with a large effect size. The low, intermediate and low advanced learners rated postverbs significantly lower than high advanced, NSs from Spain and NSs from Latin America.

Finally, I examined the effect for subject position within each group and each context, using a one-way ANOVA with subject position as the independent variable. For wide focus, low, intermediate, and low advanced groups showed no effect for subject position: low $F(1, 74) = 0.66$, $p = .42$, partial $\eta^2 = .01$, power = 0.13, intermediate $F(1, 90) = 0.48$, $p = .49$, partial $\eta^2 = .01$,
power = 0.11, low advanced F(1, 78) = 1.79, p=.19, partial η² = .02, power = 0.26, with equally low ratings for both subject positions, indicating lack of acceptance of the topicalization structure rather than a specific subject position. High advanced, NSs from Spain, and NSs from Latin America showed significant effects for subject position, rating postverbals significantly higher: high advanced F(1, 98) = 17.25, p=.000, partial η² = .15, power = 0.98, NSs from Spain F(1, 62) = 28.28, p=.000, partial η² = .31, power = 0.99, NSs from Latin America F(1, 62) = 16.38, p=.000, partial η² = .21, power = 0.98, all with large effect sizes. This pattern is repeated in narrow focus and contrastive focus: Narrow Focus: low F(1, 74) = 0.91, p=.34, partial η² = .01, power = 0.16, intermediate F(1, 90) = 0.04, p=.84, partial η² = .00, power = 0.05, low advanced F(1, 78) = 0.84, p=.36, partial η² = .01, power = 0.15, high advanced F(1, 98) = 38.82, p=.000, partial η² = .28, power = 1.00, NSs from Spain F(1, 62) = 53.26, p=.000, partial η² = .46, power = 1.00, NSs from Latin America F(1, 62) = 28.71, p=.000, partial η² = .32, power = 1.00; Contrastive Focus: low F(1, 74) = 1.92, p=.17, partial η² = .03, power = 0.28, intermediate F(1, 90) = 0.13, p=.72, partial η² = .00, power = 0.07, low advanced F(1, 78) = 0.07, p=.80, partial η² = .00, power = 0.06, high advanced F(1, 98) = 27.84, p=.000, partial η² = .22, power = 0.99, NSs from Spain F(1, 62) = 26.82, p=.000, partial η² = .30, power = 0.99, NSs from Latin America F(1, 62) = 38.78, p=.000, partial η² = .39, power = 1.00.

In answering research question number four, regarding which verb types are acceptable with postverbal subjects for NSs and L2 learners, the NSs, both from Spain and Latin America, show the highest acceptance of postverbal subjects with topicalized objects, regardless of focus contexts, where the high advanced groups performed like NSs. Both L2 and NSs show little difference in ratings between verb types independently of focus. Finally, the dialectal difference
between Spain and Latin America seen in the production data was not as marked in the acceptability data.

3.3. **Research question 5**: Are native speakers and L2 learners able to detect a mismatch between a focused constituent and nuclear stress?

Table 32. *Mean acceptance (%) of nuclear stress/focus mismatches*

<table>
<thead>
<tr>
<th>Level</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>91.26</td>
<td>18.07</td>
</tr>
<tr>
<td>Intermediate</td>
<td>91.30</td>
<td>18.41</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>90.63</td>
<td>19.94</td>
</tr>
<tr>
<td>High Advanced</td>
<td>78.75</td>
<td>25.53</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>81.88</td>
<td>22.81</td>
</tr>
<tr>
<td>Native – LA</td>
<td>84.04</td>
<td>22.78</td>
</tr>
</tbody>
</table>

Figure 22. *Mean acceptance (%) of nuclear stress/focus mismatches*

In order to answer research question number five, regarding whether NSs and L2 learners are sensitive to a mismatch between nuclear stress and focus information, mean ratings for the stress/focus mismatch condition were calculated and are presented in Table 32, where the lower the percentage indicates the higher the sensitivity to the mismatch, since they rated mismatches with lower scores. As can be seen in Figure 22, the high-advanced group is the most highly sensitive to the nuclear stress mismatch, followed by NSs from Spain, NSs from Latin America,
and then the low, intermediate, low-advanced learners who show little sensitivity or difference between each other.

A one-way ANOVA with group as the independent variable and rating as the dependent variable showed a significant effect for group, $F(5, 3564) = 42.18$, $p < .05$, $\eta^2 = .06$, power = 1.00, with a small effect size. A post hoc Scheffé revealed that the three lower proficiency learners performed significantly different from all other groups in lacking sensitivity to the mismatch. The two NS groups have no significant differences, but the high advanced is significantly more sensitive than the NSs from Latin America.

Table 33. Reformulation types for stress mismatches

<table>
<thead>
<tr>
<th>Focus Level</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wide Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>97.30%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>100.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>75.00%</td>
<td>25.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>22.00%</td>
<td>78.00%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>13.60%</td>
<td>76.50%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>70.60%</td>
<td>25.50%</td>
</tr>
<tr>
<td><strong>Narrow Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>97.30%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>96.20%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>85.00%</td>
<td>15.00%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>52.30%</td>
<td>47.70%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>51.60%</td>
<td>45.20%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>81.00%</td>
<td>19.00%</td>
</tr>
<tr>
<td><strong>Contrastive Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>97.60%</td>
<td>2.40%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>93.20%</td>
<td>4.50%</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>72.50%</td>
<td>27.50%</td>
</tr>
<tr>
<td>High Advanced</td>
<td>16.00%</td>
<td>82.80%</td>
</tr>
<tr>
<td>Native – Spain</td>
<td>11.40%</td>
<td>77.10%</td>
</tr>
<tr>
<td>Native – LA</td>
<td>36.50%</td>
<td>61.50%</td>
</tr>
</tbody>
</table>

In Table 33, we can see the structures participants used to reformulate stress mismatch items that they deemed less than perfect, divided by focus context for all verbs with topics excluded. In wide focus, all target items contained preverbal subjects and the nuclear stress was on the subject, which is inappropriate because the whole sentence is new information not just the
subject. The low and intermediate learners almost always employ preverbal subjects when correcting the sentence, which is correct since postverbal subjects are inappropriate in wide focus. The low advanced group performed like NSs from Latin America, while the high advanced group performed like NSs from Spain in their reformulations. The former groups used only 25% postverbal subjects to correct the sentences, while the latter groups used a majority 75% of postverbal subjects. However, this behavior is incorrect in wide focus, which should prefer preverbal subjects. What might be happening is that the participants hear the nuclear stress on the preverbal subject in the target sentence and assume it is the focused information, which they prefer to put in postverbal position, despite the fact that the item in question doesn’t elicit and information focus answer. The postverbal subjects in wide focus might also be due to unaccusative verbs.

In narrow focus and contrastive focus, all target items contained preverbal subjects with nuclear stress in sentence-final position, which is inappropriate because the subject is new information and should receive nuclear stress to mark focus, regardless of the subject position. In narrow focus, we see the familiar proficiency hierarchy of low and intermediate < low advanced and NSs from Latin America < high advanced and NSs from Spain, in that each pair of groups performed similarly in their use of postverbal subjects in reformulations. The NSs from Spain and the high advanced learners don’t show a clear preference for pre- or postverbal subjects, while the other groups still prefer preverbs. In contrastive focus, a similar pattern emerges, except the NSs from Latin America separate from the low advanced and performed more like NSs from Spain.

Unfortunately, what the reformulations cannot indicate is whether the participants are reformulating the sentences with the proper nuclear stress placement. When participants used a
preverbal subject to reformulate a sentence with a preverbal subject stress mismatch, it is not clear whether they are correcting nuclear stress or another element. When participants used a postverbal subject to reformulate a sentence with a preverbal subject mismatch, it is not clear whether they are correcting nuclear stress or simply subject position. The coding of these reformulations needs to be fine-tuned in order to extract the most information out of the data. Regardless, the data is still informative by telling us that postverbal subjects are preferred in narrow and contrastive focus, as exemplified by the NSs and advanced learners, and provide a fruitful starting point for more detailed examination of the interplay of nuclear stress, subject position, and focus information.

3.4. Exit questionnaire

Table 34. Participant knowledge of postverbal subject grammaticality and target uses

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Are postverbal subjects grammatical?</th>
<th>Used with unaccusative verbs</th>
<th>Used in narrow focus</th>
<th>Used in contrastive focus</th>
<th>Used with topicalized object</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes  No</td>
<td>Yes  No</td>
<td>Yes  No</td>
<td>Yes  No</td>
<td>Yes  No</td>
</tr>
<tr>
<td>Low</td>
<td>21</td>
<td>31.8% 68.2%</td>
<td>22.7% 77.3%</td>
<td>0% 100%</td>
<td>4.5% 95.5%</td>
<td>13.6% 86.4%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24</td>
<td>38.1% 61.9%</td>
<td>14.3% 85.7%</td>
<td>0% 100%</td>
<td>9.5% 90.5%</td>
<td>0% 100%</td>
</tr>
<tr>
<td>Low Adv.</td>
<td>20</td>
<td>42.9% 57.1%</td>
<td>47.6% 52.4%</td>
<td>19.0% 81%</td>
<td>28.6% 71.4%</td>
<td>19.0% 81.0%</td>
</tr>
<tr>
<td>High Adv.</td>
<td>25</td>
<td>66.7% 33.3%</td>
<td>76.2% 23.8%</td>
<td>61.9% 38.1%</td>
<td>81.0% 19.0%</td>
<td>71.4% 28.6%</td>
</tr>
</tbody>
</table>

Answers from the exit questionnaire were analyzed to gain insight into whether performance in both experiments was due metalinguistic knowledge of subject positions by the L2 learners. The data in Table 34 shows whether or not the L2 learners know that postverbal subjects are grammatical in Spanish and whether they know that they can be used in the specific contexts tested in the study. We can see that the L2 learners have more metalinguistic knowledge as proficiency increases. What is interesting to note, is in the two contexts where low,
intermediate, and low-advanced learners started to produced and accept postverbal subjects at higher rates, in contrastive focus and with topicalized objects, they still show low rates of metalinguistic knowledge of the structures.

The exit questionnaire also sought information about whether or not the learners had studied postverbal subjects previously. Table 35 presents data on how or where the participants thought that they learned to use postverbal subjects. These responses were based on multiple choice answers that also included an open ended ‘other’ option. The Unsure/Did not know category refers to the closed answer ‘I did not know it was grammatical’ and open-ended responses indicating they do not know how they know it is grammatical. Closed responses of ‘in class’ and ‘from a professor’ along with open-ended answers such as “my education” were grouped as Spanish Class. The closed response ‘speaking with NSs’ and open-ended responses such as “experience speaking the language” and “intuition” were grouped as Experience/Intuition. We see that the majority of the low, intermediate, and low-advanced learners still do not know that postverbal subjects are grammatical, or if they do know, they aren’t quite sure why/how they know. The high-advanced learners demonstrated higher rates of knowledge from Spanish class and personal research, indicating more deliberate efforts to study the grammar of Spanish which would lead them to more traditional accounts of subject placement, such as descriptive grammars, where postverbal subjects are used with unaccusative verbs, in narrow and contrastive focus, and with topicalized objects, while they also indicate experience and intuition, indicating that not all of their performance is due to explicit effort to learn the target item.
Table 35. Participant claims of where/how they learned postverbal subjects are used

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Unsure/Didn’t know</th>
<th>Spanish class</th>
<th>Experience/Intuition</th>
<th>Personal research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>21</td>
<td>86.4%</td>
<td>13.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24</td>
<td>76.2%</td>
<td>23.8%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Low Advanced</td>
<td>20</td>
<td>71.4%</td>
<td>14.3%</td>
<td>14.3%</td>
<td>0</td>
</tr>
<tr>
<td>High Advanced</td>
<td>25</td>
<td>38.1%</td>
<td>19.0%</td>
<td>23.8%</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

Overall, the data from the exit questionnaire pairs well with the data from both the production and the acceptability tasks, in that metalinguistic knowledge of postverbal subjects increases and acceptance/production rates become more native-like as proficiency increases, even if the learners never formally studied the topic. The questionnaire results will not be used in correlation with the production and acceptability data, as the questionnaire was short and the questions were not specific enough to make predictions about explicit or implicit knowledge, but the results shed light on a possible role of explicit and implicit knowledge in the acquisition of subject positions, which might be fruitful to study more thoroughly in future research with careful operationalization of the constructs of explicit/implicit knowledge and instruction.

In the next chapter, I compare the acceptability results with the results from the production data, to get a clearer picture of postverbal subject use by NSs and non-NSs. I then use the empirical data to support a syntactic analysis accounting for differential subject placement by NSs. Using the proposed analysis; I explore the Feature Reassembly Hypothesis and the Interface Hypothesis to determine whether they explain the L2 learner performance.
CHAPTER 5: DISCUSSION AND CONCLUSIONS

In this chapter, I combine the results from the production and the acceptance tasks to paint a clearer picture of the distribution of postverbal subjects in native and non-native Spanish, comparing it to results found in the previous literature. I then return to the syntactic analyses presented in Chapter 2 to propose a cohesive syntactic analysis that accounts for the distribution of pre- and postverbal subjects, including the role of discourse information. Based on the analysis, I then explain the task at hand for the L2 learner and examine whether the FRH and/or the IH can explain the L2 performance.

Figure 23. Scale of percentage of postverbal subjects produced by native speakers

In summary of production by NSs, considering both focus context and verb type, we see a pattern of postverbal subject use emerge as shown in Figure 23. The top three contexts which elicit postverbal subjects from NSs are topicalized object structures, contrastive focus, and unaccusative verbs. Unergative, transitive, and ditransitive verbs elicit similar frequencies of postverbal subjects, but it is important to remember that these percentages represent production
regardless of discourse context, which seems to be a stronger predictor of subject position, where wide focus elicits the least postverbal subjects. The difference between the two NS groups can be seen in Figure 23, where the speakers from Latin America always produced fewer postverbal subjects than the speakers from Spain. The L2 learner data demonstrates a similar pattern of acquisition, as shown in Figure 24, where the high advanced learners produced postverbal subjects at similar rates as the NSs from Spain in the same contexts.

![Figure 24. Scale of percentage of postverbal subjects produced by L2 learners](image)

In summary of acceptability by NSs, considering both focus context and verb type, we see a pattern of postverbal subject use emerge as shown in Figure 25. While the production data found significant differences between the two NS groups, this difference is much less apparent in the acceptability data. The order of preference of postverbal subjects is different for the acceptability data, where contrastive and narrow focus yield higher acceptance rates than topicalized objects. Lower acceptance of topicalized objects may reflect a rejection of the topicalized object, rather than of a postverbal subject.
We can see in Figure 26 that the L2 learners also pattern similarly to the NSs in their preferences, with acceptance of postverbal subjects becoming more native-like as proficiency increases. The only exception is the topicalized object structures, whose low ratings are more indicative of lack of acceptance of a topicalized object structure, regardless of subject position, since preverbal subjects also received low ratings, and reformulations of both pre- and postverbal subjects had the preverbal topics moved to postverbal position. The NSs from Latin America also showed overall lower acceptance of those structures. Furthermore, the high advanced, and to a lesser degree the low advanced group, always rated postverbals higher than NSs, most importantly in wide focus where they rated them significantly higher. While their production was native-like, their acceptance seems to be non-nativelike in over-accepting postverbal subjects regardless of context, which may mean that once they realize that the postverbal subjects are grammatical, they will accept them in any context. This might be due to the nature of the task or in the participant’s completion of the task, in that they may be rating grammaticality rather than
acceptability. Since they are able to produce postverbal subjects in felicitous contexts, they seem to have the discourse knowledge, but do not seem to be accessing it in acceptance.

![Figure 26](image)

**Figure 26. Scale of percentage of postverbal subjects accepted by L2 learners**

1. **Subject position by discourse context**

Research questions 1 and 3 investigated the discourse contexts in which postverbal subjects are produced (RQ1) and accepted (RQ3) by both NSs and L2 learners of Spanish. Both the production data and the acceptability data revealed that NSs, both from Spain and from Latin America show a significantly higher use and acceptance of postverbal subjects in contrastive focus as compared to wide focus. However, the data from the two tasks differs when we look at preference for subject position. While both groups show a preference for post- versus preverbal subjects in contrastive focus in production and acceptance, the NSs from Spain show a preference for postverbal subjects in narrow focus on acceptance, but not production. On the production task, the NSs from Spain showed a significant difference between all three focus contexts, while the NSs from Latin America showed no difference between wide and narrow...
focus. This also changes on the acceptability task, where both groups of NSs rated postverbal subjects as significantly worse in wide focus, but there was no statistical difference between narrow and contrast. Both groups produced significantly more preverbal subjects in wide and narrow focus, and this preference is maintained for both NSs on the acceptability task in wide focus. However, the NSs from Spain show a significant preference for postverbals in narrow and contrastive focus on the acceptability task, while this is only true of the NSs from Latin America in contrastive focus.

The strongest conclusion that can be drawn is that contrastive focus in Spanish yields the highest frequency of postverbal subjects, as compared to wide focus, while narrow focus shows task affects, patterning like contrastive focus in acceptability, but like wide focus in production. The studies by Hertel (2003), Lozano (2006), and Domínguez and Arche (2008; 2014) do not report rates of subject placement compared by focus context, but rather only compare verb types within one focus context, under the assumption that narrow and wide focus differ. Therefore, my results make an important advance in the understanding of the role of focus, crucially uncovering that NSs use postverbal subjects most often with contrastive focus, a context that has not been examined in previous research, and undermining the common assumption that narrow and wide focus differ, in that the latter favors postverbal subjects.

The high advanced learners demonstrated the same pattern of production and acceptability as the NSs from Spain in both narrow and contrastive focus. The high advanced learners also consistently rate postverbal subjects higher than both NS groups in all three focus contexts, but this is only significant in wide focus, where both high and low advanced learners rate postverbals significantly higher than the NSs, showing no significant difference in their ratings of pre- and postverbal subjects. The low advanced group demonstrated the same pattern
of production and acceptability as the NSs from Latin America, with no significant differences between them in any context, except in acceptance in contrastive focus, where the low advanced learners significantly preferred pre- to postverbal subjects. While the low advanced and high advanced learners are showing over-acceptance of postverbal subjects in wide focus, the low and intermediate learners demonstrate native-like acceptance, but this is most likely superficial. While the NSs show very low acceptance of postverbal subjects in wide focus, the low and intermediate learners do not actually know that postverbal subjects are infelicitous in wide focus in particular, but rather show low acceptance in all contexts with a slightly higher acceptance in contrastive focus; therefore micking native-like competence in wide focus on a superficial level.

An important finding from these results is that all L2 groups, regardless of proficiency, demonstrate significantly higher rates of production and acceptance of postverbal subjects in contrastive focus, which is precisely the context where postverbal subjects are most productive for NSs. This translates to native-like behavior for both the high and the low advanced group, indicating that postverbal subjects in the correct discourse contexts are ultimately attainable. These results are similar to previous studies on production (Hertel, 2003; Domínguez, 2013) and acceptability (Lozano, 2006; Domínguez & Arche, 2008; 2014), which claim that L2 learners can acquire the correct syntactic correlations of focus information by producing and accepting postverbal subjects in the correct contexts.

2. Subject position by verb types

Research questions 2 and 4 investigated the verb types with which postverbal subjects are produced (RQ2) and accepted (RQ4) by both NSs and L2 learners of Spanish. Intermediate and low advanced learners and NSs from Latin America produced significantly more postverbal subjects with unaccusative verbs compared to other verb types, with very small effect sizes,
while the low-proficiency learners showed no significant difference by verb type. Additionally, the high advanced group and the NSs from Spain showed no significant difference between unaccusatives and unergatives, which undermines subject placement as a diagnostic for distinguishing between these two verb types used as a basis for previous research on production (Hertel, 2003; Domínguez, 2013) and acceptability (Lozano, 2006; Domínguez & Arche, 2008; 2014). Hertel (2003) is the only one of the previous Spanish L2 studies to statistically compare unaccusatives to unergatives, rather than solely compare groups within each verb type, and found that advanced and NSs produced significantly more postverbal subjects with unaccusative versus unergative verbs in wide focus (p<.05) but there was no difference in narrow focus (p>.05). Turning to the acceptability data, the unaccusative verbs no longer show significant differences from any verbs for any groups.

Combining the lack of significance by verb type on acceptability with the small effect sizes by verb type on production, the findings indicate that the unaccusative and unergative verbs are not necessarily distinguished by subject placement. While previous research posits an overgeneralization between the two verb types by L2 learners (Hertel, 2003; Domínguez, 2013; Lozano, 2006; Domínguez & Arche, 2008; 2014), this is also happening by NSs in the present data. Rather than an overgeneralization by L2 learners, it seems that the traditional assumption that unaccusative verbs favor postverbal subjects and unergative verbs favor preverbal subjects (Suñer, 1982; Contreras, 1976) is becoming a less robust diagnostic for the Unaccusative Hypothesis (Pelmutter, 1978) in Spanish. It is not surprising that unergative and unaccusative verbs may be becoming syntactically more similar in Spanish, since “Spanish no longer has the two perfect auxiliaries haber ‘have’ and ser ‘be’ that distinguish unaccusative from unergative verbs in Italian and Dutch” (Montrul, 2004:304). However, much more robust data needs to be
collected using other diagnostics such as bare plurals (Demonte, 1985; Torrego, 1989) and participle absolutive constructions (de Miguel, 1992), as discussed in Chapter 1 Section 1, in addition to subject placement before a conclusion can be drawn about whether unaccusative and unergative verbs are still two distinct verb classes in Spanish, whether subject placement is still a strong diagnostic to distinguish them, or whether the L2 learners are unable to distinguish the two types based on other diagnostics in addition to subject placement. I go into more detail about these possibilities in Section 7 of this chapter, while proposing the syntactic analysis. Furthermore, in the next section, I will show how verb type interacts with focus type, maintaining postverbal subjects as an identifying characteristic of unaccusative verbs.

Curiously, ditransitive verbs elicited higher ratings of postverbal subjects on the acceptability judgment task for low, intermediate, low advanced, and NSs from Spain, with small effect sizes. This difference in verb type may reflect the idea that when preverbal clitics are used, a postverbal subject will be elicited, which we saw to some extent in the production task, as shown in example (5.1).

\begin{align*}
(5.1) & \quad \text{a. Se lo dio María.} \\
& \quad \text{Him/her it gave Maria.} \\
& \quad \text{‘María gave it to him/her.’} \\
& \quad \text{b. María le dio el libro a Juan.} \\
& \quad \text{Maria him gave the book to Juan} \\
& \quad \text{‘María gave the book to Juan.’}
\end{align*}

The performance on the two tasks may differ because on the production task, participants had more freedom to use one, two, or no object clitics with the ditransitive verbs, which allowed them to also exhibit more freedom in subject placement, allowing them to use preverbal subjects with postverbal lexical objects, as in (5.1b), while on the acceptability task all items contained
two clitics, as in example (5.1a), yielding a stronger preference for postverbal subjects. The low, intermediate, and low advanced learners showed lower rates of double clitic use with ditransitive verbs on the production task, preferring to use the structure in (5.1b), but they were still able to rate the structure in (5.1a) as felicitous when presented with it. The high advanced learners did not demonstrate this trend in acceptance of postverbal subjects with ditransitive verbs because they accepted pre- and postverbal subjects at similar rates with all verb types, once again exhibiting the overgeneralization. Therefore, the acceptability and production data complement each other in highlighting the importance of clitics with postverbal subjects, but the reader is reminded that the effect sizes were small for ditransitive verbs; therefore conclusion may not be robust, but might be a trend to examine with further data.

The data from Belletti et al. (2007) found that when NSs used postverbal subjects with transitive verbs, they typically also included a preverbal clitic, whereas the L2 speakers were not using many clitics, instead using full object DPs in postverbal position, since object clitics have been proven to be difficult for L2 learners (Leonini & Belletti, 2004). They postulated a possible preference for noun-verb-noun structures by both NSs and non-NSs, where the NSs produced $O_{\text{clitic}} V S$ and the non-NSs produced $SVO$. Based on their postulation, the object DP produced by the L2 learners forced a preverbal subject while the preverbal clitic produced by NSs allowed the postverbal subject; therefore positing that acquisition of clitics may confound the use of postverbal subjects, in that those learners who can’t produce clitics also will not produce postverbal subjects. Even though Spanish allows postverbal subjects with lexical postverbal objects (e.g. *Ganó la lotería Juan* and *Ganó Juan la lotería* ‘Juan won the lottery.’), the L2 learners are not producing either of these postverbal subject structures due to the preference for noun-verb-noun structure. Unfortunately, the data in Belletti et al. (2007) could not
systematically tease apart the role of clitics, but the results of this dissertation confirm their postulation. This is demonstrated in example (5.2), which is a real example from the data.

(5.2) ¿Quién toma la foto? (transitive, narrow, participant 93)
    ‘Who takes the photo?’

a. Alberto toma la foto
   ‘Alberto takes the photo.’
b. La toma Alberto
   ‘Alberto takes it.’

The responses in (5.2) were uttered sequentially and both responses were coded. I claim in Section 7.4 of this chapter that the preference for a postverbal subject when a preverbal clitic is present is due to the topic nature of the clitic, since postverbal subjects are produced with topicalized objects. However, results from the present data should also be examined with caution, as the number of sentences with clitics was relatively low; therefore the percentages of pre- and postverbal subjects are based on few exemplars.

The results from this dissertation agree in certain respects with previous research on the L2 acquisition of postverbal subjects in Spanish. Studies by Hertel (2003), Lozano (2006), and Domínguez and Arche (2008; 2014) found that advanced L2 learners overgeneralized postverbal subjects to unergative verbs, treating them like unaccusative verbs, and my results indicate little difference between not only unaccusative and unergative verbs, but also between intransitive verbs and transitive and ditransitive verbs. In the next section I show that verb type alone is not a strong predictor of subject position, but rather interacts with discourse context.
3. Interaction between focus and verb type

This dissertation found verb type to not be a strong indicator of subject position, but rather it interacts strongly with focus type. This finding has the biggest consequence on unaccusative verbs as compared to other verb types. When focus was examined independently of verb type, all groups produced significantly more postverbal subjects in contrastive focus than in other discourse contexts, and they also rated them significantly better in contrastive focus, but only the high advanced and the NSs from Spain showed a significant preference for postverbal subjects in contrastive focus, while the other groups still favored preverbal subjects. When verb type was examined independently of focus type, there was very little difference in subject position for the four verb types, where unaccusative verbs did not show a preference for postverbal position.

However, in contrastive focus with unaccusative verbs, both low and high advanced learners and NSs from both Latin America and Spain showed a significant preference for postverbal subjects. All other verb types still elicited a preference for preverbal subjects in contrastive focus by the low advanced learners and the NSs from Latin America. Here, we see the traditional preference for postverbal subjects with unaccusative verbs emerge when it is reinforced by the preference for postverbal subjects in contrastive focus. This indicates that focus context plays a stronger role than verb type in determining subject position, but also that unaccusative verbs do favor postverbal subjects as well. The high advanced learners are performing like NSs from Spain while the low advanced learners are performing like NSs from Latin America, but in Section 9.2 of this chapter, I explain that each learner group is not necessarily approximating a NS norm of a particular region, but rather both the low advanced and the NSs from Latin America are passing through the same stage of language change.
4. **Topicalized objects**

   All NSs from both groups showed a large, significant preference for postverbal subjects with topicalized objects in all focus contexts, confirming results found in Domínguez and Arche (2008; 2014), and there was also no significant difference between focus contexts. These results were consistent for both production and acceptability. All four L2 learner groups produced postverbal subjects with topicalized objects, but only the high advanced learners reach native-like performance on both tasks. When we look at topicalized objects by focus context, it can be seen that all groups once again produced and accepted significantly more postverbal subjects. Crucially, in contrastive focus the low advanced learners, in addition to the high advanced and the NSs, produced significantly more postverbal subjects, while the low and intermediate groups show no significant preference for subject position.

   The overall low acceptability ratings of postverbal subjects with topicalized objects by the low, intermediate, and low advanced proficiency levels may indicate lack of acceptance of the topicalization structure rather than lack of acceptance of postverbal subjects, since they also rated preverbal subjects as low. Similar findings have been found in previous research by Montrul (2010) where L2 learners rated topicalized object structures as ungrammatical, more indicative of lack of knowledge of topicalization structures rather than subject placement. L2 learners in this dissertation were able to produced the postverbal structure when asked to put the lexical object in preverbal position, but they often chose not to use the topic in their reformulations of infelicitous sentences on the acceptability task.

5. **Nuclear stress**

   Research question five investigated whether NSs and L2 learners are sensitive to mismatches between nuclear stress placement and focus material. Results show that sensitivity
increases with proficiency, where the low, intermediate, and low advanced learners show no sensitivity to the mismatch, rating mismatched sentences significantly higher than all other groups. The two NS groups show no significant differences. The high advanced group rates the mismatches significantly worse than the NSs from Latin America, but shows no difference compared to the NSs from Spain.

For beginner, intermediate, and low-advanced learners, this indicates that they aren’t using the L1 strategy of relying on nuclear stress to determine information structure, since they aren’t sensitive to the mismatch in acceptability. However, since they don’t produce or accept postverbal subjects at high rates either, they also aren’t using the target language strategy relying on word order to convey discourse information. It could be that the lower learners are not yet mapping information structure onto the sentences, but are concentrated solely on grammaticality of the sentence. Since all target items contained preverbal subjects, it is not surprising that they showed high rates of acceptance, but it indicates they are not only insensitive to nuclear stress but also to the role of information structure. The high advanced learners, on the other hand, have shifted from using nuclear stress to using word order to mark focus. However, even with the high advanced learners, interpretation of the data should be cautious since once again, all targets contained preverbal subjects, so the low ratings could be indicative of sensitivity to subject position alone rather than subject position in combination with nuclear stress. Regardless of what is causing the low acceptability ratings by the high advanced group, they are demonstrating their knowledge of the need to map information structure to a sentence; whether that is done via nuclear stress or subject placement is unfortunately not discernible from the data.
6. Acceptance versus production

One of the contributions of this dissertation is that it systematically compares acceptability and production of postverbal subjects, which have been studied separately, but never in a single study including discourse context with the same sample of participants. As was mentioned previously, this comparison has shed some light on previous research and shown that the two types of tasks elicit knowledge of different aspects of subject positions; therefore they reveal different facets of the linguistic system of the participants. In the present study, the NSs from Spain demonstrated similar patterns on both tasks, while the NSs from Latin America showed low rates of production but high rates of acceptance of postverbal subjects. Importantly, while the production task indicated a dialectal difference between the NS groups in terms of postverbal subject use, this was not as discernible on the acceptability task. Comparing the production and acceptability tasks, it seems that the mechanism that allows postverbal subjects is available in the linguistic system of the NSs from Latin America, as evident in acceptability, but is not highly active in their production. In Section 8 of this chapter, I use the proposed syntactic analysis to understand the differential performance by both NS groups and explain why they performed similarly in certain aspects but differ in others.

For L2 learners, on the other hand, acceptance of postverbal subjects seems to precede production. This is evident in the fact that acceptability ratings for post verbal subjects steadily went up from beginner to high advanced in all focus contexts, but production remained very low and similar for beginner, intermediate and low advanced learners in narrow and wide focus, and only went up in contrastive focus. Despite their growing acceptance of postverbal subjects, the lower three learner groups only seem to produce them in contrastive focus and with topicalized objects. This pattern is similar to that of the NSs from Latin America just described, who also
show higher acceptance than production. This seems to indicate that while acceptance may precede production, production is not guaranteed.

The high advanced group showed native-like production, but they demonstrated overacceptance of postverbal subjects in wide by rating them significantly higher than both NS groups, indicating that acceptance has overgeneralized to all focus contexts in a non-nativelike way. It might be that the high advanced learners are able to use discourse context accurately on the production task, but are not integrating the same information into the acceptability task. While the lower three L2 groups are rejecting postverbal subjects across the board with no regard to discourse context, the high advanced learners have acquired the grammaticality of postverbal subjects and thus accept them in all contexts, regardless of discourse context. It could be an inherent weakness of the acceptability judgment task, which aims at tapping into felicitousness but may only tap into grammaticality versus ungrammaticality. This explains why the high advanced learners can appropriately incorporate focus information into their production, since the questions required knowledge of the discourse context in order to be answered, but could not reject unacceptable responses on the acceptability task.

7. Towards a minimalist analysis of postverbal subjects

I now return to minimalist syntax to propose an analysis to derive postverbal subjects in Spanish in the contexts used by NSs based on the scale proposed in Figure 14. The analysis will allow for optionality of subject positions in narrow and contrastive focus, but require preverbal subjects in wide focus when not an unaccusative verb, in which case there is optionality. It will also require postverbal subjects in topicalized object structures. This is summarized below in Table 36.
Table 36. Possible subject positions for each target context

<table>
<thead>
<tr>
<th></th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topicalized object</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Contrastive focus</td>
<td>✓*</td>
<td>✓*</td>
</tr>
<tr>
<td>Narrow focus</td>
<td>✓*</td>
<td>✓</td>
</tr>
<tr>
<td>Wide focus (non-unaccusative)</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Unaccusative in wide focus</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* Significant preference, but still optional

As seen in Table 36, contrastive focus, narrow focus, and unaccusative focus allow optionality of subject positions while topicalized objects and wide focus only allow one position. Contrastive focus showed a significant preference for postverbal subjects, narrow focus showed a significant preference for preverbal subjects, and unaccusative verbs did not demonstrate a significant preference for one position or the other. Following analyses of the contexts in Table 36, which were examined explicitly in the experiments conducted in this dissertation, the analysis will be extended to other contexts that elicit postverbal subjects, which the data from the experiments was not designed to elicit, including focalization of non-subject elements, object and adverb scrambling, and locative inversion. Recall from the discussion in Chapter 2, in order to derive postverbal subjects, we must determine the location of discourse features (Topic, Focus, Location, Contrast) which allow postverbal subjects, the location of preverbal subjects, both focalized and non-focalized, and the location of the EPP feature which allows preverbal subjects. Therefore, first, I use the previous research to make claims as to the function and location within the derivation of the fundamental features which derive postverbal subjects. Then, I show how
these principles will differentiate subject position with sample structures for each postverbal context examined and postulations for the other structures not examined.

I assume the split CP of Rizzi (1997), including the projections Finite Phrase (FinP), Topic Phrase (TopP), Focus Phrase (FocP), and Force Phrase (ForceP), however only those functional heads necessary for the sentence at hand will be included in the derivation. ForceP is responsible for determining whether a sentence is a declarative, interrogative, or imperative, and houses complementizers and relative pronouns in its head and its specifier, respectively. It will not be used in the current analysis, but may prove important in eliciting postverbal subjects in subordinate clauses, which is left to future research to examine. The TopP houses dislocated, known information about which the sentence is predicated (Montrul 2004:251), while the FocP houses stressed, new information that is dislocated. A crucial distinction between the two is that Spanish allows multiple topics, while there can only by one focus, which is prosodically marked. When a constituent bearing a [TOP(ic)] or a [FOC(us)] feature are in the numeration, the numeration will also include the respective phrase head. Finally, the FinP determines whether the TP below will be finite or not. I will now show how TopP, FocP, and FinP are responsible for deriving postverbal subjects.

Based on the evidence provided earlier by Goodall (2001), Cardinaletti (1997), and López (2009), I assume that the EPP feature is present in Spanish. EPP is necessary in Spanish since neutral word order is SVO, and a lack of an EPP feature would not yield that order. However, I assume following Sheehan’s (2010) extension of Chomsky (2008) that the EPP feature is located on the Fin head, rather than on the T head; a crucial difference from English in which T hosts the EPP feature. Since the EPP is on Fin, I follow the proposals of Alexiadou & Anagnostopoulou (1998), Ordoñez & Treviño (1999), and Barbosa (2009) assuming that
preverbal subjects are ultimately found within the CP domain, specifically in Spec, FinP for preverbal subjects in wide focus, but they can be further fronted for focus or topic purposes (López, 2009). A sample derivation of a preverbal subject in wide focus is shown in (5.3).^26

(5.3)  ¿Qué pasó?  (wide focus)
‘What happened?’
Juan corrió.
‘Juan ran.

\[[\text{FinP}_{\text{3SG}} \text{corrió} + \text{v} + \text{T} + \text{Fin}_{\text{TP}} \text{corrió} + \text{v} + \text{T}_{\text{[3SG]} \text{corrió} + \text{v} + \text{vP}_{\text{corrió} + \text{v} + \text{VP}_{\text{corrió}}}}]]^27

In (5.3), the subject is originally merged in the Spec of \( v \), where it is probed by T and enters an Agree relation which values and deletes the phi features on T. Since T doesn’t have an EPP feature, this Agree relation does not result in the movement of the subject to Spec,TP, as it would in a traditional minimalist analysis. Rather, the Fin head bears the EPP feature, so the subject raises to Spec,Fin for reasons independent of the phi feature deletion on T.

This approach captures the idea of phi-dependence from Holmberg (2010), who claimed that in NSLs like Spanish, EPP deletion is phi-independent in that it does not rely on phi-feature valuing via Agree to be deleted but rather can be deleted in another way. Non-NSLs like English are phi-dependent and the EPP must delete in the same operation that values the phi-features on T. The separation of the EPP feature deletion from phi-feature valuing becomes clear when EPP is not even located on the T head, but rather in FinP. Alexiadou & Anagnostopoulou’s (1998) proposal appealed to a similar process in which something other than a subject could delete EPP. In their analysis, all preverbal subjects move to the CP domain, and the verb movement to T deletes EPP because of the presence of a D feature. While it did make the important

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^26 All derivations will be shown after merge and feature valuing.
^27 It will be assumed that the verb always moves up to the Fin head, and will subsequently move up to the Foc head and the Top head when present.
advancement that EPP deletion in Spanish is not dependent on the phi-features in \( T \), it was shown that their analysis was insufficient, as verb movement happens regardless of subject position, which incorrectly predicts postverbal subjects to be the canonical position, which previous research and my current data shows is not the case.

In order to explain the optionality of preverbal and postverbal subjects in the focused contexts apparent in the data, I assume a traditional approach in which a null expletive \( pro_{\text{expl}} \) is present in the numeration, which has been posited in generative accounts by Rizzi (1982; 1986) and minimalist accounts by Holmberg (2005) to account for null subjects and as posited for postverbal subjects by Campos (1997). A crucial difference between the current account and previous research is that the inclusion of \( pro_{\text{expl}} \) will rely on the presence or absence of discourse features in restricted contexts, in which it will receive matching phi and discourse features from other constituents. Two types of \( pro_{\text{expl}} \) will be elicited in this dissertation and I now turn to the contexts of their appearance and their licensing conditions.

When no discourse features are present, as in wide focus, \( pro_{\text{expl}} \) is licensed as a lexical property of only unaccusative and unergative verbs, which is a silent equivalent of the English \textit{there}, and just like \textit{there} it must be valued. It is optional, but when present, it will derive postverbal subjects with those two verb types in wide focus contexts. When a lexical subject bearing a focus feature is present in the numeration, as in narrow and contrastive focus, \( pro_{\text{expl}} \) is optional with all verb types and will be valued with a matching focus feature to the lexical subject in the derivation. This will be referred to as \( pro_{[\text{FOC]}} \) and is used to derive postverbal focused subjects which are optional in alternation with a preverbal focused subject. \( Pro_{\text{expl}} \) will always be merged with unvalued phi-features, which will be valued to provide a referent in certain licensing contexts. Following Rizzi (1982), a null element must be licensed and its
referent determined. The licensing conditions for $pro_{expl}$ which value its phi-features and determine its referent, are summarized in (5.4), where only one of the subconditions must be met.

(5.4) $pro_{expl}$ is licensed iff
a. $pro_{expl}$ is valued by a DP internal to unaccusative VP
b. $pro_{expl}$ is valued by a DP in Spec, vP of an unergative verb
c. $pro_{expl}$ is valued by a subject DP$_{[FOC]}$

When conditions (5.4a) or (5.4b) are satisfied, $pro_{expl}$ is valued with the phi-features of a co-referential DP but is devoid of any discourse features. When condition (5.4c) is satisfied, $pro_{expl}$ not only has it phi-features valued but also receives the Focus feature from a co-referential DP and becomes $pro_{[FOC]}$. Through condition (5.4), the $pro_{expl}$ will always fully match its lexical counterpart for both phi and discourse features. This condition also allows the $pro_{expl}$ to agree with the verb, which already has matching phi-features after fulfilling the Agree relation with the lexical subject. In this way, the lexical subject not only values the phi-features of the verb after Agree, but also values the phi-features of $pro_{expl}$. By assuming a $pro_{expl}$ account, no new mechanism is created to account for optionality between pre- and postverbal subjects, but rather uses a null version of the same mechanism as the expletive *there* in English. If a $pro_{expl}$ is not present in the numeration, a preverbal subject is derived. For an unaccusative or unergative verb in wide focus, a $pro_{expl}$ will derive a postverbal subject while lack thereof will derive a preverbal subject. In both cases, nuclear stress falls canonically in sentence-final position in wide focus regardless of word order. If the subject bears a focus feature and no $pro_{[FOC]}$ is present after valuing, a preverbal focused subject is derived and focus stress placement is triggered, falling on

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28 I will leave it to future research to examine the possibility of collapsing the three conditions into one, which would be a desirable outcome in minimalism. As it stands, the three separate conditions are necessary to block postverbal subjects with transitive verbs in wide focus.
the focalized DP\textsubscript{[FOC]} in Spec, Foc. When the \textit{pro\textsubscript{[FOC]}} is present in the numeration, a postverbal focalized subject is elicited. Focus stress placement is once again triggered to the DP\textsubscript{[FOC]} in postverbal position.

When a Focus feature is present in the derivation for narrow or contrastive focus sentences, a FocP must be projected to check the Focus feature. Since only one FocP can be projected within the left periphery (Rizzi, 1997), only one element bearing a Focus can move to Spec, FocP to check the Focus feature. The specific conditions that check the Focus feature are shown in (5.5), where only one of the two conditions must be met.

\begin{enumerate}
\item The Focus feature on the Foc head is deleted iff
\begin{enumerate}
\item XP\textsubscript{[FOC]} moves to Spec, Foc, triggering Focus stress placement on Spec, Foc
\item \textit{pro\textsubscript{[FOC]}} moves to Spec, Foc, triggering Focus stress placement on co-referential DP\textsubscript{[FOC]} in postverbal position and deletion of \textit{pro\textsubscript{[FOC]}}\textsuperscript{29}
\end{enumerate}
\end{enumerate}

Condition (5.5a) refers to an XP to account for preverbal focused subjects as well as other focused constituents, such as adverbs. This discussion will focus on the movement of the lexical subject DP\textsubscript{[FOC]} to satisfy (5.5a) but will address the possibility of other focalized elements in Section 7.5.2, such as focalized adverbs in (5.40)-(5.41). Condition (5.5) emphasizes the fact that only a stressed constituent can check the Focus feature, and \textit{pro\textsubscript{[FOC]}} in (5.5b) must be co-referential with a stressed constituent for the Focus feature to be checked. I will show how conditions (5.4) and (5.5) work to license postverbal subjects in the narrow and contrastive focus contexts examined with concrete examples in the following sections.

Recall that previous analyses of postverbal subjects advocate for a modification of copy theory to derive focused, postverbal subjects, assuming that the lexical subject moves to Spec, FinP (Sheehan, 2010) and that when the element bears a Focus feature, the lower copy is

\textsuperscript{29} Semantics will determine the focus interpretation by the Focus feature on the lexical subject in all cases where \textit{pro\textsubscript{[FOC]}} is deleted along with the Focus feature on the Focus head.
pronounced (Sheehan, 2010; Ortega-Santos, 2006). This analysis crucially assumes that when the subject is focused, with narrow focus as the concentration of previous research, it obligatorily appears in postverbal position. The empirical data from this dissertation shows clearly that both pre- and postverbal subjects are grammatical in narrow and contrastive focus, with a preference for preverbal in the former and postverbal in the latter. The copy theory analysis proposed by Ortega-Santos (2006) and Sheehan (2010) cannot account for this optionality, since it assumes that the lower focused copy will be pronounced and provides no option for the higher copy to be pronounced. In order to account for the optionality, their analysis must be modified to posit that when a subject bears a focus feature either the higher or the lower copy can be produced.

If the copy theory analysis is modified to allow either the higher or the lower copy to be pronounced, the optionality found in the present data is accounted for, leaving selection of which copy to pronounce to PF. However, my proposed analysis also captures the optionality by giving the responsibility to syntax to select \( \text{pro}_{\text{expl}} \) along with their corresponding lexical subject for the numeration or choosing the lexical subject alone. Both analyses suffer from the same weakness in that there is no mechanism to determine which option is selected. One positive consequence of the proposed \( \text{pro}_{\text{expl}} \) analysis is that there is no need to modify standard copy theory, which assumes that the higher copy is pronounced. However, further data needs to be collected examining other postverbal subject contexts to determine which analysis is stronger. The expletive nature of the \( \text{pro}_{\text{expl}} \) makes Spanish similar to English, with the analogy between \( \text{pro}_{\text{expl}} \) and there, which is another desirable outcome. The proposed analysis is further strengthened by its parallel to previous analyses which account for non-focalized postverbal subjects with unaccusative verbs in wide focus, which utilize an expletive LOC(ative) operator, also equivalent to there in English. I follow the ideas of Pinto (1997), Zubizarreta (1998), Sheehan (2010), and
Corr (2012) in adopting the idea that, as a property of the verb class, all unaccusative verbs\textsuperscript{30} in Spanish can optionally select a null operator in their numeration that is able to move to Spec,Fin and delete the EPP feature, yielding a postverbal subject. Rather than assuming the null element to be a LOC operator, I chose to use the $pro_{expl}$ its place to create a more cohesive analysis.

7.1. Wide focus

First, I examined subject placement in wide focus contexts when no information is presupposed and the entire sentence is the focus, new information. The empirical data showed that preverbal subjects are produced at very high frequencies in wide focus by NSs from both Spain and Latin America with all verb types. 3.7\% of transitive verbs yielded postverbal subjects by speakers from Spain and 0\% by speakers from Latin America, while ditransitive verbs yielded only 5.6\% of speakers from Spain and 0\% by speakers from Latin America. Therefore, the present analysis will elicit obligatory preverbal subjects with transitive and ditransitive verbs in wide focus, as shown in examples (5.6) and (5.7).

\begin{flushleft}
(5.6) ¿Qué pasa en el dibujo?
What's happening in the picture?
\vspace{0.5em}
a. Jaime paga la cuenta.
Jaime pays the bill.
\vspace{0.5em}
b. *Paga la cuenta Jaime.
\end{flushleft}

\begin{flushleft}
(5.7) ¿Qué pasa en el dibujo?
What’s happening in the picture?
\vspace{0.5em}
a. Paula le regala los chocolates a Anita.
\vspace{0.5em}
b. *Le regala los chocolates a Anita Paula.\textsuperscript{31}
\end{flushleft}

\textsuperscript{30}The present data found unergative verbs also exhibiting postverbal subjects in wide focus, contradicting much previous research. The consequences of this finding for intransitivity will be discussed.

\textsuperscript{31}It could be proposed that the ungrammaticality of (5.7b) is due to the fact that the indirect object Anita is a human and thus leaves two human nouns at the end of the sentence. Therefore, grammaticality might obtain if the indirect object is non-human, such as \textit{Le rompió la pata a la mesa Juan} “Juan broke the leg to the table.” Since my data only contains human indirect objects with ditransitive verbs in wide focus, this theory cannot be tested and further research is necessary to test this hypothesis. However, native speakers in the study were able to produce two sentence-final human nouns in narrow and contrastive focus, indicating that the ungrammaticality is due to the postverbal subject in wide focus rather than the two human nouns at the end of the sentence.
‘Paula gives the chocolates to Anita.’

Deriving a preverbal subject for transitive and ditransitive verbs in wide focus will undergo the same process, shown here with a transitive verb in (5.8).

(5.8)    Jaime paga la cuenta.
        ‘Jaime pays the bill.’

NUM: {Fin\{EPP\}, T[\u03b1\u03b4\u03b5\u03ba\}], Jaime[3SG], paga, v, la, cuenta[3SG]}

The subject Jaime is originally merged in Spec, v, but when the Fin head enters the merge process bearing EPP, the subject moves up to Spec, Fin to delete the EPP. Nuclear stress will be assigned canonically in sentence-final position, as necessitated in wide focus. A proexpl was not included in the numeration because it is not licensed under condition (5.4), since the verb was not intransitive and there is no subject DP[FOC].

Previous accounts assume a preference for postverbal subjects with unaccusative verbs (Suñer, 1982; Domínguez & Arche, 2014; Lozano, 2006; Hertel, 2003). The current data shows that with unaccusative verbs in wide focus, postverbal subjects are possible (13.10% Spain, 3.2% Latin America), but preverbals were much more frequent. This optionality is shown in example (5.9) from the data.

(5.9)    ¿Qué pasa en el dibujo?
        What’s happening in the picture?
        a. Luis llega.
           (unaccusative)
        b. Llega Luis.
           ‘Luis arrived.’

Recall that proexpl is an optional part of the numeration as a lexical property of the verb following condition (5.4a). Since they are both a part of the numeration, either the proexpl or the lexical
subject are viable options to delete the EPP feature in Fin. When a preverbal subject is yielded, \( \text{pro}_{\text{expl}} \) is not a part of the numeration, and when the postverbal subject is yielded, \( \text{pro}_{\text{expl}} \) is a part of the numeration, with optionality similar to \textit{there} in English. The contrast of subject positions with an unaccusative verb in wide focus is shown in comparison between (5.10) and (5.11).

(5.10) \( \text{¿Qué pasa en el dibujo?} \)  
What’s happening in the picture?  
Luis llega.  
‘Luis arrived.’  

\[ \text{NUM: \{Fin}_{\text{EPP}}, \text{T}_{[\text{uϕ}]}, \text{v}, \text{Luis}_{[3SG]}, \text{llega}\} \]

\[ \begin{array}{c}
\text{FinP} \quad \text{Luis}_{[3SG]} \quad \text{llega}+\text{T}+\text{Fin}_{\text{EPP}}[\text{TP} \quad \text{llega}+\text{T}+\text{v}\quad[\text{uϕ} ; \text{3SG}] \quad \text{vP} \quad \text{Luis}_{[3SG]} \quad \text{llega}+\text{v} \quad \text{VP} \quad \text{llega} \quad \text{Luis}_{[3SG]}] ]  
\end{array} \]

(5.11) \( \text{¿Qué pasa en el dibujo?} \)  
What’s happening in the picture?  
Llega Luis.  
‘Luis arrived.’  

\[ \text{NUM: \{Fin}_{\text{EPP}}, \text{T}_{[\text{uϕ}]}, \text{v}, \text{Juan}_{[3SG]}, \text{llega}, \text{pro}_{\text{expl}} \} \]

\[ \begin{array}{c}
\text{FinP} \quad \text{pro}_{[3SG]} \quad \text{llega}+\text{T}+\text{Fin}_{\text{EPP}}[\text{TP} \quad \text{llega}+\text{T}+\text{v}\quad[\text{uϕ} ; \text{3SG}] \quad \text{vP} \quad \text{llega}+\text{v} \quad \text{VP} \quad \text{llega} \quad \text{Luis}_{[3SG]}] ]  
\end{array} \]

In (5.10), the subject \textit{Luis} moves to Spec,Fin and deletes EPP yielding a preverbal subject, while in (5.11) the \( \text{pro}_{\text{expl}} \) is merged directly into the specifier of FinP and deletes the EPP. Following condition 5.4, the \( \text{pro}_{\text{expl}} \) gets valued with the phi features of the subject and becomes \( \text{pro}_{[3SG]} \). In both cases, nuclear stress will be assigned canonically in sentence final position, regardless of subject position, because condition (5.5) does not apply in wide focus. It is also possible for the \( \text{pro}_{\text{expl}} \) to co-occur with an overt locative PP, yielding either a pre- or postverbal subject, as shown in (5.12).

32 It will be assumed that the subject of an unaccusative verb passes through the specifier of vP, as evidenced by quantifier float, such as \textit{Los estudiantes llegaron todos a la fiesta} “The students all arrived to the party”, where the quantifier \textit{todos} “all” is left in Spec,v while the rest of the subject moves up.
¿Qué pasó?  
a. Juan llegó a la clase. (preverbal)  
b. Llegó Juan a la clase. (postverbal)  
c. ? Llegó a la clase Juan. (postverbal)

Example (5.12b) represents another advantage of using \( pro_{expl} \) rather than the LOC operator to derive subject inversion, since the LOC operator would predict that an overt locative PP would not be able to appear with a postverbal subject. The example in (5.12c) is marked with a question mark, because it may or may not be grammatical depending on other information available in the discourse context. Since these structures were not explicitly examined in the experiments, the contexts which elicit the different structures are unclear. Therefore, they will not be used to directly support the proposed analysis, but I will examine the possible contexts that elicit them and their consequences for the present analysis later in examples (5.36)-(5.39) in Section 7.5.2.

The process that yields word order with unaccusative verbs in Spanish can be contrasted with the preverbal/postverbal subjects with an unaccusative verb in English. While Spanish can use the null \( pro_{expl} \), in English this must be realized as the overt expletive \( there \), which can be seen in (5.13). Spanish and English still differ in the location of the EPP feature, on Fin in Spanish and on T in English.

(5.13)  
a. Three students come.  
NUM: \{T[\{φ, EPP\}, v, come, three, students{3PL}]\}  
\[[TP three students{3PL} T[\{EPP, uϕ\{3PL\}\} [VP v [VP come three students{3PL}]]]]\]

b. There come three students.  
NUM: \{there, Fin, T[\{φ, EPP\}, v, came, three, students{3PL}]\}  
\[[TP there T[\{EPP, uϕ\{3PL\}\} [VP v [VP came three students{3PL}]]]]\]
There comes a student.

NUM: \{there, Fin, T_{EPP}, v, comes, a, student_{3SG}\}

\[TP \text{there} \ T_{EPP, u}\[3SG] \[vP \text{v} \[VP \text{comes a student}_{3SG}]]\]

The numeration for the preverbal subject in (5.13a) doesn’t contain the expletive *there*, and the subject is forced to raise and delete EPP. The numeration for the postverbal subject in (5.13b) will contain an expletive *there*, which is merged in Spec, T in preference of Merge over Move, and deletes the EPP. A comparison between the plural subject in (5.13b) and the singular subject in (5.13c) exemplifies the fact that the verb has the same phi feature values as the subject when the expletive is present, which can also be seen with the Spanish sentence in (5.11), further showing how the Spanish and English mechanism for postverbal subjects is the same, with an overt expletive in English and a null expletive in Spanish. The lexical properties of transitive and ditransitive verbs differ from those of unaccusative verbs, thus barring postverbal subjects in wide focus, which are grammatical with unaccusative verbs.

Unergative verbs are commonly assumed to bar postverbal subjects in wide focus (Hertel, 2003; Lozano, 2006; Dominguez & Arche, 2008; 2014), but my data demonstrates similar rates of production of postverbal subjects as unaccusative verbs, with 11.10% for unergatives by speakers from Spain and 1.10% by speakers from Latin America. Therefore, unergative verbs seem to also allow the $pro_{\text{expl}}$ in their numeration, as shown in (5.14a), as was shown above for unaccusative verbs, while the preverbal subject is still preferred without a $pro_{\text{expl}}$, as in (5.14b).

\begin{align*}
(5.14) \quad & \text{¿Qué pasa en el dibujo?} \\
& \text{What's happening in the picture?}
\end{align*}
a. Juan Carlos estornuda.  

NUM: {Fin[|EPP], T[ϕ], v, Juan Carlos[3SG], estornuda} 

\[FinP \text{Juan Carlos[3SG] estornuda+T+Fin[|EPP|TP estornuda+T+ϕ|3SG| vP Juan Carlos[3SG estornuda+v [vp estornuda]]}\] 

b. Estornuda Juan Carlos.  

‘Juan Carlos sneezes.’ 

NUM: {Fin[|EPP|, T[ϕ], v, Juan Carlos[3SG], estornuda, proexpl} 

\[FinP pro[3SG] estornuda+T+Fin[|EPP|TP estornuda+T+ϕ|3SG| vP Juan Carlos[3SG estornuda+v [vp estornuda]]}\] 

The derivations of (5.14a) and (5.14b) follow the same process described for the unaccusative verb above in (5.10) and (5.11), respectively. This finding brings into question whether the distinction between unaccusative and unergative verbs is as strong as traditionally assumed, or whether an intransitive generalization is developing between the two. Some researchers have posited the possibility of a hierarchy of unaccusativity, ranging from more unaccusative to more unergative (Sorace, 2000), while others have posited more fine-grained analyses of intransitive verbs based on features such as path, location, and deixis (Corr, 2012).

The grammaticality of postverbal subjects is commonly assumed to be the strongest diagnostic to distinguish between the two verb classes. Assuming a distinction still exists between unaccusative and unergative verbs, the present findings also question whether PF-subject position remains a factor that distinguishes unaccusative from unergative verbs. Findings from Montrul (2005) suggest that postverbal subject use is no longer a strong indicator of unaccusative verbs as evident by NSs, but absolutive constructions and bare plurals are still strong diagnostics for unaccusative verbs. While it seems that the data from the present dissertation demonstrates an intransitive generalization, since the two verb types (unaccusative
and unergative) behave similarly in terms of subject position, it does not examine other diagnostic structures, and therefore cannot make a definitive claim. An analysis of each individual verb within the unaccusative and unergative categories may also provide more insight into the possibility of an unaccusativity hierarchy, but the data contains only one of each verb in wide focus; therefore results would not be very robust, but remains a possible prospect for future research.

The NSs from Latin America produced significantly fewer postverbal subjects in wide focus than speakers from Spain, regardless of verb type, with the most frequent being with unaccusative verbs, but at only 3.2%. This seems to indicate that these speakers are no longer employing the $pro_{expl}$ in their derivations, thus producing only preverbal subjects. This is similar to the proposal by Domínguez and Hicks (2016), whose speakers of Caribbean Spanish used fewer postverbal subjects and null subjects as compared to speakers of Peninsular Spanish. However, the $pro_{expl}$ must still be available in the linguistic system on the Latin American speakers, as they demonstrate similar rates of acceptance of postverbal subjects in wide focus as speakers from Spain. A similar pattern emerges for postverbal subjects in narrow focus, which were produced at lower frequencies by speakers from Latin America. In the next section, I show how postverbal subjects in narrow focus relies on $pro_{[FOC]}$, which may be undergoing the same process of loss as postverbal subjects with intransitive verbs by speakers from Latin America, which strengthens the claim that $pro_{[FOC]}$ is the same element as $pro_{expl}$ but with the addition of the focus feature that it receives along with phi-features from the lexical subject $DP_{[FOC]}$. Following the proposed analyses, I will discuss the differential performance by the NSs in more detail.
7.2. Narrow focus

The empirical data from this dissertation showed that NSs use both preverbal and postverbal subjects in narrow focus, when the subject is the new information, but preverbal subjects showed a higher frequency, as shown with an unergative verb in (5.15). The reader is reminded that capital letters are used to mark Focus stress placement throughout the examples.

(5.15) ¿Quién corre?
‘Who is running?’
   a. Corre NACHO.
   b. NACHO corre.
‘Nacho is running.’

Both word orders are derived from a numeration containing the lexical subject Nacho[FOC] which bears a focus feature. The presence of the focus feature elicits the Foc head in the numeration as well. The two numerations differ in that the postverbal subject structure contains a proexpl which will be licensed under condition (5.4c) to be valued as pro[3SG,FOC], as in (5.16a), while the preverbal subject structure lacks the proexpl, as in (5.16b).

(5.16) a. Corre NACHO.

\[
\text{NUM} \{ \text{Foc}[^{\text{Focus}}], \text{Fin}[^{\text{EPP}}], T[^{u\phi}], v, \text{Nacho}[^{3SG,FOC}], \text{proexpl}, \text{corre} \}
\]

\[
[\text{FocP} \text{pro}[^{3SG,FOC}] \text{corre}+v+T+\text{Fin}+\text{Foc}[^{\text{Focus}}] [\text{FinP} \text{pro}[^{3SG,FOC}] \text{corre}+v+T+\text{Fin}[^{\text{EPP}}] [\text{TP corre}+v+T^u[^{u\phi}]3SG] [\text{VP Nacho}[^{3SG,FOC}] \text{corre}+v [\text{VP corre}]]] \]

b. NACHO corre.

\[
\text{NUM} \{ \text{Foc}[^{\text{Focus}}], \text{Fin}[^{\text{EPP}}], T[^{u\phi}], v, \text{Nacho}[^{3SG,FOC}], \text{corre} \}
\]

\[
[\text{FocP Nacho}[^{3SG,FOC}] \text{corre}+v+T+\text{Fin}+\text{Foc}[^{\text{Focus}}] [\text{FinP Nacho}[^{3SG,FOC}] \text{corre}+v+T+\text{Fin}[^{\text{EPP}}] [\text{TP corre}+v+T^u[^{u\phi}]3SG] [\text{VP Nacho}[^{3SG,FOC}] \text{corre}+v [\text{VP corre}]]] \]
In (5.1a), the lexical subject is merged in the specifier of vP. When Fin with EPP is merged above T, the proexpl is merged in its specifier to delete the EPP feature. The proexpl is licensed under condition (5.4c) and its phi-features are valued by the lexical subject, which also passes on its Focus feature, and proexpl becomes valued as pro_{3SG,FOC}. The pro_{3SG,FOC} is then moved up to the specifier of FocP to delete the focus feature on the Foc head. Following the Focus licensing condition in (5.5), movement of pro_{3SG,FOC} to Spec,Foc will delete the Focus feature and the pro_{3SG,FOC}, and upon utterance, Focus stress will be placed on the co-referential lexical subject in postverbal position. In (5.1b), since there is no proexpl in the numeration, the lexical subject DP_{FOC} is moved up to Spec,Fin to delete EPP, and is subsequently moved to Spec, Foc to delete the Focus feature on the Foc head following condition (5.5a), triggering Focus stress placement onto the lexical subject in Spec,Foc. This is consistent with the proposal of López-Cortina (2007) who posited that all answers to questions are in CP domain where stress is then assigned, via either the lexical subject or the pro_{FOC}.

It was shown earlier that a postverbal subject can alternate positions with a postverbal PP. The same is true of a postverbal subject and a postverbal object, known as object scrambling (Ross, 1986), which Ordoñez (2000) claims is due to the object scrambling over the subject into Spec,v, but the exact motivation of such movement is not clearly defined. This alternation between subject and object position in Spanish is shown in (5.17).

(5.17)  ¿Quién llamó a su madre?
   ‘Who called their mother?’

   a. Llamé a mi madre YO.  (postverbal, subject-final)
   b. Llamé YO a mi madre.  (postverbal, object-final)
   ‘I called my mother.’

I claim that this scrambling occurs independently of the derivation of the postverbal subject. In other words, I believe the analysis described here with the pro_{FOC} yielding the postverbal
subject applies to both of the sentences in (5.17) and the object movement is the result of a separate operation. Since the experiment in this dissertation was not designed to examine object scrambling, I cannot make any robust claims as to the contexts that elicit it. However, I will later examine a possible explanation for both object scrambling, in examples (5.32)-(5.35) and the PP scrambling seen earlier, in examples (5.36)-(5.39), which is cohesive with the present analysis for postverbal subjects.

7.3. Contrastive focus

Of the three focus contexts examined, the NSs used postverbal subjects most often in contrastive focus, when the subject contrasts with presupposed information, but preverbal subjects are still an option, as shown in the contrast in (5.18).

(5.18) ¿Baila Felipe? ‘Does Felipe dance?’

a. No, baila PILAR.

b. No, PILAR baila. ‘No, Pilar dances.’

I adopt the Yes/No Phrase (Y/NP) from López-Cortina (2007) with no as its head above the Focus phrase. I assume that the derivations for both preverbal and postverbal subjects in contrastive focus follow the same procedure as was shown for narrow focus. The numeration for the postverbal subject will have a proexpl that will be valued to become pro[3SG,FOC] under condition (5.4), as shown in (5.19a), while the preverbal subject lacks the proexpl, as in (5.19b).

(5.19) a. No, baila PILAR.

NUM {no, Foc[Focus], Fin[TP], Pilar[3SG,FOC], proexpl, baila}
b. No, PILAR baila.

NUM \{ no, Foc[Focus], Fin[EPP], T[uϕ], v, Pilar[3SG,FOC], baila \}

\[[Y/NP] no \ [FocP \ Pilar[3SG, FOC] \ baila + v + T + Fin + Foc[Focus] \ [FinP \ Pilar[3SG, FOC] \ baila + v + T + Fin[EPP] \ [TP \ baila + + T[uϕ, 3SG] \ [VP \ Pilar[3SG, FOC] \ baila + + VP \ baila ]]]\]]

For the postverbal subject in (5.19a), the \textit{pro}_{\text{expl}} is merged in Spec, Fin to delete EPP and, following condition (5.4), is valued as \textit{pro}_{[3SG,FOC]} when its receives the phi-features along with the focus feature from the lexical subject in Spec, v. It is then moved to Spec, Foc to delete the Focus feature under condition (5.5), which triggers Focus stress placement on the co-referential lexical subject and deletion of \textit{pro}_{[3SG,FOC]}. For the preverbal subject in (5.19b), the lexical subject DP_{[FOC]} is moved from Spec, v to Spec, Fin to delete EPP, and is then moved to Spec, Foc to delete the focus feature under condition (5.5), which triggers Focus stress placement on the preverbal lexical subject with the Focus feature in Spec, Foc. Once again, as was shown in narrow focus, object scrambling is possible with transitive verbs in contrastive focus.

### 7.4. Topicalized objects

The most common use of postverbal subjects in the data was with an object topicalized to the front of a sentence regardless of focus context or verb type. This is most evident in wide focus, as in (5.20), where normally a postverbal subject is barred with a transitive verb, but here it is required.

(5.20) ¿Qué pasa con los platos?
What’s happening with the dishes?

a. Los platos, los lava Ana María.
The dishes, them is washing Ana Maria.
b.*Los platos, Ana María los lava.
The dishes, Ana Maria them is washing.
‘Ana Maria is washing the plates.’

Crucially, the NSs from Spain and Latin America performed similarly with both showing an overwhelming preference for postverbal subjects on both the production and the acceptability tasks. These contexts differ from the focus contexts described earlier because they do not rely on a \( \textit{pro}_{[\text{FOC}]} \) to yield a postverbal subject. Instead, a non-subject constituent will be merged into preverbal position in TopP, leaving a postverbal subject in FinP. The derivations for the wide focus sentences in (5.20) are similar to the derivations from the previous examples in that the Fin head bears the EPP feature, as assumed for all derivations in Spanish. They differ in that they contain a preverbal topic which involves another layer of the split CP domain, the TopP, which is immediately above the FinP in this case. The derivation of (5.20a) is shown here in (5.21).

(5.21) Los platos, los lava Ana María.

\[
\text{NUM} \{\text{Top}_{[\text{Topic}]}, \text{Fin}_{[\text{EPP}]}, T_{[\text{uφ}]}, v, \text{Ana María}_{[3\text{SG}]}, \text{los}_{[3\text{PL}]}, \text{lava}, \text{los platos}_{[3\text{PL,TOP}]}, \text{pro}_{[\text{TOP-object}]}\}
\]

\[
[\text{TopP Los platos}_{[3\text{PL,TOP}]} \text{lava}+v+T+\text{Fin}+\text{Top}_{[\text{Topic}]} [\text{FinP Ana María}_{[3\text{SG}]} \text{los}+v+T+\text{Fin}_{[\text{EPP}]} [\text{TP los lava}+v+T_{[\text{uφ},3\text{SG}]} [\text{VP Ana María}_{[3\text{PL,TOP}]} \text{lava}+v [\text{VP los lava pro}_{[\text{TOP-object}]}]]]]
\]

The derivation in (5.21) begins like the derivations shown previously with the subject merged in Spec, v. First, it is moved up to Spec, Fin to delete the EPP feature. Normally, this would yield a preverbal subject; however the numeration also contains the object \textit{los platos} with a Topic feature. It is merged above FinP in the specifier of TopP, to delete the Topic feature on the Top head and leaving the subject in postverbal position in Spec, Fin. Since the subject bears no Topic

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33 I will assume a resumptive pro will be merged in the in-situ position of all topics. These will be labeled as \( \textit{pro}_{[\text{TOP}]} \) for expository purposes and will be labeled for their role in the sentence. I will leave it to future research to examine the licensing conditions of these pro types. Following Rizzi (1997), Topics will be merged directly into Spec,Top.
or Focus feature, there is nothing to attract it to a higher position in the sentence, another layer of the split CP is not projected, and the preverbal subject in (5.20b) is barred. Nuclear stress will fall in sentence-final position due to the lack of a Focus feature to trigger Focus stress and condition (5.5) does not apply.

However, the subjects of these structures can additionally receive a focus interpretation, as in (5.22) in narrow focus, but this can be achieved without the pro[FOC].

(5.22) ¿Quién lava los platos?
‘Who is washing the dishes?’

a. Los platos, los lava ANA MARIA.
The dishes, them is washing Ana Maria.
b. *Los platos, ANA MARIA los lava.
The dishes, Ana Maria is washing them
‘Ana Maria is washing the dishes.’

The derivation of sentence (5.22a) will be very similar to that of (5.21), with the only difference being that the lexical subject will bear the Focus feature, as shown in (5.23).

(5.23) Los platos, los lava ANA MARIA.

NUM {Top[Topic], Fin[EPP], T[uϕ], v, Ana María[3SG.FOC], los[3PL], lava, los platos[3PL.TOP], pro[3PL.TOP-object]}


In the derivation in (5.23), once again the subject Ana Maria is moved from Spec, v to Spec,Fin to delete the EPP. It is subsequently moved to Spec,Foc to delete the Focus features under condition (5.5), which triggers Focus stress placement in Spec, Foc. Finally, the topicalized object is merged in Spec,Top yielding a focalized, postverbal subject. Once again, as with
(5.20b), (5.22b) is barred because the subject bears no other discourse feature that would allow it to move to a specifier between the object and the verb. The structure could potentially contain a $pro_{[FOC]}$, following condition (5.4), but it is unnecessary as the postverbal subject will be derived due to the position of the topic and the verb. However, the $pro_{[FOC]}$ may be elicited when other constituents alternate with the postverbal subject, which will be shown with object scrambling in examples (5.32)-(5.35) in Section 5.7.2.

Returning to the differential performance between NSs from Spain and Latin America, it now becomes clear that both groups of speakers produce postverbal subjects at the same frequency when the structure does not require the $pro_{[FOC]}$, specifically with topicalized objects. Narrow and contrastive focus, on the other hand, rely on $pro_{[FOC]}$ and elicit fewer postverbal subjects by speakers from Latin America, who seem to be using the $pro_{[FOC]}$ to a lesser degree in production, but have no trouble with acceptability, where they perform like speakers from Spain. Furthermore, we also saw a lower frequency of the $pro_{expl}$ produced with unaccusative verbs in wide focus by NSs from Latin America as compared to those from Spain, which may also be suffering the same decrease as $pro_{[FOC]}$, further proving that $pro_{[FOC]}$ is the same null element as $pro_{expl}$ with the additional discourse feature. For both NS groups, the $pro_{expl}$ is most likely to appear in the numeration in contrastive focus where significantly more postverbal subjects were produced as compared to the other contexts. The $pro_{expl}$ appears in the numeration at an overall low frequency by both NS groups, even in wide focus with unaccusative verbs where most syntax and SLA research assumes a preference for postverbal subjects which was not borne out in the present data.

In the contexts examined in this dissertation, a postverbal subject was obligatory with topicalized objects; however none of the contexts elicited both subject and object topics. If both
the subject and the object are topics and preposed to the front of the sentence, in a context such as example in (5.24), then the subject can be preverbal with a topicalized object.

(5.24)  ¿Cuándo hizo la tarta Juan?
        ‘When did Juan make the cake?’

        La tarta, Juan la hizo AYER.\(^{34}\)
        ‘The cake, Juan made it yesterday.’

\[
\begin{array}{l}
\text{NUM} \{ \text{Top}_{[\text{Topic}]} , \text{Fin}_{[\text{EPP}]} , \text{T}_{[\text{uϕ}]} , \text{v} , \text{Juan}_{[3\text{SG,TOP}]} , \text{pro}_{\text{expl}[3\text{PL,TOP-subject}]} , \text{la}_{[3\text{SG}]} , \text{hizo} , \text{la} _{[3\text{SG,TOP}]} , \text{pro}_{\text{expl}[3\text{SG,TOP-object}]} , \text{ayer} \}
\end{array}
\]

\[
\begin{array}{l}
\text{[TopP \ La tarta}_{[3\text{SG,TOP}]} \ [\text{TopP Ju} \ \text{a}_{[3\text{SG,TOP}]} \ \text{la} \ \text{hizo} + v + T + \text{Fin} + \text{Top}_{[\text{Topic}]}] \ [\text{FinP pro}_{[3\text{SG,TOP-subject}]} - \text{la} \ \text{hizo} + v + T + \text{Fin} + \text{Top}_{[\text{Topic}]}] \ [\text{VP pro}_{\text{TOP-subject}} - \text{la} \ \text{hizo} + v + T + \text{Fin} + \text{Top}_{[\text{Topic}]}] \ [\text{vP pro}_{\text{TOP-subject}} - \text{la} \ \text{hizo} + v + T + \text{Fin} + \text{Top}_{[\text{Topic}]}] \ [\text{ayer}]]\]
\end{array}
\]

In (5.24), both the subject and the object bear topic features which each license an independent resumptive \text{pro}_{[\text{TOP}]} bearing matching topic features. The object \text{pro}_{[\text{TOP}]} is merged as an internal argument to the VP and the subject \text{pro}_{[\text{TOP}]} is merged into the specifier of v, which subcategorizes for an external argument. The subject \text{pro}_{[\text{TOP}]} then moves up to the specifier of FinP to delete EPP. The lexical subject is then merged directly into the specifier of the Topic phrase because of its topic feature. The object topic is then merged in another specifier of TopP, which follows from the fact that Spanish allows multiple topics (Montrul, 2004; Rizzi, 1997, 2000). This derivation in (5.24) can be contrasted with the ungrammatical sentences in (5.20b) and (5.22b), with their derivations in (5.21) and (5.23), respectively, where a preverbal subject was barred with the topicalized object, because the subject did not bear a topic feature which prevented its movement to another TopP layer. In (5.24), on the other hand, the subject does bear the topic feature and the second specifier of TopP is licensed. It also follows from the fact that

\(^{34}\text{Focalization of the adverb ayer ‘yesterday’ will be addressed in (5.40)-(5.41).}\)
the topics can interchange position with the subject coming first and the object following, as in (5.25).

(5.25) ¿Cuándo hizo la tarta Juan?
‘When did Juan make the cake?’

Juan, la tarta, la hizo AYER.
‘The cake, Juan made it yesterday.’

The example in (5.25) follows the same procedure as in (5.24), with the only difference being the order of the two topicalized elements in preverbal position. This proposal, in turn, follows from Chomsky (2013, 2015) and Reinhart (2006) who posit that the syntax will make available multiple options and the sensorimotor and conceptual intensional systems are responsible for choosing the structure appropriate in the context, thus accounting for optionality of word orders. The present study only elicited sentences in which the subject is new information or a part of the new, asserted information, meaning that the subject could never be the topic; therefore I will leave it to future research to examine the role of topic or non-topic status of the subject in licensing subject position with topicalized objects. Although the nuclear stress can fall canonically in sentence final-position to mark the adverb as new information, this analysis does not address how the adverb ayer receives its focus interpretation as the answer to the question in (5.24) and (5.25). It is most probable that the adverb bears a Focus feature, which, following from the proposal for focused subjects presented here, would require movement to a FocP under
condition (5.5). I believe this movement is motivated under circumstances similar to cases of object scrambling shown earlier, and for that reason I will examine the nature of the adverb here in conjunction with object scrambling in in examples (5.32)-(5.35) in Section 7.5.2.

Recall from the results that with transitive verbs, postverbal subjects were significantly more frequent when a preverbal object clitic was used rather than a postverbal lexical object. This analysis for postverbal subject with topicalized objects can also be extended to explain the contrast present in the data, as shown in (5.26).

(5.26)  ¿Quién toma la foto?
‘Who is taking the photo?’

   a. La toma JUAN.  (preverbal object clitic)
   ‘Juan is taking it.’
   
   b. JUAN toma la foto.  (postverbal lexical object)
   ‘Juan is taking the photo.’

The derivation of (5.26a) presented in (5.27) can be paralleled to that described above for the topicalized objects, differing only in that the topicalized object is null and available in the discourse context. This is consistent with the idea that the left periphery is responsible for connecting the sentence to the discourse context. It also extends Holmberg’s (2010) idea of AS-topics licensing null subjects in which a null topic is present in the C-domain of the sentence, as was shown in Chapter 2.

(5.27)  NUM {Top[Topic], Fin[EPP], T[uϕ], v, Juan[3SG,FOC], la[3SG], toma, (la foto[3SG,TOPI]), pro[3SG,TOPI-object]}
Notice that even though the subject bears a focus feature, the \( \text{pro}_{[\text{FOC}]} \) is not necessary to derive the postverbal subject in (5.27), which is consistent with the fact that NSs from Spain and Latin America alike preferred postverbal subjects with object clitics like in (5.26a) and preverbal subjects with lexical objects like in (5.26b) regardless of the focus context. Therefore, once again it becomes more apparent that those postverbal structures that rely on \( \text{pro}_{[\text{FOC}]} \) are more susceptible to loss while those that don’t require \( \text{pro}_{[\text{FOC}]} \) are more resilient to change. The derivation of (5.26b) is presented in (5.28), where the object is no longer null and does not bear a topic feature, which forces it to merge in its position internal to VP.

(5.28) \[
\text{NUM} \{\text{Fin}_{[\text{EPP}]} \cdot \text{T}_{[\text{u}\phi]} \cdot \nu \cdot \text{Juan}_{[3SG, \text{FOC}]} \cdot \text{toma}, \text{la foto}_{[3SG]}\}
\]

The preverbal, focused subject in Spec, Foc deletes the Focus feature which triggers Focus stress placement to that position following condition (5.5). A postverbal subject is also possible with the postverbal lexical object, which is derived through the merge of \( \text{pro}_{\text{expl}} \) which is then valued by receiving phi-feature and the Focus feature from the lexical DP_{[\text{FOC}]} subject under condition (5.4) to become \( \text{pro}_{[3SG, \text{FOC}]} \) as demonstrated above in the discussion of narrow and contrastive focus.

The postverbal subject is also forced if we make the fronted object a focus element rather than a topic (Hernanz & Brucart, 1987), as in the contrast in (5.29).

(5.29) a. LA TARTA hizo Juan ayer (y no los pasteles).
   ‘Juan made the cake yesterday (and not the pastries).’

b. *LA TARTA Juan hizo ayer (y no los pasteles).
   ‘Juan made the cake yesterday (and not the pastries).’
Unlike the topic fronting in (5.22)-(5.26), in (5.29) the object la tarta bears a focus feature and is first merged internal to the VP as its object. The subject Juan moves to Spec, Fin to delete the EPP feature, since it is the first accessible noun. Following condition (5.5), the DP [FOC], in this case the object, moves to Spec, Foc to check the Focus feature, triggering Focus stress placement in that position. The verb again moves consecutively from head to head ending on the Foc head, which results in the preverbal focused object and the postverbal subject. With the subject Juan bearing no topic or focus features in (5.29b), the derivation will crash because there is no discourse feature which allows the subject to move up higher and generate another layer of the left periphery.

7.5. Extending the analysis

7.5.1. Locative inversion

While the dissertation did not examine locative inversion, the tenets discussed for topicalization could plausibly be extended to those contexts. Recall from Chapter 1 that when a fronted PP is a locative, the postverbal subject is obligatory (Torrego, 1984; Sheehan, 2010). This contrast is shown in (5.30) based on the analysis by Sheehan (2010), where the postverbal subject can also vary position with the object as we saw previously for transitive verbs, as shown in the contrast between (5.30a) and (5.30b), but most importantly, a preverbal subject is barred, as in (5.30c).

(5.30) ¿Quién te regaló un anillo en el parque?
‘Who gave you a ring in the park?’
a. En el parque me regaló Juan un anillo.
b. En el parque me regaló un anillo Juan.
c. *En el parque Juan me regaló un anillo.
   ‘In the park, gave me a ring John.’

I assume that the derivation of (5.30a) follows the same process we saw for topicalized objects, shown here in (5.31).

(5.31) NUM: {En el parque[TOP], me regaló, v, T, Fin[EPP], Foc, Top, Juan[3SG,FOC], un anillo}

In (5.31), the PP en el parque has a topic feature, which requires it to be merged directly into Spec,Top. The subject Juan is moved first to Spec,Fin to delete the EPP feature and is then moved to Spec,Foc to delete the focus feature on the Foc head under condition (5.5), which causes Focus stress placement in that position. With the topicalized PP in preverbal position, the subject remains in postverbal position. According to the proposed analysis, the pro[FOC] could optionally be used in this derivation following condition (5.4) since there is a DP[FOC] subject to value its phi-features, but it is not necessary since the postverbal subject will be derived even without it when the verb moves to TopP. However, as I mentioned earlier, the pro[FOC] may need to be elicited when a focused postverbal subject alternates position with other postverbal constituents, which will be shown in the next section.

Also, a postverbal subject will be derived in wide focus, where the subject will stay in Spec,Fin, where it deletes EPP, but no further movement of the subject occurs since it bears no Focus feature and condition (5.5) does not apply. Nuclear stress will remain in sentence-final position due to the lack of Focus features to trigger Focus stress. Similar to the cases of
topicalized objects described in the previous section, the sentence in (5.30c) is barred because there is no topic feature present on the subject to trigger its movement to a specifier between the PP and the verb. However, recall from Chapter 1, Ordoñez (2000) and Sheehan (2010) claim that the obligatory nature of the postverbal subject depends on the nature of the topic; therefore I leave it to future research to substantiate the possibility of making (5.30c) grammatical. In the next section I will address the variations in word order between (5.30a) and (5.30b) with object scrambling in examples (5.32)-(5.35).

7.5.2. Postverbal subjects alternating with other constituents

In the previous discussion, I showed several examples of postverbal subjects alternating word order with other postverbal constituents, including the direct object, an adverb, or a PP. The experiments conducted in this dissertation were not designed to elicit these structures; therefore I cannot make any definitive claims as to which contexts elicit this scrambling. However, some insights can be made from the present data, and in this section, I propose that independent operations are responsible for these movements, but they may also be related to discourse features. The proposed analysis for postverbal subjects will extend to these structures, with an additional operation deriving the scrambling, based on a clause-internal periphery (Belletti, 2004) containing TP-internal topic and focus positions, paralleling the Rizzi’s (1997, 2000) split CP. Once again, these structures do not come from the data collected as a part of this dissertation; therefore the contexts eliciting the scrambling must be tested with further data collection left to future research in order to support these claims. I can also not make claims as to whether these TP-internal topic and focus positions, as put forth by Belletti (2004), will yield undesirable consequences for other word order constructions not involving a postverbal subject.
Object scrambling with transitive verbs with a postverbal subject, as in (5.32), may provide fruitful evidence for the phrase-internal TopP (Belletti, 2004).

(5.32)
¿Quién llamó a tu madre?
‘Who called your mother?’

a. Llamé a mi madre YO.  
(postverbal, subject-final)
b. Llamé YO a mi madre.  
(postverbal, object-final)
‘I called my mother.’

One option to derive the difference between (5.32a) and (5.32b) is that the sentences will differ in their numerations slightly, with the $v$ in (5.32a) bearing an EPP feature allowing an extra specifier (Chomsky, 2000) which allows for the object to scramble over the subject (Ordoñez, 2000) and into a second Spec,$v$, as in (5.33).

(5.33)
Llamé a mi madre YO.

As we saw earlier for a postverbal subject in narrow focus, the $pro_{expl}$, licensed under condition (5.4b), will be merged in Spec, Fin to delete EPP, where its phi features are valued by the lexical subject and it receives the Focus feature. It then moves to Spec, Foc to delete the Focus feature of the Foc head, leaving the lexical subject $yo$ in Spec,$v$ where Focus stress will be placed. With $v$’s EPP, the object is attracted to an additional Spec,$v$ above the subject.

However, object scrambling is not obligatory, as shown in (5.32b), which is possible with a different numeration in which $v$ lacks an EPP feature, shown in (5.34).
(5.34)  Llamé YO a mi madre.

NUM \{Foc[Fo\text{c}], Fin[EPP], T[uϕ], v, yo[1\text{SG}, FOC], pro_{expl}, llamé, a mi madre\}

\[
[FocP \quad pro_{[1SG,FOC]} \quad llamé+v+T+Fin+Foc[\text{Focus}] \quad [FinP \quad pro_{[1SG,FOC]} \quad llamé+v+T+Fin[EPP] \quad [TP
\quad llamé++v+T[uϕ,1SG] \quad [vP \quad yo_{[1SG,FOC]} \quad llamé++v+T[uϕ,1SG] \quad [vP \quad llamé a mi madre]]]]
\]

The derivation in (5.34) proceeds the same as the postverbal subject described before, where the \textit{pro}_{expl} is merged in Spec,Fin, deleting EPP and valued by the lexical subject to become \textit{pro}_{[1SG,FOC]}, and moves to Spec, FocP to delete the Focus feature of the Foc head under condition (5.5), leaving the lexical subject in situ which receives a focus interpretation by the matching focus features. Since \textit{v} does not have an EPP, the object cannot scramble over the subject. However, with the \textit{pro}_{[1SG,FOC]} in Spec, Foc, Focus stress is triggered and falls on the coreferential DP_{[FOC]} subject. It could be claimed that the optionality of the EPP feature on \textit{v} is the result of the feature not being selected for use in the derivation, although available in the language, a theory put forth for the availability of the D feature by Domínguez and Hicks (2016).

However, there is no motivation for the EPP and extra specifier on \textit{v}; therefore this analysis does not make clear why one structure would be chosen over the other. Returning to the cases of VOS word order in the empirical data from this dissertation, object scrambling only occurred when the object was known information as introduced by the question, in narrow focus by questions such as ¿Quién llamó a tu madre? “Who called your mom?” or in contrastive focus by ¿Llamó a tu madre tu hermano? “Did your brother call your mom?” In both of these contexts, the mother is known information and can be conveyed as a topic in the response, which is similar to what was shown earlier for the PP in the limited contexts for VPPS word order. Following Belletti (2004), there may be a clause-internal TopP which is attracting the scrambled object with a Topic feature. A possible structure is shown in (5.35).
(5.35) ¿Quién llamó a tu madre?
‘Who called your mom?’

Llamé a mi madre YO.
‘I called my mom.’

NUM {Foc[Focus], Fin[EPP], T[ub], v, yo[1SG, FOC], proexpl, llamé, [a mi madre[TOP]], pro[3SG, TOP-object]}

In the case of (5.35), the object does not raise due to an EPP feature on v, but rather is merged directly into a phrase-internal TopP due to its topic feature. The majority of the answers produced by NSs with postverbal subjects and no preverbal object clitic had VOS order, which indicates the topic status of the object. This is parallel to structures produced in which the object was omitted in exchange for a preverbal clitic, which also refers to a topic. This analysis also makes it possible for the object to topicalize within the TP or within the left periphery, as we saw above for preverbal topicalized objects. This tentative analysis does not make it clear when a preverbal topic or a phrase-internal topic would be chosen, which may be for stylistic purposes; therefore more research on this choice is necessary. As with the scrambled PP, more data is necessary in order to prove whether object scrambling is always a topic. Further data and investigation is necessary to determine whether a clause-internal TopP is the most accurate analysis or whether it yields negative consequences with other sentence structures.35 This same analysis is also

35 The nature of the object of a transitive verb may play a role in licensing subject positions, similar to what was shown earlier for the nature a PP in licensing subject position. When a null object is used, a preverbal subject may be required as in:

¿Quién trajo cerveza? ‘Who brought beer?’
Pedro trajo.
*Trajo Pedro. ‘Pedro brought (it).’

The present dissertation specifically examined transitive verbs with definite topics, but it is possible for there to be an interaction between focus and topic, where there is no topic in this example since there is a null object. Future research should examine whether postverbal subjects are banned in narrow or contrastive focus with null objects using empirical data.
assumed to account for the postverbal object/subject alternation in the locative inversion structures in (5.30).

Another context that may also exhibit scrambling are postverbal subjects with unaccusative verbs and a locative PP, repeated here in (5.36).

(5.36) ¿Qué pasó?
  ‘What happened?’
  a. Llegó Juan a la clase.
  b. *Llegó a la clase Juan.
  ‘Juan arrived to class.’

Following the derivation in (5.36), the numeration contains both the pro\textsubscript{expl}, licensed under condition (5.4) when it receives reference via phi-features from the internal argument of an unaccusative verb and becomes pro\textsubscript{[3SG]}, and the overt locative PP. The pro\textsubscript{expl} is merged in Spec,Fin to delete EPP, yielding the postverbal subject with nuclear stress in sentence-final position since it is wide focus, with no focused constituents.

(5.37) NUM: {Fin\textsubscript{EPP}, T\textsubscript{[\textnu\textphi]}, Juan\textsubscript{[3SG]}, llegó\textsubscript{[LOC]}, pro\textsubscript{expl}, [PP a la clase]}

{[FinP pro\textsubscript{[3SG]} llegó+T+Fin\textsubscript{EPP}][TP llegó+T+[vP Juan\textsubscript{[3SG]} llegó+V [vP llegó Juan\textsubscript{[3SG]} [PP a la clase]]]]}

It is commonly assumed that (5.36b) is barred because the locative PP cannot move past the subject, as there is no feature motivating the movement. However, it seems that the discourse context can not only affect subject placement, but PP placement as well, and certain contexts can be created which allow the PP to raise. If the PP contains a bare noun rather than a noun with a definite article, the PP becomes a part of the common ground or the known information in the discourse context and scrambling over the postverbal subject is permitted, as in (5.34).

(5.38) Todos están felices porque volvió a casa Pedro.
‘Everyone is happy because Pedro returned home.’

In example (5.12) in Section 5.2, inversion between the postverbal subject and a locative PP, as in (5.38), was presumed to be ungrammatical, but this may depend on discourse factors. To allow (5.38) to be grammatical, we can imagine a context where Pedro’s family members are all home celebrating his return. In this context, the family home becomes a part of the discourse context as known information, and could possibly allow PP scrambling, thus as in the derivation of (5.38) shown in (5.39) below.

(5.39) Todos están felices porque volvió a casa Pedro.

Following the strategy for object scrambling by Ordoñez (2000), the derivation in (5.39) contains a v with an EPP feature which licenses an extra specifier, which movement of the PP a casa to Spec,v to delete the EPP. It might also be claimed that the PP bears a Topic feature and licenses a phrase-internal TopP, rather than an extra specifier on v, since it relies on a specific discourse context. Belletti (2004) claims that “interference of an adverb between the verb and postverbal subjects leads to marginality” (p. 19), which is why it relies on a very specific discourse context its position. Once again, this hypothesis needs to be corroborated with more data, as these contexts were not elicited in the dissertation, and therefore the topic nature of the PP needs to be tested. I leave it to future research to examine which analysis can account for additional data.
If a phrase-internal TopP is possible, a phrase-internal FocP may also be possible, which could be responsible for giving a focus interpretation to non-subjects, as we saw earlier with adverbs and repeated here in (5.40).

(5.40) ¿Cuándo hizo la tarta Juan?
‘When did Juan make the cake?’

a. La tarta la hizo Juan AYER
b. La tarta la hizo AYER Juan.
‘The cake, Juan made it YESTERDAY.’

In the answers in (5.40), the adverb ayer ‘yesterday’ is new, focused information, while the subject Juan is old information, which can possibly bear a topic feature. I propose that in the derivations of both sentences in (5.40) the adverb bears a focus feature, and the derivations differ in whether this is realized as a phrase-internal FocP or with a FocP in the left periphery, similar to the optionality we saw above with topicaized objects, which are contrasted in the derivations in (5.41).

(5.41) NUM {Top, Foc[Focus], Fin[EPP], T[ϕ], v, Juan[3SG], hizo, ayer[FOC], la tarta[TOP], pro[3SG,TOP-object]}

a. La tarta la hizo Juan AYER

b. La tarta la hizo AYER Juan.
With the sentence-final adverb in (5.41a), the adverb is originally merged internal to the VP and raised to a phrase-internal FocP to delete the Focus feature on the Foc head under condition (5.5), which will also trigger Focus stress placement in that position. With the sentence-final subject in (5.41b), the adverb is moved to a FocP in the left periphery. Again, choice of a phrase-internal or left periphery FocP may be for stylistic purposes, but the syntax does not indicate why one word order is chosen over the other, but makes both possible. In either case, Focus stress will be triggered so that it falls on the adverb, since it is the constituent that bears the focus feature.

If the phrase-internal periphery is correct for licensing the scrambling of objects, PPs, and adverbs with postverbal subjects, it could be questioned why the postverbal subjects are not also moved there. It is possible that postverbal subjects are ultimately located within a FocP between TP and vP, as proposed by Belletti (2004). It could be that phrase-internal FocP and TopP are possible along with the left periphery FocP and TopP, as we saw both options are possible for topicalized objects, when we compare (5.39) and (5.20), and for focused adverbs, when we compare (5.41a) and (5.41b). I will leave it to future research to collect further data to examine the topic/focus nature of the non-subject constituents in licensing variable word orders, and whether focused and topicalized/focalized subjects can occur in both phrase-internal and left periphery FocP and TopP.

In summary, it appears that the contexts in which NSs most often use postverbal subjects contain an overt element in preverbal position, whether this is a topicalized object or the negative adverb used in contrastive focus, emphasizing the importance of the left periphery in deriving postverbal subjects. These contexts with overt preverbal constituents are also those contexts where all L2 learners show the ability to produce postverbal subjects, an ability which improves as proficiency increases. The implementation of an optional pro\_[FOC], licensed by a focus feature
on the subject, can account for the apparent optionality of pre- and postverbal subjects in focused contexts, both narrow and contrastive. The \( pro_{\text{expl}} \) as an internal argument to the verb provides the pre-postverbal contrast with unaccusative and unergative verbs in wide focus. The derivations with null \( pro_{[\text{FOC}]} \) or the \( pro_{\text{expl}} \), are not only the contexts in which NSs from Latin America use a lower frequency of postverbal subjects, but they are also the contexts in which L2 learners struggle to use them, and in the next section I explain the difference between the two groups of speakers based on the proposed analysis.

The syntactic analysis proposed in this chapter suffers the same weakness as the copy theory analysis by Sheehan (2010) and Ortega-Santos (2006), in that neither provide a rationale for the optionality observed in the data. In my account, the presence or absence of \( pro_{\text{expl}} \) is optional, while in the copy theory account, the deletion of the higher or lower copy of a focused element must be optional, although this is not claimed by either Sheehan (2010) or Ortega-Santos (2006). In my analysis, the optionality is left in the syntactic component while in the copy theory analysis PF is responsible for choosing which copy to spell out. However, my analysis has the added advantage over previous accounts by making postverbal subjects preferable in narrow and contrastive focus due to the preference for merge of \( pro_{\text{expl}} \) over movement of the subject from its original position. This is consistent with previous theoretical accounts which posit a preference for postverbal subjects when focused. Another weakness of the current analysis is that much recent research is trying to get rid of \( pro \) altogether, so the proposed analysis needs to be corroborated with data on other null elements, such as null subjects and objects, to confirm the necessity of \( pro \).
8. Explaining differential native speaker performance

The proposed syntactic analysis accounts for the optionality in the native speaker data by allowing either $pro_{expl}$ or the lexical subject to delete the EPP feature. However, despite the optionality, the production task found significant differences between NSs from Spain and those from Latin America, in that the former distinguished significantly between wide, narrow, and contrastive focus, producing the focus hierarchy wide < narrow < contrastive, while the latter made no distinction between wide and narrow focus. Furthermore, while both groups showed a significant preference for preverbal subjects in wide and narrow focus, in contrastive focus the NSs from Spain showed a significant preference for postverbal subjects, while those from Latin America still preferred preverbal subjects. So it seems that the optionality of subject position in focused contexts allowed for by $pro_{expl}$ in the syntactic system seems to be fading for speakers from Latin America who produce 94% preverbal subjects in narrow focus while those from Spain produce 64% preverbal subjects, thus the speakers from Latin America seemingly ban postverbal subjects in narrow focus in favor of preverbal subjects. The differential performance could be due to a language shift to unmarked SV word order, which is a possible word order regardless of information structure, while both VS and SV are grammatical on the acceptability task, thus still a part of the linguistic system. This could be due to a cross-linguistic influence from English, either in the participant’s environment, since all Latin American participants were tested in the U.S. and spoke English, or a more general influence of English on the Spanish within Latin America, to which peninsular Spanish has been more resistant.

Findings to support cross-linguistic influence from English have been found by Paradis and Navarro (2003) for the distribution of null and overt subject pronouns. The goal of that study was to compare child language to parental input, and it compared monolingual speakers of
Spanish to bilingual Spanish-English speakers in the U.S. The results showed that the bilingual parent produced a higher frequency of overt subjects as compared to the monolingual parent, which the authors attribute to cross-linguistic influence from English. This could be the case with the NSs from Latin America in my data, who produced significantly fewer postverbal subjects than NSs from Spain in all contexts. All speakers from Spain also spoke English, although English proficiency was not controlled. So the English influence might be stronger when the participants are also living in an English-speaking environment, whereas the NSs from Spain, although they speak English, were tested in Spain. Future research would need to operationalize English proficiency to get a better understanding of whether English influence plays a role in the differences between Spain and Latin America. A lower frequency of postverbal subjects is well attested in the Caribbean (Cabrera-Puche, 2008; Martínez-Sanz, 2008; Mayol, 2012; Ticio, 2002, 2004; Toribio, 1994, 2000), but has not been known to extend widely throughout Latin America.

Domínguez and Hicks (2016) examined the distribution of pre- and postverbal subjects in Caribbean Spanish in order to propose a minimalist syntactic analysis to explain the higher frequency of overt subjects and lower frequency of postverbal subjects as compared to speakers of peninsular Spanish. They compared monolingual speakers from Cuba and Spain, living in their respective native countries, to Cuban bilinguals living in Miami and Spanish bilinguals living in the U.K. They found that both bilingual groups and the monolingual speakers in Cuba produced significantly fewer postverbal subjects than the monolingual speakers in Spain. Their proposal rests on the role of the D feature in T, which makes T pronominal and thus allows both postverbal and null subjects. They propose that the Cuban variety and the bilingual varieties contain two types of T, one with and one without the D feature, and the speakers with higher
frequencies of overt subjects and lower frequencies of postverbal subjects are employing the T with D much less frequently than speakers from Spain.

My syntactic analysis doesn’t make use of the D feature, but the proposal put forth by Domínguez and Hicks (2016) can be extended to my data and analysis by looking at the role of $pro_{expl}$ in licensing postverbal subjects. It would mean that the speakers from Latin America are not necessarily employing $pro_{expl}$, regardless of presence or absence of discourse features, in their production at the same frequency as those from Spain. This yields the significantly lower frequencies of postverbal subjects produced by NSs from Latin America in narrow and contrastive focus. However, the NSs from Latin America do not differ significantly in their acceptance of postverbal subjects, which indicates that the $pro_{expl}$ is still available in their linguistic system in hearing and accepting postverbal subjects, but it is less active in being chosen for the numeration and merged into the sentence in production. Furthermore, the NSs from Latin America do not differ from those speakers from Spain in production of postverbal subjects with topicalized objects, in which cases both groups of speakers produce high frequencies of postverbal subjects. These structures crucially do not rely on $pro_{expl}$ to derive postverbal subjects, even if the subject is focused, and the postverbal subject will be derived regardless.

If it is true that NSs from Latin America are less likely to merge $pro_{expl}$ into their derivations, this will not adversely affect their subject placement with topicalized objects, and it explains their similar performance to the NSs from Spain who use $pro_{expl}$ at a higher frequency and show a preference for $pro_{[FOC]}$ in contrastive focus. Therefore, the observed variation is not related to the left-periphery, since topicalized objects did not exhibit variation, but is localized to the availability of $pro_{expl}$. It is also evident that discourse context mediates the availability of
pro_{expl} since pro_{[FOC]} in focused contexts is used at a higher frequency than pro_{expl} with intransitive verbs in wide focus by both groups of NSs. This conclusion on the resiliency of the left-periphery should be confirmed with future research on other left-periphery phenomena such as the frequency topicalization and focusing of various constituents.

Thus the data from this dissertation seems to indicate that the dialectal characteristic of fewer postverbal subjects, commonly associated only with Caribbean dialects, may be extending throughout Latin America, a finding that must be examined more thoroughly by controlling for different dialects within Latin America, exposure to English, and English proficiency in order to examine the role of cross-linguistic influence. This dialectal difference can be explained positing that pro_{expl} is being produced at a lower frequency in Latin America, which is consistent with the dialectal characteristic of fewer null subjects associated with the Caribbean dialects, which may also be extending throughout Latin America, but which must once again be corroborated with more data not available in this dissertation. The lower frequency of postverbal subjects was only observed in narrow and contrastive focus, while postverbal subjects with topicalized objects, which don’t rely on pro_{expl}, remain frequent in the Spanish of Latin America. In the next section I will use this analysis to understand the L2 performance and also explain why the low advanced learners behave like NSs from Latin America while the high advanced learners behave like NSs from Spain.

9. L2 acquisition of postverbal subjects

9.1. The language learning task

I now describe the task at hand for the English-speaking learner of Spanish, given the distribution of subject positions in Table 36 and the syntactic analyses described previously. Assuming a full-transfer approach, with English as the initial state for acquisition and following
the analysis presented above, the learner will assume that EPP is assembled on T in Spanish. This yields preverbal subjects with all verb types when the subject is raised to Spec,TP to delete the EPP feature after Agree between T and the subject. This also yields postverbal subjects with unaccusative verbs when the expletive *there* or a locative phrase is merged in Spec,TP to delete the EPP feature after Agree between T and the subject. Therefore, the first task for the L2 learner is syntactic: they must determine that in Spanish, the EPP feature is dissociated from the Agree relation (Holmberg, 2010), that the EPP is on the Fin head, and that a non-subject within the left periphery can delete the EPP feature (Sheehan, 2010). This difference between the two languages is available in the Spanish input in topicalized object sentences in, contrastive focus sentences, and locative inversion sentences, all of which yield postverbal subjects when another constituent merges in CP to delete the EPP. They must also determine that when the subject bears a focus feature, the numeration can optionally contain a $pro_{[\text{FOC}]}$, which have matching agreement and discourse features.

Assuming English to be the initial state, in which postverbal subjects are grammatical with unaccusative verbs, it could be assumed that the acquisition of postverbal subjects with unaccusative verbs in Spanish would be unproblematic since they are also grammatical in English. However, this assumes that subject position is still a strong diagnostic of unaccusative verbs in Spanish, which the data shows is not the case. However, the learner would still need to acquire the null $pro_{\text{expl}}$, which functions like the English expletive *there*. Therefore, despite superficial similarities between Spanish and English with unaccusative verbs, the learner would still have to acquire a different syntactic structure and target-like performance is not guaranteed.

With English as the initial state for acquisition, the learner will also assume that discourse features, such as focus, topic, or locative, do not affect subject-verb word order and that word
order patterns are rigid. The EPP feature is always associated with T and a subject or expletive in Spec, TP is the only thing that can delete the feature. Therefore, the second task for the L2 learner is pragmatic: they must determine that discourse features can have reflexes in the syntactic derivation in Spanish, which affect the deletion of EPP, allow the $pro_{expl}$, and yield more flexible word order patterns. This difference between the two languages is potentially available in the Spanish input in comparison between contrastive and wide focus sentences with unergative and transitive verbs, with contrastive focus yielding postverbal subjects and wide focus yielding preverbal subjects. It is also evident in the contrast between preverbal and postverbal subjects with unaccusative verbs in wide focus contexts, in which subject placement manipulates the placement of information focus (Suñer, 1982). However, the empirical data presented above shows that NSs do not produce a high frequency of postverbal subjects with unaccusative verbs or in narrow focus, therefore the input provided to the learners is not robust with examples, which might implicate difficulties in this acquisition, which is what the data shows.

Lastly, if the learner assumes English as the initial state for acquisition, they will assume nuclear stress flexibility (Zubizarreta and Nava, 2011), which allows sentence initial, internal, and final nuclear stress made available via stress-shift rules (Chomsky & Halle, 1968) which match nuclear stress with focused material (Reinhart, 2006). Therefore, the third task for the L2 learner is prosodic: they must determine that Spanish has nuclear stress rigidity (Zubizarreta and Nava, 2011) in which sentence-final nuclear stress is canonical and syntactic word order is manipulated to align focused material with nuclear stress. Zubizarreta and Nava (2011) point out that the English learner of Spanish must learn to switch from a prosody-based system, where information structure is mainly encoded via prosody, to a syntax-based system, where information structure is mainly encoded via word order. This difference between the two
languages is available in the Spanish input not only through postverbal subjects in contrastive
and narrow focus sentences, but also word order in general when answering questions, as can be
seen in the following examples in Table 1, repeated here as Table 37, with the capital letters
indicating the word receiving nuclear stress.

Table 37. Patterns of nuclear stress patterns available to the L2 learner

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ¿Quién vendió el coche?</td>
<td>Lo vendió JUAN. JUAN sold it.</td>
</tr>
<tr>
<td>Who sold the car?</td>
<td></td>
</tr>
<tr>
<td>b. ¿Qué hizo Juan con el coche?</td>
<td>Lo VENDIÓ. He SOLD it.</td>
</tr>
<tr>
<td>What did Juan do with the car?</td>
<td></td>
</tr>
<tr>
<td>c. ¿Qué vendió Juan?</td>
<td>Vendió el COCHE. He sold a CAR.</td>
</tr>
<tr>
<td>What did Juan sell?</td>
<td></td>
</tr>
<tr>
<td>d. ¿COMPRÓ Juan el coche?</td>
<td>No, lo VENDIÓ. No, he SOLD it.</td>
</tr>
<tr>
<td>Did Juan buy the car?</td>
<td></td>
</tr>
<tr>
<td>e. ¿Compró JUAN el coche?</td>
<td>No, lo compró JOSÉ. No, JOSÉ bought it.</td>
</tr>
<tr>
<td>Did JUAN buy the car?</td>
<td></td>
</tr>
</tbody>
</table>

In Table 37, we see that nuclear stress is sentence-final in Spanish, while in English the
nuclear stress can be sentence-initial, as in (a), sentence-internal, as in (b), (d), and (e), or
sentence-final, as in (c). The word order patterns of English in Table 37, follow canonical SVO
with movement of nuclear stress, while in Spanish, nuclear stress follows canonical sentence-
final placement with more varied word order. Therefore, the evidence for sentence-final nuclear
stress in Spanish is not only available via narrow focus and contrastive focus of postverbal
subjects, but via nuclear stress patterns in general.
However, while English can only use stress-shift, Spanish complicates the issue, because as shown in empirical data from NSs, Spanish can also use focus fronting with stress shift to align focus with nuclear stress in narrow focus in (5.42a) and contrastive focus in (5.43a) (RAE, 2010).

(5.42) ¿Quién llamó?
‘Who called?’
    a. Llamé YO.
    b. YO llamé.
‘I called.’

(5.43) ¿Llamó Juan?
‘Did Juan call?’
    a. No, llamé YO.
    b. No, YO llamé.
‘No, I called.’

Recall that both the (a) and the (b) responses in (5.42) and (5.43) were used in the data by NSs, but according to the Royal Spanish Academy grammar (RAE, 2010), focus fronting of a subject is more marked than postverbal subjects and canonical final stress placement. Therefore, the L1 mechanism for nuclear stress placement is a viable option in Spanish, which could lead to persistent non-target like performance, especially in contrastive focus, if the learner fails to reanalyze the structure and incorporate the role of discursive features in the complex subject DP.

9.2. Explaining L2 performance

While the basis of Lardiere’s (2008, 2009) FRH is the mapping of syntactic features to morphological representations, it seems fruitful to apply it to the acquisition of features that have word order reflexes. According to the syntactic analysis proposed above, the EPP feature in English is always associated with T, and is deleted when the subject is moved to Spec, T (or an
expletive *there* is merged in the case of unaccusatives) after the Agree relation between T and the subject is obtained. In Spanish, on the other hand, the EPP in assembled as a part of the Fin head. Another important distinction between the two languages is the presence of the *pro*_{FOC} with interpretable agreement features and focus feature that match those of the lexical subject, available when the focus features is present on the subject. In English, the interpretable agreement features are only located on the lexical subject, while in Spanish they are located on two lexical heads. Since the L2 learner must reassemble the features in L2 Spanish from the way they are organized in the L1 English, the FRH hypothesis predicts that postverbal, focused subjects would be vulnerable to difficulties in acquisition, but that reassembly and acquisition would be ultimately attainable.

Where learners are able to use postverbal subjects in focused contexts the same way as NSs, it indicates that feature reassembly is successful and that perhaps it is not too difficult to distribute the interpretable agreement features and discourse features across two nominal heads, the lexical subject and the *pro*_{expl}, rather than solely on the lexical subject. The *pro*_{FOC} is only required to render focused, postverbal subjects, but postverbal subjects with topicalized objects do not require the *pro*_{FOC}, therefore they don’t require feature reassembly of the focus feature either. Returning to the L2 behavior, all L2 learners were able to use postverbal subjects in contrastive focus and with topicalized objects. This indicates that in these contexts, the L2 learners were able to reassemble the features by disassociating EPP from T and associating it with the Fin head, and for contrastive focus, were able to use the *pro*_{FOC}. For the high-advanced learners, we see this reassembly has been regularized and they produce postverbal subjects like NSs in all contexts. Specifically, they produce the obligatory postverbal subjects with topicalized
object structures in (5.44) and optional postverbal subjects in contrastive focus in (5.45) with high levels of consistency.

(5.44)   Topicalized object – successful reassembly

\[ \text{TopP } \text{La tarta}[\text{TOP}] \text{ la hizo+}v+T+\text{Fin}+\text{TopP}[\text{TOP}] [\text{FinP } \text{Juan}[3\text{SG}] \text{ la hizo+}v+T+\text{Fin}[\text{EPP}] [\text{TP } \text{la} \text{ hizo+}v+T[3\text{SG}]] [\text{vP } \text{Juan}[3\text{SG}] [\text{vP } \text{la} \text{ hizo+}v+\text{pro}[\text{TOP-object}]]]]] \]

(5.45)   Contrastive focus – successful reassembly

\[ \text{YNP no } [\text{FinP } \text{pro}[1\text{SG,FOC}] \text{ llamé+}v+T+\text{Fin}+\text{Focus} [\text{FinP } \text{pro}[1\text{SG,FOC}] \text{ llamé+}v+T+\text{Fin}[\text{EPP}] [\text{TP } \text{llamé+}v+T[1\text{SG}]] [\text{vP } \text{yo}[1\text{SG,FOC}] \text{ llamé+}v+\text{pro}[\text{EPP}]]]]] \]

The beginner, intermediate, and low-advanced learners still show optionality, producing some postverbal subjects in the obligatory context in (5.43), but producing significantly more preverbal subjects demonstrating unsuccessful reassembly as in (5.44).

(5.46)   Topicalized object – unsuccessful reassembly

\[ \text{TopP } \text{La tarta Top}[\text{TP}] [\text{TP } \text{Juan la hizo+}v+T[3\text{SG}]] [\text{vP } \text{Juan la hizo+}v+\text{pro}[\text{TOP-object}]]] \]

In (5.46), we see that the lower-proficiency learners are using the L1 syntactic structure, and have failed to reassemble to EPP feature, and it is still in TP. Therefore, they still show a significant preference for preverbal subjects. Recall that the lower-proficiency learners were able to produce the preverbal object when obliged, but they did not rate it highly and did not use it to reformulate responses, indicating preference for no preverbal object and a preverbal subject, due to reassembly failure.

In narrow focus, where postverbal subjects are optional, we see the beginner, intermediate, and low advanced learners fail to produce postverbal subjects, indicating that they
have not acquired \(\text{pro}_{\text{FOC}}\) and are unable distribute the focus feature and the interpretable agreement features on the \(\text{pro}_{\text{FOC}}\) in addition to the lexical subject, as shown with an unergative verb in narrow focus in (5.47):

(5.47) Narrow focus – unsuccessful reassembly (L1 strategy)

\[
[\text{TP} \text{yo llamé}+v+T[\text{EPP, uϕ}:1SG]} [\text{vP} \text{yo llamé}+v+T[\text{vP-llamé}]]
\]

The learners are most likely using an L1 stress-shift rule to align the nuclear stress with the focalized subject in Spec,TP, since the subject would have to be in left periphery for stress shift via the Spanish mechanism. The same would be true of unaccusatives in wide focus as in (5.48).

(5.48) Unaccusative in wide focus – unsuccessful reassembly (L1 strategy)

\[
[\text{TP} \text{Juan llegó}+v+T[\text{EPP, uϕ}:3SG]} [\text{vP} \text{llegó}+v+T[\text{vP-llegó Juan}]]
\]

The high-advanced learners demonstrate correct acquisition of the null \(\text{pro}_{\text{expl}}\) and subsequent reassembly of the respective features in narrow focus, where postverbal is optional but preverbal is highly preferred, producing postverbal structures as in (5.49), but producing preverbal subjects significantly more, like the NSs from Spain, as in (5.50).

(5.49) Narrow focus – successful reassembly – postverbal

\[
[\text{FocP} \text{pro}[3SG, FOC]} \text{corre}+v+T+\text{Fin+Foc}[\text{Focus}] [\text{FinP} \text{pro}[3SG, FOC]} \text{corre}+v+T+\text{Fin}[\text{EPP}]} [\text{TP} \text{corre}+v+T[\text{uϕ}:3SG]} [\text{vP Nacho}[3SG, FOC]} \text{corre}+v+T[\text{vP-corre}]]])
\]

(5.50) Narrow focus – successful reassembly – preverbal

NACHO corre.

‘Nacho runs.’
Finally, the beginner, intermediate, and low-advanced learners correctly produce no postverbal subjects in wide focus, but are most likely using the L1 strategy, as in (5.51).

(5.51)  
Wide focus – L1 strategy

Juan camina.
‘Juan walks.’

[TP Juan camina+ν+T[EPφ, 3SG] [vp Juan camina+ [vp camina]]]

The high-advanced learners, on the other hand, accept postverbal subjects in wide focus significantly more often than NSs with all verb types. This overgeneralization of postverbal subjects in incorrect wide focus contexts can possibly be explained several ways. They are either extending the unaccusative strategy to unergative and transitive verbs, claimed by Hertel (2003), Lozano (2006), and Domínguez and Arche (2008; 2014) for unergative verbs, by inappropriately using the pro expl with unergative and transitive verbs. A generalization for unaccusatives and unergatives is plausible since they are both intransitive verbs, and the differences between the two have been found to be problematic for acquisition in several languages (Oshita, 2001). However, this strategy seems unlikely since they are extending the strategy to transitive and ditransitive verbs as well, and the NSs do not seem to be using subject position to distinguish verb types. Another possibility is that they are rating the sentences on grammaticality rather than appropriateness. Therefore, they give postverbal sentences high ratings in wide focus since they recognize the structures as grammatical, but their production shows native-like patterns as they are more focused on the discourse context because they are answering the question.
One important finding from the experiments was that the high advanced L2 learners performed like NSs from Spain while the low advanced learners performed like NSs from Latin America. It is possible that the learners are assimilating the behavior of a particular dialect for which they have received frequent input, but the current dissertation does not have sufficient language background information to make any claims about this. However, looking at the target structures where NSs from Spain performed similarly, namely those structures that do not require $pro_{expl}$, another rationale for the L2 learner pattern becomes apparent. I claimed in Section 8 of this chapter that the NSs from Latin America have the variants of $pro_{expl}$ in their linguistic system, but are not actively using it in their production. Therefore, they show preference for preverbal subjects in narrow and contrastive focus on the production task, but show high ratings of postverbal subjects in those contexts on the acceptability task. This indicates that these varieties of Spanish are losing the $pro_{expl}$. The low advanced learners, on the other hand, seem to be acquiring $pro_{expl}$ over time, since their ratings of postverbal subjects increase with proficiency, but it is inactive in their production, where they produce postverbal subjects very infrequently.

I claim that the low advanced learners superficially approximate the behavior of NSs from Latin America, in that both groups are crossing paths in the process of language change with a similar degree of variability in the use of $pro_{expl}$ by both groups of speakers. The NSs from Spain speak a more standard variety of Spanish with the $pro_{expl}$, which the high advanced learners have accurately acquired. The NSs from Latin America are losing the $pro_{expl}$, while the low advanced learners are acquiring it. Just like the $pro_{expl}$ are still active in acceptability, the low advanced learners show use of it in acceptability as well, but struggle to use it in production. Therefore, the low advanced learners’ acquisitional process is mimicking the NSs from Latin America’s language change process. It is probable that as the low advanced learners proficiency
improves, they too will acquire the \( \text{pro}_{\text{expl}} \) in their production and assimilate to the behavior of the high advanced learners and NSs from Spain. The high advanced participants are assimilating the performance of the NSs from Spain because they are acquiring a more standard variety of Spanish using more postverbal subjects, which is still employed by NSs from Spain. This is most likely due to the fact that language classes and textbooks often teach and use more standard varieties of Spanish. Furthermore, the open-ended data from the exit questionnaire indicates that many of the high advanced learners were aware of the grammaticality of postverbal subjects and had sought such information through personal research in grammar books and discussions with Spanish instructors. These conclusions should be corroborated with data on frequency of exposure to different varieties of Spanish as well as with data on different dialectal differences such as null subjects.

The IH might also be adopted to explain L2 performance, since the presence of \( \text{pro}_{\text{FOC}} \) requires discourse features to be present; thus making postverbal subjects a discourse-syntax interface phenomenon. The IH predicts lingering difficulties even at advanced L2 states, but the high advanced learners show native-like production and acceptance in contrastive and narrow focus. However, the high advanced group also showed overgeneralization of postverbal subjects in wide focus, with no clear preference for a subject position, in a non-nativelike way, which the IH would predict. The current data seems to indicate that for subject position, the interface may cause delays but does not impede ultimate attainment. Using the IH to complement FRH, it could be that the features that involve the interface between syntax and discourse makes reassembly of the EPP and reassociation of interpretable agreement features and focus features with the null \( \text{pro}_{\text{FOC}} \) in addition to the lexical subject difficult. This explains the following distribution of
postverbal subjects by L2 learners, with the most frequently produced by learners in (5.52) down towards the least produced in (5.55).

(5.52) Topic-fronting – postverbal obligatory – successful reassembly

[TopP La tarta[TOP] la hizo+T+Fin+TopP[TOP] [FinP Juan la hizo+T+Fin] [TP la hizo+T[ϕ:3SG]]
[VP Juan la hizo++ [VP la hizo+pro[TOP-object]]]]

(5.53) Contrastive focus – postverbal optional – successful reassembly

[Y/NP no [FocP pro[1SG,FOC] llamé+T+Fin+FocP[FOCS] [FinP pro[1SG,FoC] llamé++T+Fin] [TP llamé++T[ϕ:1SG]]
[VP yo[1SG, FOC] llamé++ [VP llamé ]]]]]

(5.54) Narrow focus – postverbal optional – unsuccessful reassembly

[TP yo llamé+T[ϕ:1SG]]

(5.55) Unaccusative in wide focus – postverbal optional – unsuccessful reassembly

[TP Juan llegó+T[ϕ:3SG]]

Reassembly is more successful in topic-fronting and in contrastive focus because there are overt elements in the left periphery, while it is more difficult to reassemble using null information, such as proexpl. Interestingly, and I’d argue not coincidentally, the structures acquired earlier and produced by all L2 learners in the study are more frequently produced by NSs, thus available in the input for the learner. It also seems that NSs also prefer structures with overt syntactic constraints that yield postverbal subjects, as in (5.52) and (5.53) and do not prefer structures requiring null operators, and use overt preverbal material instead, as in (5.54) and (5.55). In summary, the empirical data shows a direct correlation between the forms produced by the L2 learners and those produced by the NSs, which can be explained via feature reassembly and the interface with discourse.
The data from this dissertation can be compared to previous research which also supports FRH, particularly that of Hwang and Lardiere (2013). In that study, English speaking learners of L2 Korean struggled with feature reassembly of the extrinsic plural, where the [u-plural] and [distributive] features are assembled together on the lexical expression each (of the...) in English, but are associated with the plural marker in particular syntactic and pragmatic contexts in Korean. Most learners struggled with the extrinsic plural, but some advanced learners were able demonstrate native-like performance. This is consistent with the current analysis, where in English the interpretable agreement features are associated with soley the lexical DP subject, but in Spanish the interpretable agreement features and the focus feature are associated with both a null pro and the lexical DP subject. Similar to the L2 Korean learners, the lower proficiency learners struggle with reassembly, but it is ultimately acquired by the high advanced learners.

10. Limitations and Future Research

Despite encouraging results found in this dissertation, limiting factors need to be considered. The biggest limitations fall within the acceptability judgment task. In order to avoid participant fatigue but still include the variables of focus, verb type, and nuclear stress, each mean rating for preverbal, postverbal, or stress mismatch was only based on two target items, which is extremely low. For example, with 30 verbs in contrastive focus, six were unaccusative verbs. Within those six unaccusative verbs, two sentences contained a preverbal subject, two contain a postverbal subject, and two contained a stress mismatch. This was repeated for each verb type in each of the three discourse contexts. With mean ratings based on two items, reliability is relatively low, and reformulation data was therefore based on even fewer exemplars. However, the data sheds light on possible trends that can be fine-tuned and further analyzed independently in future research. It would be beneficial to construct an experiment examining
one focus context in particular with a large number of each verb type and pre- and postverbal target items, particularly with contrastive focus or with topicalized objects. The production task suffered less from this problem, since each focus context contained a large number of items (30). However, each verb type only contained 6 items, so that could be strengthened as well.

The validity of acceptability judgment tasks is also often questioned, as it is unclear whether the ratings provided represent true acceptability or simply basic understanding. Guijarro-Fuentes (2012:714) points out that if:

“learners can understand the sentence, but do not really know whether it is right or wrong, they may assume that anything they are not sure of is a result of their own lack of proficiency rather than a problem with the sentence they are being asked to judge. Thus we can hypothesize that performance may have more to do with learners’ lack of confidence in deciding that something is wrong”

This implies that if a participant is able to understand the sentence, they will rate it as correct and not evaluate it further for anomalies. This is an inherent limitation of any acceptability judgment task, but the present dissertation tried to overcome this limitation by including corrections of sentences judged as wrong, and also corroborating the judgments with production data and explicit knowledge data. This may have affected performance by the high advanced learners in my data, as they rated both pre- and postverbal subjects as acceptable in wide focus, converging from their native-like behavior in production. However, this doesn’t explain why they didn’t do the same thing in the other focus contexts, where they did perform like natives.

The dissertation sought to expand on previous research by including information on the interface between subject-verb word order and nuclear stress placement. However, this was not coded for on the production task because it was often hard to determine the nuclear stress placement for L2 learners, as they often employed high terminal rise in answers to wh-question
(Ching 1998; Ladd, 2008), which made answers sound like questions instead of responses. This also affected coding of the reformulations on the acceptability judgment task. While this task did have target items examining nuclear stress mismatches, as mentioned before, there were relatively few target items in each individual group which were also confounded with subject placement, making it difficult to claim whether nuclear stress really played a role. Once again, the trends from this data should be used to develop more systematic examinations of nuclear stress and subject placement in future research. Future research would benefit from focusing more specifically on nuclear stress, perhaps leaving out another variable such as verb type, or using phonetic analysis software.

The findings in this dissertation provide a fruitful starting point for other future research as well. The production task found a curious result with L2 learners producing what appears to be a subject marker using the preposition a, which is the same as the object marker a. This questions the relationship between production and interpretation of postverbal subjects. Empirical evidence to date suggests that VS structures in Spanish are persistently misinterpreted as VO structures even by advanced learners (Lee & Malovrh, 2009; Malovrh & Lee, 2010). Therefore, future research should include production and interpretation tasks to see if accurate production precedes or is possible without accurate interpretation or vice versa.

Within the native speaker data, a difference was noted between speakers from Spain and speakers from Latin America in terms of preference for pre- or postverbal subjects. Future research could reveal more information about the dialectal nuances of subject placement. It could be that the Spanish of Latin America has endured English influence which is reflected even in speakers who don’t speak English; therefore subject placement could be a change in progress in the language. Not only is it interesting to examine the role of dialect in NSs, but it has
implications for the L2 learner. Examining the dialect of the professors with whom the learners have contact and also the amount of time they’ve spent using Spanish in a particular foreign country or with a particular community of speakers in the US can help us better understand their performance.

The dissertation makes a contribution to previous research by incorporating transitive verbs and finding that preverbal clitics interplay with subject position and discourse context. However, this was based on very few exemplars; therefore future endeavors should look at fine-tuning an experiment dedicated to transitive verbs, including clitics in wide focus in addition to narrow and contrastive focus. The dissertation also only used third person subjects and did not control for singular or plural. Future research would benefit from investigating the role of first and second person subjects, as well as the role of agreement morphology, especially in topicalized object structures, where postverbal subjects were often confused for agents of a passive structure. Furthermore, the difference between lexical subjects versus pronominal subjects and even null subjects can be analyzed.

Finally, this dissertation only examined a subset of uses of postverbal subjects, but in order to capture the entire situation, future research should look at more types of postverbal subjects. The use that stands out the most would be to include subject position in subordinate clauses, specifically relative clauses such as the difference between El libro que leyó Juan and El libro que Juan leyó ‘The book that Juan read.’ This is intriguing because relative clauses also involve the left periphery, and will help provide a clearer understanding of where preverbal subjects are truly located and the role of the left periphery in licensing them. The discursive nature of other constituents also needs to be examined to understand their role in word order and if a phrase-internal periphery (Belletti, 2004) is licensed, as was postulated in Section 7.5.2. of
this chapter. It is also fruitful to examine not only the difference between SV and VS, but also a four way contrast between SVO, OVS, VOS, and VSO orders.

This dissertation did not examine the role of quantity and type of input or different instruction types on the acquisition of postverbal subjects; therefore future research might also examine postverbal subjects in treatment tasks that seek to teach the target item to examine other factors that affect the acquisitional process. This would allow extrapolation of data from the current dissertation to research with pedagogical implications. The high advanced learners, who have had much exposure to Spanish outside the classroom, greatly out-performed the lower proficiency groups, who have the majority of their exposure in the classroom. This seems to indicate that the discourse contexts that elicit postverbal subjects may not be readily available in the classroom, positing a role for naturalistic input outside the classroom and the need to assimilate the classroom environment to incorporate more natural discourse contexts. A controlled treatment experiment would allow for the testing of the role of input as well as pedagogical techniques that can be implemented in the classroom.

11. Conclusions

Like the nature of its experimental design, the contribution of this dissertation to the field of linguistics is multifaceted. First, it has a descriptive contribution in discovering a scale of postverbal subject use by NSs of Spanish. Empirical data revealed that Spanish speakers use the most postverbal subjects in sentences with preverbal topicalized objects and in contrastive focus. They use them relatively infrequently in wide focus, across verb types, with unaccusative verbs, and in narrow focus. The relatively low frequency of postverbal subjects in narrow focus converges with much previous research claiming that this context favors them.
Second, the dissertation contributes to theoretical syntax by proposing a cohesive analysis within minimalism to account for the distribution of pre- and postverbal subjects, based on the scale that was discovered in the data. This analysis appeals to the nature of the EPP feature, its location on Fin in Spanish, and proposes the optionality of a \textit{pro} \textsubscript{[FOC]} that is licensed in the numeration along with the lexical subject when the subject bears a focus feature. The subject and \textit{pro} \textsubscript{[FOC]} have matching agreement features, and the \textit{pro} \textsubscript{[FOC]} can be merged to delete the EPP feature. This accounts for the preference for postverbal subjects in narrow and contrastive focus as claimed my previous theoretical accounts, as well as for the optionality apparent in the present data.

Third, it contributes to the field of SLA by finding that the use of postverbal subjects in those contexts where NSs most frequently use them are the earliest acquired by L2 learners of Spanish. These structures contain overt preverbal constituents, which are present in the linguistic input available to the L2 learners which enables them to be acquired earlier. This extends previous research by incorporating contrastive focus, transitive verbs, and topicalized objects. Contrastive focus had not been examined in L2 acquisition to the best of my knowledge, and transitive verbs have been underexamined.

Fourth, this dissertation contributes to the research on formal approaches to SLA by explaining the L2 behavior using the FRH and the IH. For all L2 learners in the study, reassembly of the agreement and focus features was possible, but not guaranteed, with topicalized object sentences and contrastive focus sentences, in which the discourse features yield syntactic corollaries other than postverbal subjects; therefore providing more evidence for reassembly. Those structures in which the discourse features are satisfied via null elements, reassembly was less successful for all but the high-advanced learners. In this way, the IH may
complement the FRH in that discourse features are harder to reassemble when they require null information, while discourse information requiring overt constituents is easier to reassemble.

Lastly, this dissertation has opened the doors to future research examining other contexts in which postverbal subjects may be generated, crucially relative clauses, which will help clarify the role of the left periphery, discourse features, and the EPP feature. In summary, this dissertation has provided a clearer picture of postverbal subject use by NSs, and has provided insight into their acquisition by L2 learners.
APPENDICES

APPENDIX A: CONTROLLED PRODUCTION TASK

Narrow focus (30)

Unaccusative verbs
1. ¿Quién sale?
2. ¿Quién llega?
3. ¿Quién viene?
4. ¿Quién se cae?
5. ¿Quién entra?
6. ¿Quién vuelve?

Unergative verbs
1. ¿Quién corre?
2. ¿Quién nada?
3. ¿Quién patina?
4. ¿Quién salta?
5. ¿Quién almuerza?
6. ¿Quién fuma?

Transitive verbs
1. ¿Quién lleva los cuadernos?
2. ¿Quién lee el periódico?
3. ¿Quién toma la foto?
4. ¿Quién construye el castillo de arena?
5. ¿Quién invita a Julio?
6. ¿Quién escucha la canción?

Ditransitive verbs
1. ¿Quién le devuelve el disco a Margarita?
2. ¿Quién le corta el pelo a la mujer?
3. ¿Quién le toma la temperatura a Javier?
4. ¿Quién le arregla el coche a José?
5. ¿Quién le echa gasolina al coche?
6. ¿Quién les pide el dinero a sus amigos?

Topicalized object
1. ¿Quién ve la televisión?
2. ¿Quién lava los platos?
3. ¿Quién hace los ejercicios de yoga?
4. ¿Quién pinta las paredes?
5. ¿Quién conduce el tractor?
6. ¿Quién compra el gorro?

Wide focus (30)
¿Qué pasa en el dibujo?

Unaccusative verbs
1. Salir
2. Llegar
3. Volver
4. Venir
5. Entrar
6. Caerse

Unergative verbs
1. Cenar
2. Bailar
3. Dormir
4. Cocinar
5. Estornudar
6. Llorar

Transitive verbs
1. Manejar el autobús
2. Preparar la comida
3. Arreglar la ropa
4. Pagar la cuenta
5. Escribir el cheque
6. Vender la fruta

Ditransitive verbs
1. Regalar los chocolates a Anita
2. Escribir una carta a un amigo
3. Pedir dinero a su padre
4. Servir el maíz a su novio
5. Abrir la puerta a su abuela
6. Dar el regalo a Luis
Topicalized object
1. Comer palomitas
   ¿Qué pasa con las palomitas?
2. Tener
   ¿Qué pasa con el billete de viaje?
3. tomar
   ¿Qué pasa con el taxi?
4. Hacer la cama
   ¿Qué pasa con la cama?
5. Leer, vender
   ¿Qué pasa con las revistas?
6. Defender cliente
   ¿Qué pasa al cliente?

Contrastive focus (30)

Unaccusative verbs
1. ¿Llega Javier?
2. ¿Entran los hombres?
3. ¿Sale Iván?
4. ¿Vuelve la Sra. García?
5. ¿Se cae un plátano?
6. ¿Viene el padre?

Unergative verbs
1. ¿Baila Felipe?
2. ¿Caminan dos mujeres?
3. ¿Habla por teléfono Andrés?
4. ¿Grita el empleado?
5. ¿Estudia Manuela?
6. ¿Cantan Luis y Francisco?

Transitive verbs
1. ¿Compra el cuaderno Pedro?
2. ¿Llama a Marta Ricardo?
3. ¿Ve la televisión Nico?
4. ¿Usa la calculadora Nina?
5. ¿Recoge los vasos José?
6. ¿Examina el mapa Daniel?
Ditransitive verbs
1. ¿Le da una propina al botones Emilio?
2. ¿Le pide perdón a su novia Miguel?
3. ¿Le sirve la comida a la gente Pablo?
4. ¿Le lleva la compra al Sr. Campos José?
5. ¿Le trae las bebidas a Iván Óscar?
6. ¿Le vende fruta a Rosa una mujer?

Topicalized object
1. ¿Beben el vino Juan y María?
2. ¿Hace una escultura Sandra?
3. ¿Quiere comprar juguetes Carlos?
4. ¿Saluda a la gente el presidente?
5. ¿Dirige la obra de teatro Margarita?
6. ¿Examina a Manuel la enfermera?
APPENDIX B: ACCEPTABILITY JUDGMENT TASK

Narrow focus (30)

Unaccusative verbs
1. ¿Quién sale?
   Sale Carlota.
2. ¿Quién se cae?
   Se cae Raúl.
3. ¿Quién llega?
   Yoel llega.
4. ¿Quién entra?
   Nina entra.
5. ¿Quién viene?
   Maria viene.
6. ¿Quién vuelve?
   El esposo vuelve.

Unergative verbs
1. ¿Quién nada?
   Nada Carlos.
2. ¿Quién patina?
   Felipe patina.
3. ¿Quién corre?
   Nacho corre.
4. ¿Quién salta?
   Rodrigo salta.
5. ¿Quién almuerza?
   Almuerzan Enrique, Sandra y David.
6. ¿Quién fuma?
   Javi fuma.

Transitive verbs
1. ¿Quién lleva los cuadernos?
   Los lleva Pepe.
2. ¿Quién lee el periódico?
   Lo lee el Sr. Rodríguez.
3. ¿Quién construye el castillo de arena?
   Ana María y Flor lo construyen.
4. ¿Quién invita a Julio?
   Paco lo invita.
5. ¿Quién escucha la canción?
   Jimena la escucha

6. ¿Quién toma la foto?
   Alberto la toma.

Ditransitive verbs
1. ¿Quién le devuelve el disco a Margarita?
   Se lo devuelve Anita.
2. ¿Quién le arregla el coche a José?
   Se lo arregla el mecánico.
3. ¿Quién le corta el pelo a la mujer?
   Enrique se lo corta.
4. ¿Quién le echa gasolina al coche?
   El gasolinero se la echa.
5. ¿Quién le toma la temperatura a Javier?
   Petra se la toma.
6. ¿Quién les pide el dinero a sus amigos?
   Ronda se lo pide.

Topicalized object
1. ¿Quién ve la televisión?
   La televisión, la ve Silvia.
2. ¿Quién pinta las paredes?
   Las paredes, las pinta Sergio.
3. ¿Quién lava los platos?
   Los platos, Ana María los lava.
4. ¿Quién compra el gorro?
   El gorro, Denise lo compra.
5. ¿Quién hace los ejercicios de yoga?
   Los ejercicios, Laura los hace.
6. ¿Quién conduce el tractor?
   El tractor, Paco lo conduce.

Wide focus (30)
¿Qué pasa en el dibujo?

Unaccusative verbs
1. Volver
   Vuelve Carlos.
2. Entrar
Unergative verbs

1. Dormir
   Duerme Isabel.
2. Llorar
   Llora Amalia.
3. Cocinar
   Pablo cocina.
4. Cenar
   Gonzalo y Laura cenan.
5. Bailar
   Carla y Francisco bailan.
6. Estornudar
   Juan Carlos estornuda.

Transitive verbs

1. Arreglar la ropa
   Arregla la ropa Rafael.
2. Vender la fruta
   Vende la fruta Carlos.
3. Manejar el autobús
   El conductor maneja el autobús.
4. Pagar la cuenta
   Jaime paga la cuenta.
5. Preparar la comida
   Juan prepara la comida.
6. Escribir el cheque
   Marcos escribe un cheque.

Ditransitive verbs

1. Abrir la puerta a su abuela
Le abre la puerta a su abuela Natalia.

2. Pedir dinero a su padre
   Le pide dinero a su padre Andrea.

3. Regalar los chocolates a Anita
   Paula le regala los chocolates a Anita.

4. Servir el maíz a su novio
   Julia le sirve el maíz a su novio.

5. Escribir una carta a un amigo
   Marcos le escribe una carta a un amigo.

6. Dar el regalo a Luis
   Greta le da el regalo a Luis.

Topicalized object
1. Comer palomitas
   ¿Qué pasa con las palomitas?
   Las palomitas, las comen las chicas.

2. Hacer la cama
   ¿Qué pasa con la cama?
   La cama la hace Leya.

3. Tener
   ¿Qué pasa con el billete de viaje?
   El billete, María lo tiene.

4. Leer, vender
   ¿Qué pasa con las revistas?
   Las revistas Jimena las vende.

5. Tomar
   ¿Qué pasa con el taxi?
   El taxi los Torres lo toman.

6. Defender cliente
   ¿Qué le pasa al cliente?
   Al cliente el abogado lo defiende.

Contrastive focus (30)

Unaccusative verbs
1. ¿Llega Javier?
   No, llega el Sr. López.

2. ¿Viene el padre?
   No, viene la madre.

3. ¿Vuelve la Sra. García?
4. ¿Se cae un plátano?
   No, una manzana se cae.
5. ¿Entran los hombres?
   No, Marisa, Clara y Ana entran.
6. ¿Sale Iván?
   No, César sale.

Unergative verbs
1. ¿Baila Felipe?
   No, baila Pilar.
2. ¿Grita el empleado?
   No, grita el jefe.
3. ¿Caminan dos mujeres?
   No, Pepe y Juan caminan.
4. ¿Estudia Manuela?
   No, Lola estudia.
5. ¿Habla por teléfono Andrés?
   No, Gabriel habla.
6. ¿Cantan Luis y Francisco?
   No, Ricardo y Roberta cantan.

Transitive verbs
1. ¿Llama a Marta Ricardo?
   No, la llama Sergio.
2. ¿Examina el mapa Daniel?
   No, lo examina Nico.
3. ¿Ve la televisión Nico?
   No, Daniel la ve.
4. ¿Recoge los vasos José?
   No, Juan los recoge.
5. ¿Compra el cuaderno Pedro?
   No, Mónica lo compra.
6. ¿Usa la calculadora Nina?
   No, Paco la usa.

Ditransitive verbs
1. ¿Le da una propina al botones Emilio?
   No, se la da Rodrigo.
2. ¿Le lleva la compra al Sr. Campos José?
No, se la lleva Jaime.

3. ¿Le pide perdón a su novia Miguel?
   No, Rafael se lo pide.

4. ¿Le traen las bebidas a Iván Óscar?
   No, Roberto se las trae.

5. ¿Le sirven la comida a la gente Pablo?
   No, Rosa se la sirve.

6. ¿Le venden fruta a Rosa una mujer?
   No, un hombre se la vende.

Topicalized object

1. ¿Hace una escultura Sandra?
   No, la escultura la hace Ángela.

2. ¿Dirige la obra de teatro Margarita?
   No, la obra la dirige Manuela.

3. ¿Quiere comprar juguetes Carlos?
   No, los juguetes Cristina los quiere comprar.

4. ¿Examina a Manuel la enfermera?
   No, a Manuel el médico lo examina.

5. ¿Beben el vino Juan y María?
   No, el vino Rosa y José lo beben.

6. ¿Saluda a la gente el presidente?
   No, a la gente los reyes la saldan.
APPENDIX C: ELICITED IMITATION TASK

REPETITION TASK

ELICITED IMITATION TASK for L2 SPANISH


You are going to hear several sentences in English. After each sentence, there will be a short pause, followed by a tone sound {TONE}. Your task is to try to repeat exactly what you hear. You will be given sufficient time after the tone to repeat the sentence. Repeat as much as you can. Remember, DON'T START REPEATING THE SENTENCE UNTIL YOU HEAR THE TONE SOUND {TONE}. Now let's begin.

We drove to the park
I’ll call her tomorrow night
You can buy meat at the butcher shop
My brother just bought a brand new computer
Sometimes they take their dog for a walk in the park
We're going to play volleyball at the gym that I told you about

That was the last English sentence

Now, you are going to hear a number of sentences in Spanish. Once again, after each sentence, there will be a short pause, followed by a tone sound {TONE}. Your task is to try to repeat exactly what you hear in Spanish. You will be given sufficient time after the tone to repeat the sentence. Repeat as much as you can. Remember, DON'T START REPEATING THE SENTENCE UNTIL YOU HEAR THE TONE SOUND {TONE}. Now let's begin.
1. Quiero cortarme el pelo (7 syllables)
2. El libro está en la mesa (7 syllables)
3. El carro lo tiene Pedro (8 syllables)
4. Él se ducha cada mañana (9 syllables)
5. ¿Qué dice usted que va a hacer hoy? (9 syllables)
6. Dudo que sepa manejar muy bien (10 syllables)
7. Las calles de esta ciudad son muy anchas (11 syllables)
8. Puede que llueva mañana todo el día (12 syllables)
9. Las casas son muy bonitas pero caras (12 syllables)
10. Me gustan las películas que acaban bien (12 syllables)
11. Después de cenar me fui a dormir tranquilo (13 syllables)
12. El chico con el que yo salgo es español (13 syllables)
13. Quiero una casa en la que vivan mis animales (14 syllables)
14. A vosotros os fascinan las fiestas grandiosas (14 syllables)
15. Ella ha terminado de pintar su apartamento (14 syllables)
16. El niño al que se le murió el gato está triste (14 syllables)
17. Ella sólo bebe cerveza y no come nada (15 syllables)
18. Me gustaría que el precio de las casas bajara (15 syllables)
19. Cruza a la izquierda y después sigue todo recto (15 syllables)
20. Me gustaría que empezara a hacer más calor pronto (15 syllables)
21. Una amiga mía cuida a los niños de mi vecino (16 syllables)
22. El gato que era negro fue perseguido por el perro (16 syllables)
23. Antes de poder salir él tiene que limpiar su cuarto (16 syllables)
24. La cantidad de personas que fuman ha disminuido (17 syllables)
25. Después de llegar a casa del trabajo tomé la cena (17 syllables)
26. El ladrón al que cogió la policía era famoso (17 syllables)
27. Le pedí a un amigo que me ayudara con la tarea (16 syllables)
28. El examen no fue tan difícil como me habían dicho (17 syllables)
29. ¿Serías tan amable de darme el libro que está en la mesa? (17 syllables)
30. Hay mucha gente que no toma nada para desayuno (17 syllables)
APPENDIX D: SCORING OF ELICITED IMITATION TASK


APPENDIX J
SCORING PROTOCOL FOR ELICITED IMITATION TASK

Note: The scoring protocol was adapted from the scoring system developed by Ortega, Iwashita, Rabie, and Norris (in preparation).

Table J.1. EIT score 0 descriptor

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Nothing (Silence)</td>
<td></td>
</tr>
<tr>
<td>• Garbled (unintelligible, usually transcribed as XXX)</td>
<td></td>
</tr>
<tr>
<td>• Minimal repetition, then item abandoned:</td>
<td></td>
</tr>
<tr>
<td>- Only 1 word repeated</td>
<td>Manana (10- item 4)</td>
</tr>
<tr>
<td>- Only 1 content word plus function word(s)</td>
<td>El examen que [gibberish] (09- item 28)</td>
</tr>
<tr>
<td>- Only function word(s) repeated</td>
<td>Despues mue- XX tranquilo (01-item 11)</td>
</tr>
<tr>
<td>- Only 1 or 2 content words out of order plus extraneous words that</td>
<td>Tu que sepa a- m- muy bien (12-item 6)</td>
</tr>
<tr>
<td>weren’t in the original stimulus</td>
<td>Me gustaria las se se el XXX (16-item 18)</td>
</tr>
</tbody>
</table>

Table J.2. EIT score 1 descriptor

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When only about half of idea units are represented in the string but a</td>
<td></td>
</tr>
<tr>
<td>lot of important information in the original stimulus is left out;</td>
<td></td>
</tr>
<tr>
<td>sometimes the resulting meaning is unrelated (or opposed) to stimulus</td>
<td></td>
</tr>
<tr>
<td>- Antes de poder seguir (3 sec.) perdio su cuarto (02-item 23)</td>
<td></td>
</tr>
<tr>
<td>- Dudo que sepa ma- tambien (04-item 6)</td>
<td></td>
</tr>
<tr>
<td>- Seria en que el libro esta en la mesa (11-item 29)</td>
<td></td>
</tr>
<tr>
<td>- El gato que eran pelo negro dan something el perro (14-item 22)</td>
<td></td>
</tr>
<tr>
<td>- El ladron que XX la policia famoso (11-item 26)</td>
<td></td>
</tr>
<tr>
<td>- Despues de cenar fue en- tranquilo (03-item 11)</td>
<td></td>
</tr>
<tr>
<td>- Le pendu una amiga que XXX la tarea (01-item 27)</td>
<td></td>
</tr>
<tr>
<td>- La cantidad de personas fumar alguno, alguno (03-item 24)</td>
<td></td>
</tr>
<tr>
<td>• Or when string doesn’t in itself constitute a self-standing sentence</td>
<td></td>
</tr>
<tr>
<td>with some (related or not to stimulus) meaning (This may happen when</td>
<td></td>
</tr>
<tr>
<td>only 2 of 3 content words are repeated and no grammatical relation</td>
<td></td>
</tr>
<tr>
<td>between them is attempted)</td>
<td></td>
</tr>
<tr>
<td>- Antes de poder seguir (3 sec.) perdio su cuarto (02-item 23)</td>
<td></td>
</tr>
<tr>
<td>- Dudo que sepa ma- tambien (04-item 6)</td>
<td></td>
</tr>
<tr>
<td>- Seria en que el libro esta en la mesa (11-item 29)</td>
<td></td>
</tr>
<tr>
<td>- El gato que eran pelo negro dan something el perro (14-item 22)</td>
<td></td>
</tr>
<tr>
<td>- El ladron que XX la policia famoso (11-item 26)</td>
<td></td>
</tr>
<tr>
<td>- Despues de cenar fue en- tranquilo (03-item 11)</td>
<td></td>
</tr>
<tr>
<td>- Le pendu una amiga que XXX la tarea (01-item 27)</td>
<td></td>
</tr>
<tr>
<td>- La cantidad de personas fumar alguno, alguno (03-item 24)</td>
<td></td>
</tr>
</tbody>
</table>
### Table J.3. EIT score 2 descriptor

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When content of string preserves at least more than half of the idea units in the original stimulus; string is meaningful, and the meaning is close or related to original, but it departs from it in some slight changes in content, which makes content inexact, incomplete, or ambiguous</td>
<td>-Después de cenar me fui a X tranquilo (11-item 12)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Ella sola cerveza y no come nada (05-item 17)</td>
</tr>
<tr>
<td></td>
<td>-Quieres una casa que viven los alemanes animales (07-item 13)</td>
</tr>
<tr>
<td></td>
<td>-El chico con lo que es algo es español (08-item 12)</td>
</tr>
<tr>
<td></td>
<td>-El chico con yo salgo es muy bien (15-item 12)</td>
</tr>
<tr>
<td></td>
<td>-Después a trabajo tome la cena (16-item 25)</td>
</tr>
</tbody>
</table>

### Table J.4. EIT score 3 descriptor

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Original, complete meaning is preserved as in the stimulus. Strings which are ungrammatical can get a 3 score, as long as exact meaning is preserved. Some synonymous substitutions are acceptable:</td>
<td>-Me gustaria el precio de las casas baraja (2 sec.) baja (15-item 18)</td>
</tr>
<tr>
<td></td>
<td>-El niño que se m- murio cato esta triste (02-item 16)</td>
</tr>
<tr>
<td></td>
<td>-[gibberish] se ducha cada manana (18-item 4)</td>
</tr>
<tr>
<td></td>
<td>-Quiero cortar mi pelo (05-item 1)</td>
</tr>
<tr>
<td></td>
<td>-Las calles de esta ciudad son anchas (13-item 7)</td>
</tr>
<tr>
<td></td>
<td>-El chico que yo salgo es español (06-item 11)</td>
</tr>
<tr>
<td></td>
<td>-El chico con el salgo es español (05-item 11)</td>
</tr>
<tr>
<td></td>
<td>-El examen no fue tan difícil como han di- como me han dicho (12-item 28)</td>
</tr>
<tr>
<td></td>
<td>-Las casa son muy bonitas pero caras (07-item 9)</td>
</tr>
<tr>
<td></td>
<td>-Quiero una casa en que viven mis animales (12-item 13)</td>
</tr>
<tr>
<td></td>
<td>-Dudo que saba a ma- manejar muy bien (11-item 6)</td>
</tr>
<tr>
<td></td>
<td>-Ella he terminado X pintar sus apartamiento (11-item 15)</td>
</tr>
</tbody>
</table>

### Table J.5. EIT score 4 descriptor

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exact repetition: String matches stimulus exactly. Both form and meaning are correct without exception or doubt.</td>
<td>-Después de cenar me fui a X tranquilo (11-item 12)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Ella sola cerveza y no come nada (05-item 17)</td>
</tr>
<tr>
<td></td>
<td>-Quieres una casa que viven los alemanes animales (07-item 13)</td>
</tr>
<tr>
<td></td>
<td>-El chico con lo que es algo es español (08-item 12)</td>
</tr>
<tr>
<td></td>
<td>-El chico con yo salgo es muy bien (15-item 12)</td>
</tr>
<tr>
<td></td>
<td>-Después a trabajo tome la cena (16-item 25)</td>
</tr>
</tbody>
</table>
APPENDIX E: LANGUAGE BACKGROUND QUESTIONNAIRE

1. How old were you when you first started learning Spanish?

2. How many years have you been studying/speaking Spanish?

3. In what contexts have you studied/learned Spanish (classes, nanny, travel, etc)?

4. How many hours a day do you spend using Spanish to work?

5. How many hours a day do you spend using Spanish to talk to family?

6. How many hours a day do you spend using Spanish to talk to friends?

7. How many hours a day do you spend using Spanish to prepare for class?

8. How many hours a day do you spend using Spanish to read for leisure?

9. How many hours a day do you spend using Spanish to watch TV/movies?

10. How many hours a day do you spend using Spanish to listen to music?

11. Are there any other activities in which you use Spanish outside of those listed?

12. How much time have you spent in Spanish speaking countries? Include where, how long, and purpose of visit.
APPENDIX F: EXPLICIT KNOWLEDGE QUESTIONNAIRE

Open ended questions:

1. What aspect of the Spanish language do you think this experiment is trying to examine?

2. Prior to completing the study, did you know that postverbal subjects were grammatical in Spanish as in the following examples?

   Llega Juan.
   Corre María.
   Las come Julio.
   Se lo da Ana.
   La tarea, la hace Carmen.

3. Do you know any reasons why you would use a postverbal subject in Spanish, such as in the examples listed?

Multiple Choice Questions

4. How/where/from whom do you know the reasons why you would use postverbal subjects in Spanish?
   a. In class
   b. From a professor (office hours)
   c. Speaking with natives
   d. From a book
   e. From the internet
   f. Personal research on the topic
   g. I did not know it was grammatical
   h. Other:

5. BEFORE completing the study, did you know that in Spanish a postverbal subject can be used when answering questions in which the subject is new information, as in the example below?

   ¿Quién hizo la tarea? La hizo Carmen.
   a. Yes
   b. No
   c. Other

6. BEFORE completing the study, did you know that in Spanish a postverbal subject can be used when contrasting a new subject against an already mentioned subject, as in the example below?

   ¿Hizo la tarea María? No, la hizo Carmen.
   a. Yes
b. No

c. Other

7. BEFORE completing the study, did you know that in Spanish a postverbal subject can be used when a direct object is put in front of the verb, as in the example below?

¿Quién hizo la tarea? La tarea, la hizo Carmen.

a. Yes
b. No
c. Other

8. BEFORE completing the study, did you know that in Spanish a postverbal subject can be used in simple sentences with no context with certain verbs such as llegar, salir, entrar, venir, volver, and caerse, as in the example below?

Llega Juan.

a. Yes
b. No
c. Other
APPENDIX G: OBJECT PLACEMENT TASK

Translate the following sentences following the model provided. Be sure to include the object pronouns: lo, la, los, las

MODEL:

Juan busca a María en la biblioteca.  
Juan looks for María in the library.

Juan la busca en la biblioteca.  
Juan looks for her in the library.

Marta come las galletas de merienda.  
Marta eats cookies as a snack.

Marta las come de merienda.  
Marta eats them as a snack.

1. Visito a mis abuelos.  
I visit my grandparents.

________________________________________________________________________

I visit them.

2. No escucho a mi hermano.  
I don’t listen to my brother.

________________________________________________________________________

I don’t listen to him.

3. Miguel llama a sus primos.  
Miguel calls his cousins.

________________________________________________________________________

Miguel calls them.

4. José compra las bebidas.  
José buys the drinks.

________________________________________________________________________

José buys them.

5. Invito a mi novia a cenar.  
I invite my girlfriend to dinner.

________________________________________________________________________

I invite her to dinner.
6. Los estudiantes leen el libro de español.  

The students read the Spanish book.  

The students read it.

Translate the following sentences following the model provided. Be sure to include the direct object pronouns: lo, la, los, las and the indirect pronoun se

MODEL:

La profesora les repite la respuesta a los estudiantes. The professor repeats the answer to the students.

La profesora se la repite. The professor repeats it to them

La madre le corta el pollo a su hijo. The mother cuts the meat for her son.

La madre se lo corta. The mother cuts it for him.

1. Ella no les da las galletas a las chicas. She doesn’t give the cookies to the girls.

She doesn’t give them to them.

2. Él les sirve el vino a los Señores García. He serves the wine to Mr. and Mrs. García.

He serves it to them.

3. Le preparo el cereal a mi hermano. I prepare the cereal for my brother.

I prepare it for him.

4. Les echo la pimienta a mis patatas fritas. I put pepper on my French fries.
5. Martín le sirve los platos al cliente.  

*Martin serves the plates to the client.*

Martín sirve los platos al cliente.

Martín serves them to him.

6. Los estudiantes le piden ayuda a su profesora.  

*The students ask for help from the professor.*

Los estudiantes le piden ayuda a su profesora.

The students ask her for it.
## Appendix H: Reformulations by Verb Type for the Acceptability Judgment Task

Table 38. Reformulations based on target subject position and focus for unaccusative verbs

<table>
<thead>
<tr>
<th>Target</th>
<th>Preverbal</th>
<th>Postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wide Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preverbal</td>
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</tr>
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Table 39. Reformulations based on target subject position and focus for unergative verbs
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<th>Low Advanced</th>
<th>High Advanced</th>
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<th>Native – LA</th>
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Table 40. Reformulations based on target subject position and focus for transitive verbs
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Table 41. Reformulations based on target subject position and focus for ditransitive verbs

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BIBLIOGRAPHY


Kayne, R. S. (1972). Subject inversion in French interrogatives. Generative studies in Romance languages, 70126.


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