# ON FOCUS, PROSODY, AND WORD ORDER IN ARGENTINEAN SPANISH: A MINIMALIST OT ACCOUNT

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ABSTRACT: During the last decade, several proposals have been made for modeling focus-induced word order variation in Spanish, both in derivational and in optimality-theoretical frameworks. Furthermore, empirical studies have been carried out in order to capture the prosodic correlates of focus marking, most of them couched in the Autosegmental-Metrical (AM) model of intonational phonology. Interestingly, recent syntactic and prosodic studies rely on different assumptions regarding the acceptability of a structure in a given context: While most phonologists assume that a narrowly focused XP can be prosodically marked in situ ([FS]VO, SV[FdOiO), most syntacticians predict movement of the presupposed material to a higher position, yielding prosodically unmarked structures with final nuclear stress (VO[FS], SViO[FdO]). Formal approaches that integrate pragmatically motivated features correctly predict instances of focus-induced word order, but run into problems when a given focus-background articulation corresponds to different possible output forms, in other words when optionality is at play. Classical Optimality Theory (OT) is no exception in this respect, given that its fixed constraint hierarchy allows for only one favored candidate. In this paper, I concentrate on focus marking in two varieties of Argentinean Spanish, which differ from other Spanish varieties in terms of their overall prosodic shape and the speakers' preferences for certain syntactic structures. I argue that different syntactic and phonological strategies of focus marking can be accounted for by combining Chomsky's (2000, 2001) target/probe approach with the model of Stochastic OT (Boersma/Hayes 2001). My proposal is supported by empirical data stemming from recordings made with 50 speakers from Buenos Aires and Neuquén.

KEYWORDS: Argentinean Spanish; Syntax-Phonology Interface; Focus; Intonation.

#### 1. Introduction

Much work has been done on focus marking in Spanish during the last ten years. Starting with Zubizarreta's (1998) seminal work on the syntax-phonology interface, several studies have addressed the question of how the syntactic and phonological components of grammar interact in the expression of the information-structural category of focus, thereby clearly highlighting either the syntactic or the phonological perspective. Scholars such as

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Costa (2001), Gutiérrez-Bravo (2002, 2005, 2006), Domínguez (2004), and Samek-Lodovici (2001, 2005) have concentrated on focus-induced word order variation (e.g. [F SVO] vs.  $VO[_{E}S]$ ,  $[_{E}SVdOiO]$  vs.  $SViO[_{E}dO]$ )<sup>2</sup> and tackled the issue primarily from its syntactic side, adopting either a derivational or rather Minimalist or an optimality-theoretic perspective. Others have investigated prosodic reflexes of focus and largely concentrated on the shape of focal pitch accents (Sosa 1999, Face 2001, 2002, Hualde 2002, 2005, Gabriel 2006, 2007, among others). However, it is striking that the majority of syntactic work relies on acceptability judgments that differ considerably from those upon which phonological studies are based. There is, among other things, no clear consensus in the field regarding the question of if and to what extent the placement of the nuclear (or sentence) accent on a focused constituent has an impact on syntactic derivation and may or may not trigger the reorganization of the surface order of constituents. While most syntacticians depart from the assumption that SVO sentences with a focused clause-initial focused subject are ill-formed (i.e. \*[FS]VO) and assume that focused (and prosodically prominent) subjects are obligatorily shifted to the rightmost position (i.e. VO[FS]; see Zubizarreta 1998, Costa 2001, among others), the data analyzed in the majority of studies on the tonal realization of focus involve structures exhibiting the clause-initial in situ focalization of the subject constituent (see Face 2002 and Hualde 2005, among others).<sup>3</sup> However, the material analyzed in studies such as Face (2002) consists only of read data; it thus remains unclear whether speakers produce the relevant structures in spontaneous speech as well. There is an obvious need to empirically clarify this question on the basis of data from spontaneous or semi-spontaneous speech.

A further problem concerns the question of how to deal with the variability that normally appears in empirical data, especially in recordings of spontaneous speech or when semi-spontaneous data are elicited in production experiments. Regarding the modeling of variable data, it is essential to distinguish between different types of variation: On the one hand we are dealing with linguistic variants that occur in pragmatically distinct contexts, such as clause-initial subjects in neutral Spanish SVO declaratives vs. clause-final subjects in focus constructions, i.e.  $VO[_FS]$ . On the other hand we are confronted with cases of so-called "true optionality" (Müller 2003), i.e. with instances of variability that can hardly be attributed to

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 $<sup>^2</sup>$  Here and in the following, the focus domain is indicated by square brackets and the subscripted indices F (for neutral or information focus) and Fc (for contrastive focus). The position of nuclear (or sentence) stress is signaled by bold characters or capitalizing the metrically strong syllable.  $VO[_F \mathbf{S}]$  thus refers to a construction with a narrowly focused subject constituent in clause-final position;  $SV[_{Fc}\,\mathbf{dO}]$ iO stands for a double object construction exhibiting unmarked word order and a contrastively focused direct object, which is highlighted through prosodic prominence in situ. A list of abbreviations used in the text is provided in the appendix.

<sup>&</sup>lt;sup>3</sup> Evidence for [FS]VO in Brazilian Portuguese is provided by Othero/Figueiredo Silva (to appear) and Figueiredo Silva/Araújo (2008).

different pragmatic contexts or registers. Formal models of grammar do offer powerful tools for tackling variation of the former type: Focus-induced word order variation can easily be accounted for under the assumption that pragmatically motivated features, such as [+Focus], enter the derivation and trigger certain movement operations. The same holds for classical OT approaches that assume a fixed hierarchy of constraints and thus allow for only one winning candidate to be chosen in each evaluation process (EVAL). However, most formal accounts run into problems when "true optionality" is at play, as these disallow competing forms in one and the same context. Further, they cannot adequately deal with gradient variability and usage tendencies that show up in empirical data. Cases in which speakers produce different forms, e.g. [FS]VO and VO[FS] or SV[FdO]iO and SViO[FdO] in pragmatically identical contexts, thus remain unaccounted for. In order to also account for these occurrences of optional forms, I propose a model of Minimalist OT along the following lines: First, the structures are constructed according to Chomsky's (2000, 2001) target/probe approach and subsequently associated with F0 contours based on the tonal repertoire of the language or variety under discussion. In a second step, the best candidate is chosen in an evaluation process in the terms of Boersma/Hayes's (2001) model of Stochastic OT, which allows for overlapping constraints (instead of a strictly structured constraint hierarchy) and thus provides a useful tool for coping with variable data.

The paper is organized as follows: In a first step I briefly introduce the information-structural dichotomy of Focus and Background (section 2) before summarizing the syntactic and prosodic strategies of focus marking in Spanish (section 3) and giving a short overview of the relevant derivational and optimality-theoretic literature (section 4). Section 5 focuses on the question of how linguistic variability can be dealt with in OT and subsequently presents the assumed model of grammar, which is then applied to data from two varieties of Argentinean Spanish in section 6. Special emphasis is given to narrowly focused subject and object constituents in non-complex declaratives and to focused direct objects in double object constructions. Finally, section 7 offers some concluding remarks.

#### 2. FOCUS AND FOCUS MARKING

Apart from well-know dichotomies such as *theme* vs. *rheme* and *topic* vs. *comment* (see Casielles Suárez 2004, Gabriel 2007, and López 2009 for overview), much of the recent literature makes use of the so-called focus-background articulation (FBA) for capturing the information-structural component of a given sentence: The shared assumptions of speaker and

hearer at the time of the production and the transmission of a given utterance constitute the *background* (or presupposition) that is contrasted with the *focus*, equivalent to the sum of the non-presupposed information (see Chomsky 1971, Stechow 1991, Zubizarreta 1998, among others). Some examples are given in the following question-answer pairs:

(1) a. What's up?

[F María compró un DIArio.]

whole focus reading

'Mary bought a newspaper.'

b. What did Mary do?

María [F compró un DIArio.]

focused VP

c. What did Mary buy?

María compró [Fun DIArio.]

focused dO

In much of the literature, a fundamental distinction is made between two types of focus, i.e. between so-called neutral or presentational focus, which merely fills a gap in the presupposition, as in (1c) ('Mary bought x', with  $x = [Fun\ diario]$ ), and contrastive focus, which entails the correction of a presumably incorrect piece of information contained in the presupposition. This is shown in (2):

(2) Julia bought the newspaper.

(No.) [Fc MaRÍa] compró el diario.

contrastively focused S

Seen from a cross-linguistic perspective, focus is associated with prominence, i.e. linguistic material encoding non-presupposed information is more salient than that encoding presupposed information. The well-established interrelation between focus and prominence is described in the Focus-prominence rule (FPR), originally formulated in Chomsky (1971) and quoted here according to Zubizarreta: "Given two sister nodes  $C_i$  (marked [+F]) and  $C_j$  (marked [-F]),  $C_i$  is more prominent than  $C_j$ " (1998: 88). In most languages focal material is highlighted by means of prosodic prominence, i.e. through the placement of nuclear stress, which obligatorily matches with the focus domain (3a). A mismatch between nuclear stress and focus brings about an ill-formed structure, a prosodic realization which is inappropriate in the given context (3b).

- (3) What did Mary buy?
  - a. María compró [Fun DIArio.]

nuclear stress on focused dO

b. \*MaRÍa compró [Fun diario.]

focused dO, but nuclear stress on S

In many languages including Spanish, focus is not only marked through prosodic prominence, but can also be signaled by syntactic means, among them particular constructions such as clefts, which obligatorily entail a focal interpretation of the clefted constituent, as well as

special cases of focus-induced word order variation in non-complex declaratives. In addition, focal material may be highlighted by means of focus-sensitive particles such as *sólo* 'only', which trigger the focal interpretation of the constituent they have scope over, as in *Sólo* [Fmi PAdre] lo sabe 'Only my father knows it' (see Kovacci 1999). Other languages also use morphological means of focus marking. A well-documented example is the Western Atlantic language Wolof, which disposes of focus-marking bound morphemes that attach to the verbal cluster, but lacks any prosodic reflex of focus (Rialland/Robert 2001). In Spanish, by contrast, prosodic marking of focus is essential, and prosody closely interacts with syntactic strategies of focus marking. The following section describes in detail how the two components of grammar interact in the expression of this information-structural category in Spanish.

#### 3. STRATEGIES OF FOCUS MARKING IN SPANISH

As already stated, Spanish makes use of both syntactic and prosodic strategies in order to signal focus. To turn first to word order, it is interesting to see that scholars depart from considerably differing assumptions concerning the acceptability of a structure in a given context. In most syntactic studies, it is assumed that a narrowly focused constituent, which attracts nuclear stress via FPR, is obligatorily located in the rightmost position of the clause, at least in terms of neutral focus (for contrastive focus see examples 6 and 7 below). The obligatory placement of focused material guarantees the formation of prosodically unmarked structures such as VO[FS] or SViO[FdO], which place nuclear stress on the rightmost constituent contained in the intonational phrase (IP). Constructions involving focus marking *in situ*, i.e. the non-final placement of neutrally focused constituents, should thus be unsuitable in the relevant contexts (Zubizarreta 1998, 1999, Costa 2001, Gutiérrez-Bravo 2002, Samek-Lodovici 2001, Martín Butragueño 2005). Consider the following examples:

(4) Who bought the newspaper?

a. \*[FMaRÍa] compró el diario.

\*[F**S**]VO

b. Compró el diario [FMaRÍa].

 $VO[_FS]$ 

(5) What did Mary give to her brother?

a. \*María le dio [Fun DIArio] a su hermano.

 $*SV[_F dO]iO$ 

b. María le dio a su hermano [Fun DIArio].

 $SViO[_F dO]$ 

'Mary gave a newspaper to her brother.'

Taking Baker's (1988, 1996) "Uniformity of Theta Role Assignment Hypothesis" (UTAH) as a basis, according to which thematic roles are assigned in structurally identical positions, the

examples given in (4b) and (5b) must be derived from a relevant base configuration by means of certain movement operations (see section 4 for details). However, according to Zubizarreta (1998, 1999), the syntactic strategy of focus marking combining marked word order (derived via movement) and unmarked prosodic realization (with IP-final nuclear stress) only applies for neutral focus interpretation. Contrastive focus, on the other hand, can be signaled either *in situ*, as shown in (6a) and (7a), or through special syntactic constructions such as various forms of clefting (6b, c) or focus fronting (7b).

- (6) Julia bought the newspaper.
  - a. (No.) [FC MaRÍa] compró el diario. in situ focus
  - b. (No.) Es [Fc MaRÍa] la que compró el diario.
  - c. (No.) [Fc MaRÍa] es quien compró el diario. pseudo-cleft
- (7) Mary gave a book to her brother.
  - a. (No.) María le dio [Fc un DIArio] a su hermano. in situ focus
  - b. (No.) [Fc Un DIArio] le dio María a su hermano. focus fronting

According to these acceptability judgments, different word order sequences such as SVO and VOS clearly constitute cases of syntactic variation, but do not involve true optionality (in the spirit of Müller 2003), given the fact that VOS is only acceptable when the subject has a narrow focus and SVO only with a contrastively focused subject constituent.

However, in studies on the prosodic realization of focus in Spanish, it is generally assumed that focus marking through prosodic prominence in situ is always possible, regardless of the focus type (see Toledo 1989, Hualde 2002, 2005, Face 2001, 2002, among others). Accordingly, structures such as [FS]VO or SV[FdO]iO which are marked as unacceptable in (4a) and (5a), above, should be perfectly acceptable with a neutral focus interpretation. However, these studies confine themselves to the analysis of scripted speech, i.e. data read by the subjects, and thus exclude all forms of syntactic variability which necessarily appear as soon as speakers are given the choice of how to answer a question. In this way, most of the syntactic studies mentioned above do not rely on any empirical data at all. In a larger study addressing the syntax-phonology interface in Spanish, Gabriel (2007) has shown on the basis of semi-spontaneous data that acceptability judgments such as those given in (4) and (5) cannot be confirmed empirically. In addition to recordings made with 18 speakers of different Spanish varieties answering a set of context questions pertaining to short picture stories, acceptability judgments were obtained from the same speakers. On the one hand, the data show that the speakers' preferences for a prosodic or syntactic strategy of focus marking are characterized by clear tendencies (which will be outlined in more detail below); on the other hand, the boundary between the acceptability and unacceptability of a structure in a given context is not as clear-cut as suggested in much of the literature. The results of Gabriel (2007) are summarized in the following:

- 1. Neither *in situ* focus (6a, 7a) nor clefting (6b, c) or focus fronting (7b) are restricted to contrastive interpretations of the focused constituent. The speakers accepted all of the syntactic strategies in contexts of both neutral and contrastive focalization. In the production data, however, fronting of a focused object did not occur at all.
- 2. Constructions with transitive verbs exhibit a strong tendency towards the pre-verbal placement of a focused subject when the object is realized as a full nominal DP constituent. In the production data [FS]VO was realized in 100% of the cases, while VO[FS] was largely accepted by the speakers in the acceptability judgment test. Only one subject classified a clause-final focused subject as unacceptable (5.5%).
- 3. Constructions with transitive verbs are inclined towards the post-verbal placement of a focused subject when the object is realized as a clitic: 67% the subjects produced Cl+V[FS] in the production data. In the acceptability judgment test, all speakers preferred Cl+V[FS] to the reverse order [FS]Cl+V, which was judged as unacceptable by 16.7% of the speakers.
- 4. In double object constructions with both objects realized as full nominal constituents and focused direct objects, the latter are preferably located in clause-final position, thus overriding the unmarked order SVdOiO. In the elicited production task, 64.3% of the speakers produced the sequence SViO[FdO], which was preferred by 80% of the subjects in the acceptability judgment test. The prosodic strategy with *in situ* focus on the direct object, i.e. SV[FdO]iO, was also rated as being acceptable, though to a lesser extent.

In summary, it can be stated that the mechanisms of syntactic focus marking, i.e. the use of a particular syntactic construction in a given pragmatic context, is governed by strict rules to a lesser degree than suggested in much of the literature.

The strongest prosodic reflex of focus in Spanish is the placement of the nuclear accent, which is obligatorily associated with the focus domain. Located on the right edge of the intonational phrase (IP) in the unmarked case, it can be shifted to any other position in order to mark focus of a non-final constituent, e.g. (6a) *MaRÍa compró el diario*. Non-final nuclear stress often appears along with post-focal deaccentuation (Labastía 2006, Gabriel et al. 2010), even though the realization of the post-focal material as a low plateau is not as compulsory as in other languages such as English (Ortiz Lira 1995). Virtually the same F0 contour is realized

when a focused constituent other than the subject occupies the pre-verbal position, as is the case for focus fronting constructions such as (7b) *Un DIArio le dio María a su hermano*. A schematic representation of the typical F0 contour associated with constructions involving non-final focus is given in Fig. 1.

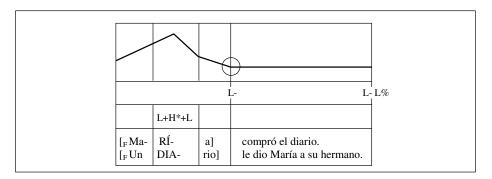
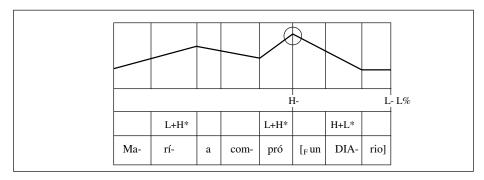


Fig. 1: Schematized F0 contour of structures with initial focus and post-focal deaccentuation.

The labeling used in Fig. 1 is consistent with the Spanish ToBI (Tone and Break indices) labeling conventions proposed by Estebas-Vilaplana/Prieto 2009 and Aguilar et al. 2009, and relies on the tonal repertoire elaborated for *Porteño* Spanish by Gabriel et al. 2010. The IP-initial nuclear accent appears as a tri-tonal pitch accent L+H\*+L, with its F0 peak located within the temporal limits of the metrically strong syllable. The steep decline after the focused constituent is triggered by a low target (intermediate phrasal boundary L-), followed by a low plateau.

While the non-final placement of the nuclear accent unequivocally signals the narrow focus of the highlighted constituent, a structure involving IP-final nuclear stress is potentially ambiguous in terms of the width of the focus domain. As shown in the examples given in (1) above, an SVO declarative such as *María compró un DIArio* is compatible with three different information-structural readings (whole focus, focused VP, and narrowly focused object). In order to clearly distinguish between the potential pragmatic interpretations, speakers can insert an intermediate phrasal boundary H- at the right edge of the presupposed material (Hualde 2005, Gabriel 2007). This additional high target can assume various surface realizations, including different tonal as well as durational cues (see Feldhausen et al. 2010 and Gabriel et al. 2011 for Argentinean Spanish). A schematic representation of the intonational contour typically associated with the information-structural interpretation of (1c) *María compró* [Fun DIArio] is given in Fig. 2.



**Fig. 2**: Schematized F0 contour of a structure with the object in neutral focus and an intermediate phrasal boundary H- (break index 3) marking the left edge of the focus domain.

It needs to be emphasized that optionality is at play here as well: The insertion of an intermediate phrasal break (H-) marking the boundary between the presupposed and the focal material is not obligatory, and the choice of a concrete surface realization of these boundaries is optional as well. In order to effectively account for the variability that obviously characterizes both the syntactic and prosodic side of focus marking, it is necessary to integrate optionality into the assumed grammar model. Before presenting the relevant proposal, I give a short overview of the accounts of focus-driven word order variation in Spanish proposed in recent derivational and optimality-theoretic studies.

# 4. FOCUS-INDUCED WORD ORDER VARIATION AS A RESULT OF PROSODICALLY MOTIVATED MOVEMENT: DERIVATIONAL AND OT ACCOUNTS

In derivational accounts, two types of movement operations are assumed to account for focus-induced word order variation. The first type is the 'classical' core syntactic operation, which applies when the subject constituent in an SVO language is moved to its canonical surface position Spec, TP. A relevant example from the field of focus-induced word order variation is the movement of the object from its VP-internal base position to a higher position in focus fronting constructions. For structures such as (7b) *Un DIArio le dio María a su hermano*, Zubizarreta (1998: 100, 182) assumes movement of the object XP to Spec, TP triggered by a focus feature potentially coded in the T head. In order to explain the presence of structures involving the clause-final placement of a focused subject as in (4b) *Compró el diario* 

<sup>&</sup>lt;sup>4</sup> Reglero (2004: 163ff) also interprets the raising of the object in fronting constructions as an operation of core grammar. Instead of movement to Spec,TP, however, she defines the Spec position of a focus phrase (FocP), located in the Left Periphery, as the relevant landing site. Similar analyses involving such an articulated CP structure in line with the model proposed by Rizzi (1997) for Italian were conducted by Grewendorf (2002: 228) and Zagona (2002: 254), among others. However, the obligatory adjacency of the proposed focused object to the finite verb (\**Un DIArio María le dio a su hermano*) constitutes a strong argument against the assumption of a split CP involving projections of Top and Foc heads. I thus follow Barbosa (2001) and (López 2002) and abstain from assuming a FocP which dominates TP in Spanish.

[ $_FMaRIa$ ], Zubizarreta proposes a second type of movement not triggered by feature checking requirements, but which is rather applied in order to avoid prosodically marked structures. Consider the representation given in (8), where the pre-supposed material is marked [-F], while the focused constituent is assigned the feature [+F].

(8) [[+F María] [-F compró [-F el diario]]].

Application of the FPR, which assigns nuclear stress to the focused subject XP, yields a prosodically marked structure with clause-initial stress ( $MaRÍa\ compr\'o\ el\ diario$ , see Fig. 1, above), which can in turn be circumvented by moving the marked material [-F] to a structurally higher position. In her approach, which relies fundamentally on Chomsky's (1995) model of Minimalist syntax, Zubizarreta assumes an initial core syntactic movement operation, i.e. raising of the finite verb to T, yielding VSO (9a), and then the subsequent left-adjunction of the whole VP to  $\nu$ P (see Zubizarreta 1998: 127).

- (9) a. [TP Compró T [PP María eompró v [PP eompró el diario]]].
  - b.  $[_{TP} \text{Compr\'o T} [_{vP} [_{VP} \text{ el diario}]_i [_{vP} \text{Mar\'ia } v \text{ compr\'o } t_i]]].$

Movement operations such as the latter are not triggered by formal features (as is generally assumed by Chomsky 1995), but are rather applied in order to avoid prosodically marked structures, hence the term p(rosodically motivated)-movement (Zubizarreta 1998: 29). In Chomsky's (2000, 2001) target/probe approach, p-movement can be captured as follows. It must be pointed out that, as opposed to the 1995 version of the Minimalist program, head movement is no longer interpreted as an operation of core grammar. Rather, it is said to be part of the phonological component, thus only affecting PF. This view is supported by the observation that head movements such as V-to-T-raising do not elicit semantic effects: Irrespective of the position of the finite verb, which is said to move overtly in Romance languages (María come T [yPa menudo come manzanas]) but covertly in English (Mary T [vP] often eats apples]), the Spanish adverb a menudo 'often' has structural scope over vP in the same manner as its English counterpart often, and thus modifies the action expressed by the verb. Chomsky formulates this as follows: "[S]emantic effects of head raising in the core inflectional system are slight or nonexistent [...]. Head raising is not part of narrow syntax" (Chomsky 2001: 37). Under this assumption, the (lexical) verb overtly adjoins to  $\nu$  (in order to be located at the edge of the strong phase  $v^*P$  at the time of Spell-out). On PF, its phonetic material can then be realized at any position as determined by the 'verbal' chain C-T-v, i.e. below any verb-related functional category (see Zwart 2003 for a similar proposal with

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<sup>&</sup>lt;sup>5</sup> See Matushansky (2006) and Hornstein (2009: 126ff) for a different position.

respect to Germanic languages). The linear position used for the realization of the verbal cluster is determined by the PF conditions of the language concerned: While English verbs appear phonetically at the linear position determined by v, the verb in Romance languages is realized below T.<sup>6</sup> This is illustrated by means of the Spanish example [ $_{CP}$  que María come a menudo manzanas] in Fig. 3 below.

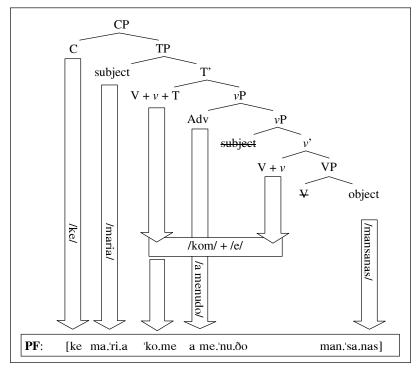


Fig. 3: Realization of the verbal cluster below T in Spanish.

It is important to point out that pronominal clitics (which attach to the verb) form part of the verbal cluster and are thus realized as agreement morphemes together with the verb form at the linear position determined by T. Consider the example (4b) *Compró el diario* [*MaRÍa*] with a pronominalized direct object:

(10)  $[_{TP}pro_{Expl}]$  Lo compró+v T  $[_{vP}]$  MaRÍa  $\frac{1}{2}$  Compró+v  $[_{VP}]$   $\frac{1}{2}$  According to the PF conditions of Spanish, the verbal cluster, which in this case contains a proclitic object pronoun, surfaces at the linear position determined by the T head. Given that the EPP feature<sup>8</sup>, requiring the Spec position of TP to be filled, is satisfied in (10) by the

phonetically null expletive pronoun  $pro_{Expl}$ , the subject constituent MaRÍa (which bears

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<sup>&</sup>lt;sup>6</sup> In Germanic V2 languages such as German or Dutch, which are characterized by the fact that the finite verb appears obligatorily in the second position of the main clause, the relevant linear position is determined by an even higher category belonging to the C domain.

<sup>&</sup>lt;sup>7</sup> For reasons of theta-role assignment, I assume a *pro* in object position.

<sup>&</sup>lt;sup>8</sup> The EPP feature ('Extended projection principle') captures the universal principle that any well-formed sentence needs a subject. In OT accounts it is reformulated as a constraint that militates against non-filled Spec,TP. In the analysis proposed by Gutiérrez Bravo (2002), this constraint is called SUBJ, see below.

nuclear stress according to the FPR) can remain in its base position and is thus realized at the rightmost linear position. The result is a prosodically unmarked structure exhibiting IP-final nuclear stress.

In order to account for  $VO[_FS]$ , I adopt the proposal made by Erteschik-Shir/Strahov (2004) for the analysis of scrambling in Danish, addressing the incorporation of maximal projections into the verbal head and the subsequent movement of the complex category obtained. Seen from this angle, structures such as (4b) *Compró el diario* [*MaRÍa*] can be derived by assuming that the phonetic material of the object constituent in  $VO[_FS]$  constructions is realized at the linear position determined by the T head, together with the verbal head. In order to avoid violating the Phase Impenetrability Condition (PIC)<sup>9</sup>, which states that any material inside vP is not accessible to further operations once the vP is completed, the phonetic material of the object DP is incorporated into the verbal head and moves to the phase edge prior to Spell-out. However, the phonetic material of the presupposed object [ $_{DP}$  *el diario*] does not belong to the 'verbal' chain C-T-v, in sharp contrast to a verbal clitic such as lo in (10) [ $_{Cl+V+v+T}$  *Lo compró*] MaRÍa. In Fig. 4 the derivation of (4b) Compró *el diario* [MaRÍa] is illustrated in the relevant phrase marker (PF representation); the material incorporated into the verbal head without having originally belonged to the verbal chain is highlighted by underlining.

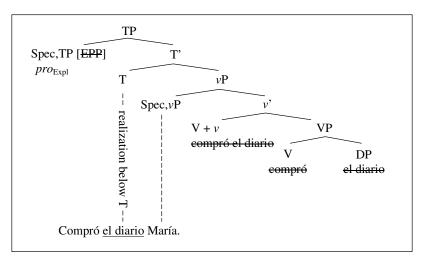


Fig. 4: Derivation of VO[FS] involving the incorporation of the object and the realization below T on PF.

Note that the clause-final position of the focused direct object in  $SViO[_F dO]$  can be accounted for in the same way: Here, the indirect object, base-generated as a complement to

 $<sup>^9</sup>$  "In phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ , only H and its edge are accessible to such operations" (Chomsky 2000: 108).

V, is incorporated into the verb and moves to v along with V. Its phonetic material is then realized on PF below T together with the verbal complex.

Keeping in mind that the derivation sketched in Fig. 4 involves an additional operation, i.e. the incorporation of the object into the verb, rendering it less economic than the derivation of a construction displaying the unmarked word order SVO, it comes as no surprise that speakers tend to avoid this syntactic strategy of focus marking and prefer to realize prosodically marked structures involving non-final nuclear stress instead, i.e. [FS]VO. It is important to emphasize once again that this does not hold for constructions involving the pronominalization of the object: Here, focused subjects are preferably realized in clause-final position, yielding prosodically unmarked structures with IP-final nuclear stress, i.e. Cl+V[FS]. However, it remains unclear how the fact that VO[FS] is largely though not completely disfavored can be accounted for in a formal model of grammar. Similarly, [FS]Cl+V does occur in empirical data, even though speakers generally prefer the opposite order of constituents (see section 3). As a rule of thumb, with greater quantities of non-verbal material that must be realized at a linear position determined by a verb-related category (i.e. the 'verbal' chain C-T-v) in order to obtain a prosodically unmarked structure, speakers tend to use deviations from the canonical word order SV(O) less frequently and instead produce (and accept) prosodically marked structures. Before presenting a formal model of grammar which allows for integrating tendencies of this kind, I briefly summarize a recent optimalitytheoretic approach to focus-induced word order variation in Spanish proposed by Gutiérrez-Bravo (2002, 2006) in the framework of classical OT.

In the same vein as Zubizarreta (1998) in her derivational approach, scholars working within the optimality-theoretic framework highlight the interaction between phonology and syntax in the expression of focus. Gutiérrez-Bravo (2002), for example, accounts for the postverbal position of the subject in *Me regaló la botella de vino* [FMaRÍa] 'It was Mary who gave me the bottle of wine' by assuming that the phonological constraint NSR ('Nuclear Stress Rule'), violated by any structure involving non-final placement of nuclear stress, dominates the two syntactic constraints SUBJ and STAY, with the former arguing against the unoccupied Spec position of TP and the latter being violated by syntactic movement. Fig. 5 represents the relevant tableau adapted from Gutiérrez-Bravo (2002) in a simplified version.

	NSR	SUBJ	Stay
a. [FMaRÍa] me regaló la botella de vino.	*!		*
b. • Me regaló la botella de vino [FMaRÍa].		*	*

Fig. 5: Tableau for Me regaló la botella de vino [FMaRÍa] (following Gutiérrez-Bravo 2002: 51).

The relationship between focus, nuclear stress, and word order is clear: Whenever a constituent occupying a non-final position in the unmarked word order (SVO) is assigned nuclear stress, a prosodically unmarked structure results from movement. Alternatively, as expressed in terms of OT, a construction optimized through such a movement operation is selected during EVAL as the favored candidate, e.g. (b) in Fig. 5. A different ranking of constraints with NSR being dominated by SUBJ and STAY would select (a) [FMaRÍA] me regaló la botella de vino as the optimal candidate. Different output forms therefore presuppose different constraint rankings and thus belong to different grammars, which may in turn correspond to the different registers or varieties of a given language. Accordingly, the nature of classical OT is based predominantly on binary relations in the same way as derivational frameworks: While a given formal feature is either present or absent in the latter, two constraints in classical OT can be either ranked (i.e. B » A or B » A) or non-ranked (as is the case for SUBJ and STAY in Fig. 5). In the former case, the result is one (and only one) output form being selected as the optimal candidate by EVAL; in the latter case, no selection is made on the basis of these two constraints. The cases of gradual judgments and variable output forms occurring in empirical data cannot be accounted for. It is thus essential to integrate the concept of optionality into a formal model of grammar, while restricting it to well-defined domains.

#### 5. ACCOUNTING FOR OPTIONALITY IN A MODEL OF MINIMALIST OT

In the following section I present a model of Minimalist OT aiming to explain cases of optionality as they occur in empirical data. My proposal is based on Boersma/Hayes's (2001) Stochastic OT and combines the flexibility contained therein with the restrictions placed on Minimalist phrase structure building according to Chomsky (2000, 2001).

#### 5.1 VARIATION AND OPTIONALITY IN OT

I have already pointed out that classical OT is just as problematic as derivational accounts when optionality comes into play. Several suggestions have been made during the last decade for dealing with variable output forms, all of them capable of solving the problem only to a certain extent. An early proposal came from Reynolds/Nagy (1994), who assume one or several *floating constraints* that freely act at different positions in an otherwise fixed constraint hierarchy and thus lead to the selection of different candidates from evaluation to evaluation. A hypothetical constraint ranking with a floating constraint F is illustrated in Fig. 6.

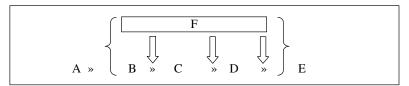


Fig. 6: Constraint ranking with a floating constraint F (Reynolds/Nagy 1994).

The different rankings which can be derived from the hierarchy represented in Fig. 6 are given in the following:

- (11) a.  $A \gg B \gg F \gg C \gg D \gg E$ 
  - b.  $A \gg B \gg C \gg F \gg D \gg E$
  - c.  $A \gg B \gg C \gg D \gg F \gg E$

However, such a model cannot account for the fact that one output form may be more likely to be selected as the optimal candidate than another. Reynolds/Nagy's model thus fails to predict the output distribution of the different forms as they occur in empirical data. The same holds for the model suggested by Anttila (2002), who assumes a stratum of internally unranked constraints within in a larger constraint hierarchy. Accordingly, multiple rankings can be derived from one and the same grammar. Consider the hypothetical example D » {A, B, C} » E, which involves a stratum of three unranked constraints {A, B, C} and two candidates, with candidate 1 violating constraints A and B and candidate 2 violating constraint C. On the basis of the six derivable rankings and the relevant constraint violations, candidate 2 would be expected to be the preferred form in 67% of the cases. Candidate 1, by contrast, is selected as the optimal candidate in only 33% of the cases.

However, the frequency predictions made by Anttila's model are based solely on the arithmetic calculations determined by the number of constraints in a stratum and the relevant constraint violations, and thus are hardly capable of predicting the frequency distributions obtained in the analysis of empirical data. This conceptual flaw becomes even more obvious when a stratum consists of only two constraints: The number of derivable rankings decreases to two possibilities and the relevant frequency prediction is consequently exactly 50% for each candidate.

A conceptually divergent proposal was suggested by Boersma/Hayes (2001), whose model explicitly relies on frequency distributions obtained from analyses of empirical data. The central idea behind their stochastically based model is a so-called continuous ranking scale (CRS), on which each constraint occupies a specific ranking value, located at different distances from one another. At the time of a given evaluation process, the individual ranking values on the CRS become 'blurred' by the standard deviation of 2.0, and the resulting actual ranking values determine the selection points. These in turn condition the position of each constraint in a given tableau. Seen from this angle, repeated evaluations should yield slightly different selection points for the given constraint, whose position on the CRS consequently varies. As a result, a constraint is associated with a range of values rather than fixed point, with the ranges of neighboring constraints overlapping to a greater or lesser extent. The more the value ranges of two adjacent constraints overlap, the higher the probability that the relevant selection points intersect at the time of evaluation and that the actual tableau exhibits the reverse constraint ranking. Learnability is ensured by the so-called Gradual Learning Algorithm (GLA), which is fed with the data and the relevant frequencies and accordingly effects the necessary changes in the ranking values. The variability occurring in empirical data is consequently accounted for by presenting the data in their relative frequencies. Consider the hypothetical example illustrated in Fig. 7, which involves two constraints, B and C, whose ranges of ranking values partially overlap and which are dominated by constraint A. Candidate 1 violates constraint B and is consequently ruled out when the (more common)

ranking A » B » C is derived from the CRS (on the left-hand side of Fig. 7). When, in contrast, the (less common) ranking A » C » B is derived at the time of EVAL, candidate 1 is selected as the optimal form, while candidate 2 entailing a violation of constraint C, is ruled out (on the right in Fig. 7).

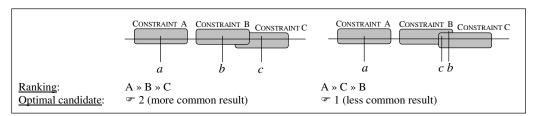


Fig. 7: Derivation of the actual constraint ranking from CRS (Boersma/Hayes 2001).

The following section is devoted to the presentation of the assumed model of grammar based on Boersma/Hayes's (2001) model of overlapping constraints.

#### 5.2 A PROPOSAL FOR A MODEL OF MINIMALIST OT

I assume that all structures are constructed according to Chomsky's (2000, 2001) target/probe approach. Movement of the subject constituent to Spec,TP is interpreted as an operation of core syntax which takes place in order to satisfy the EPP feature located in T. A post-verbal subject, in contrast, remains in its vP-internal base position, whereas EPP requirements are fulfilled by directly merging a phonetically empty expletive pronoun  $pro_{Expl}$  in the canonical subject position. Recall in this context the structure illustrated in (10) [ $_{TP}$  pro $_{Expl}$   $Lo\ compr\acute{o}+v$  T [ $_{vP}$  [ $_{vP}$   $MaR\acute{l}a\ compr\acute{o}+v$  [ $_{VP}\ compr\acute{o}$  pro]]]]. As previously stated in section 4, instances of focus-induced word order variation such as VO[ $_{F}$  S] and SViO[ $_{F}$  dO] are interpreted as a result of PF-operations, entailing the incorporation of the object constituent into the verb and the realization of the relevant phonetic material together with the verbal cluster below T.

The base configuration of a given structure, i.e. the so-called lexical layer vP, serves as input for the generator function GEN (Prince/Smolensky 2004: 54ff), which after merging vP with T and C generates all possible surface sequences that can be derived from the base configuration according to Minimalist assumptions, including operations of both core and PF syntax. The conditions of Minimalist phrase structure building consequently limit the total number of possible derived structures. It is thus ensured that only *possible* structures are generated by GEN and that no impossible configuration can enter the evaluation process EVAL. This assumption constitutes a clear conceptual advantage over classical OT approaches in which potentially *any* structure could be considered for EVAL. All structures

thus obtained are associated with F0 contours, based on the inventory of pitch accents and boundary tones of the language or variety concerned. The result is the entirety of possible structures constituting the set of candidates, some of which are given in the following.

(13)		[TP	T	$[_{vP}$	$[_{ m VP}$	]
	a.	[ <sub>F</sub> MaRÍa]	compró			el diario.
	b.	$pro_{Expl}$	Compró el diario	[ <sub>F</sub> MaRÍa]		
	c.	$pro_{Expl}$	Compró	[FMaría]		el DIArio.
	d.	[FMaría]	compró			el DIArio.
		etc.	-			

In a next step, the structures belonging to the set of possible candidates undergo evaluation by EVAL according to the model sketched in section 5.1 (Fig 7). As a function of possibly overlapping constraints, different output forms can be selected from evaluation to evaluation. The entire model of Minimalist OT that I propose is illustrated in Fig. 8; see Broekhuis (2006: 188) and Samek-Lodovici (2006) for a comparable view.

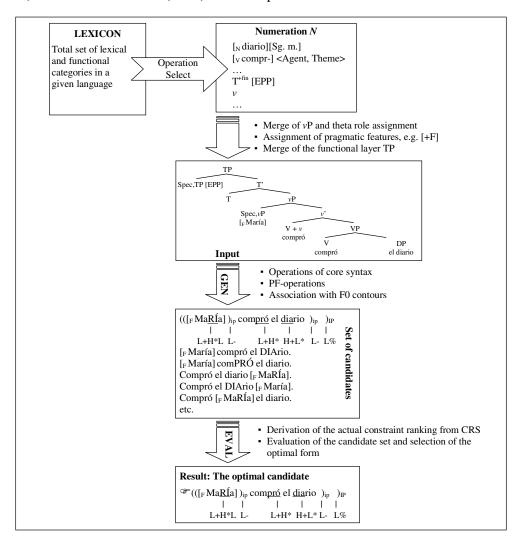


Fig. 8: The assumed model of Minimalist OT.

In the next section, the assumed model is applied to selected cases of focus-induced word order variation in two varieties of Argentinean Spanish.

#### 6. SYNTACTIC AND PROSODIC FOCUS MARKING IN ARGENTINEAN SPANISH

The goal of this section is to demonstrate how the model proposed in section (5) applies to selected instances of focus-induced word order variation in two varieties of Argentinean Spanish. After describing the methodology and data in section 6.1, I will first consider focused subjects (section 6.2), second focused objects (section 6.3), and finally focused direct objects in double object constructions (section 6.4).

#### 6.1 METHODOLOGY AND DATA

The data analyzed in the following were collected within the scope of a larger set of experiments conducted with two groups of native speakers of two varieties of Argentinean Spanish: 25 speakers of the urban vernacular of Buenos Aires (henceforth BUE, also called *Porteño* Spanish), and 25 subjects from Neuquén (NQN), a Patagonian province whose dialect clearly differs from *Porteño* in certain respects, most of them concerning the tonal shape of the variety, but is at the same time strongly influenced by the dialect spoken in the capital (see Feldhausen et al. 2010, Gabriel et al. 2010, 2011 concerning intonation).¹¹⁰ The semi-spontaneous data analyzed in the following stem from an elicited production task aiming to depict the different prosodic and syntactic strategies speakers make use of in the expression of focus. The participants were presented with two short picture stories as PowerPoint™ files and were subsequently asked various questions targeting different information-structural readings. All speakers where told to avoid answers consisting of only one constituent, but to otherwise feel free regarding the phrasing of their answers. The data were transcribed and systematized according to the syntactic strategies used by the speakers for the expression of the relevant information structure required by the given context. Some examples of the visual

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<sup>&</sup>lt;sup>10</sup> The data collection was carried out as part of the research project H9 "The Intonation of Spanish in Argentina", which forms part of the Collaborative Research Center 538 "Multilingualism", hosted by the University of Hamburg, Germany and funded by the German Research Foundation (DFG). The experimental data consist of recordings of read and spontaneous speech as well as elicitations of semi-spontaneous material and perception tests. I would like to express my gratitude to my research assistants, Ingo Feldhausen and Andrea Pešková, for their assistance in the data collection in Buenos Aires and Neuquén (Patagonia), as well as to my student assistant, Jasmina Živković, whose support in analyzing the data and quantifying the results was essential. It goes without saying that all errors remain my own.

stimuli are reproduced in Appendix 2; for detailed results consider the tables reproduced in Appendix 3.

#### **6.2 FOCUSED SUBJECTS**

The data from the two Argentinean varieties largely confirm the findings in Gabriel (2007). Neither BUE nor NQN Spanish differ from other Spanish dialects concerning the strong tendency towards the clause-initial placement of focused subjects in constructions with full nominal objects. In the BUE data, a total of 75 constructions uttered by the 25 speakers in three contexts eliciting a neutrally focused subject (P2A03BUE, P2A13BUE, P2A22BUE, see Appendix 3), 42 sentences were non-complex declaratives with a full nominal object. The subject was placed clause-finally in only two of them (14a, b), while 40 sentences display the canonical word order and IP-initial nuclear stress (14c).

- (14) a. Who buys the newspaper at the kiosk? (P2A03BUE)

  En el kiosco, compra el diario [FMaRÍa]. 11
  - b. Who kidnaps Tarzan? (P2A22BUE)
     Secuestra a Tarzán [F BlancaNIEves].
  - c. Who gives the newspaper to his/her brother? (P2A13BUE) [F MaRÍa] le está dando el diario a su hermano.

Within the group of non-complex declaratives, the percentages amount to 95% for *in situ* focus, i.e.  $[{}_FS]VO$ , and 5% for focus-induced word order variation, i.e.  $VO[{}_FS]$ . All remaining utterances represent other syntactic strategies such as rephrasing and clefting (see Appendix 3 for examples). However, the BUE data differ from the cross-dialectal data analyzed in Gabriel (2007) insofar as there is at least some evidence of  $VO[{}_FS]$ . In the NQN data, by contrast, not a single occurrence of  $VO[{}_FS]$  was attested. When the object is realized as a clitic, however, the situation is different: The BUE data contain 15 utterances of this type, 11 of which display the sequence with the focused subject in clause-final position (73%); the percentage for NQN is somewhat lower, with 8 out of 16 utterances displaying  $C1+V[{}_FS]$ , i.e. 50%.

Looking at contrastively focused subjects, it can now be stated that speakers are strongly inclined to produce cleft sentences, including pseudo-clefts of the type *María es la que compra el diario* (P2A06BUE) as well as presentational constructions such as *No, es* 

<sup>&</sup>lt;sup>11</sup> Peripheral material such as the left-dislocated PP *en el kiosco* is not considered for the present purpose. The same holds for the rare instances of right-dislocations that occur in the data.

María (P2A06BUE), which I interpret as a truncated cleft construction (No, es María la que ...). From the 100 total sentences uttered by the speakers in contexts eliciting a contrastively focused subject (P2A06, P2A15, P2A24, P2A29), 81% of the BUE data are clefts, the value for NQN being somewhat lower (69%). As for the use of non-complex declaratives (BUE: 18%, NQN: 29%), speakers make use of both the preverbal and the postverbal subject position, the percentages for the latter being somewhat lower in both varieties (BUE: 3/18, i.e. 16.7% of the cases; NQN: 2/29, i.e. 7% of the cases). In the few remaining cases (BUE: 1%, NQN: 2%), the speakers made use of other syntactic strategies and rephrased their answers, as in Te dije que era María (P2A06BUE) or Es mentira. Se llama María (P2A15NQN). To sum up, speakers of both varieties strongly prefer cleft sentences for the expression of contrastive focus. However, this strategy is not limited to contrastive readings, given that it is also used in contexts of neutral focus. Concerning the pre- or postverbal position of the focused subject, hardly any difference was observed between contrastive and neutral focus, with both [FS]VO and VO[FS] being produced in all contexts. In particular, the data confirm Gabriel's (2007) finding that neutrally focused subjects can occupy the Spec position of TP (as opposed to Zubizarreta 1998 and others, see section 3, above).

In order to account for the position of the focused subject observed in the data presented so far, the following constraints are required:

- (15) a. STRESSFOC (SF): [FXP] bears nuclear stress.
  - b. ALIGNFOCRIGHT (AFR): The right edge of [FXP] is aligned with the right edge of an intonational phrase (IP).
  - c. FULLINTERPRETATION (FI): "Parse lexical conceptual structure"
     (Grimshaw/Samek-Lodovici 1998; violated by expletives, for example).
  - d. STAY-PF: Phonetic material that does not belong to the verbal chain C-T- $\nu$  is never realized below C, T, and  $\nu$ .

The markedness constraint ALIGNFOCRIGHT requires that focused material be preceded by presupposed material in the linear sequence, and thus forces the focus domain to be right-aligned with an intonational phrase (IP). Under the assumption that AFR occupies a position higher on the CRS than the faithfulness constraint FULLINTERPRETATION (FI), militating against the use of expletives, and that the two constraints overlap to a certain extent, it can be correctly predicted that the ordering  $Cl+V[_FS]$  is used more frequently by the speakers than  $[_FS]Cl+V$  in constructions with a clitic object. The fact that the preverbal position of the focused subject is strongly preferred in constructions with a full nominal object  $([_FS]VO)$  can be accounted for by assuming that both AFR and FI are dominated by STAY-PF. In order to

correctly predict that  $VO[_FS]$  is also produced by the speakers, though to a lesser extent than the competing structure  $[_FS]VO$ , we have to assume that STAY-PF and AFR overlap slightly, indicated by the curly bracket in the tableau given in Fig. 9. Note that the incorporation of non-verbal material into the verb and its realization at the linear position determined by T entails one violation of STAY-PF per syllable: The more material that did not originally belong to the verbal chain is realized below a verbal position, the less likely the structure is to be produced by the speakers.

			overlapping constraints			
			SF STAY-PF AFR			FI
a.	<b>P</b>	[FMaRÍa] compró el diario.			*(!)	
b.	<b>P</b>	pro <sub>Expl</sub> Compró el diario [F MaRÍa].		***(!)		*
c.		[FMaría] compró el DIArio.	*!			

**Fig. 9**: Tableau for  $[_FS]VO$  and  $VO[_FS]$ .

Note that candidate (c) is ruled out because of its fatal violation of the undominated constraint SF, which requires the assignment of nuclear stress to the focused constituent. The assumed CRS with the relevant overlapping constraints is sketched in Fig. 10, below:

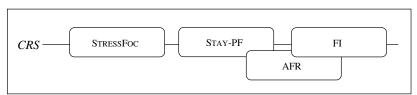


Fig. 10: CRS with two pairs of overlapping constraints (STAY-PF/AFR, AFR/FI).

It is worth pointing out that the required computations for determining the exact ranking values of the constraints on the CRS can be made with the computer program Praat (www.praat.org), into which the Gradual Learning Algorithm (GLA) is integrated. The same holds for the frequency predictions obtained for the occurrences of the relevant surface forms through the simulation of stochastic evaluations. Given the fact that both the exact ranking values (position of a constraint on the CRS with respect to the ranking values of other constraints) and the obtained frequency predictions may vary slightly from evaluation to evaluation, I abstain from giving exact numbers and confine myself to the illustration of the relative positions on the scale.

#### **6.3 FOCUSED OBJECTS**

In comparison to the focused subject that either appears clause-finally, thus yielding a syntactically marked structure, or is highlighted *in situ* via assignment of nuclear stress, focusing an object seems to be unproblematic: Given the fact that it appears canonically in the rightmost position of a clause, where nuclear stress is assigned in the unmarked case, there is simply no need to move it to a different position. Focused objects thus generally remain in their base position, where they receive nuclear (and thus) focal stress. There is, however, an alternative solution which needs to be accounted for, namely the fronting of a focused object constituent as in (7b) [Fc Un DIArio] le dio María a su hermano. It has already been stated that this construction is not restricted to contrastive focus, as speakers of various dialects also judge this construction as being acceptable in contexts of neutral focalization (Gabriel 2007). Speakers of both Argentinean varieties not only accept but also produce constructions with fronted objects in contexts of neutral as well as contrastive focalization:

- (16) a. 'Whom does Snow White kidnap?' (P2A20BUE)

  [FA TarZÁN] está secuestrando.
  - [FA TarZÁN] secuestra Blancanieves.
  - b. 'What does Mary buy?' (P2A02BUE)[F Un DIArio] está comprando María.
  - c. 'Mary gives a magazine to her brother, doesn't she?' (P2A17NQN)

    No. [Fc Un DIArio] le da.

As previously mentioned in section 4, Zubizarreta (1998) postulates that fronted object DPs are located in the Spec position of TP. This view can be expressed in optimality-theoretic terms by assuming a series of constraints excluding certain thematic roles or information-structural functions from specific structural positions. Based largely on work by Aissen (1999), Gutiérrez-Bravo (2002, 2006) proposed a scale of constraints to account for the fact that the subject position is most likely to be occupied by a constituent bearing the thematic role <Agent> (*María*<sup>Agent</sup> *compra el diario*). Should no <Agent> be available, an <Experiencer> is more likely to occupy the Spec position of TP than a <Theme> (*A María*<sup>Experiencer</sup> *le encanta la ópera*<sup>Theme</sup>).

- (17) \*Spec,TP/THEME » \*Spec,TP/EXPERIENCER » \*Spec,TP/AGENT

  Adapting this perspective for information-structural functions, Focus fronting structures can be explained by a constraint requiring focused constituents to occupy the Spec position of TP.
- (18)  $\operatorname{Spec}, \operatorname{TP/[_FXP]}$

Given that this constraint overlaps slightly with STAY-PF and AFR on the CRS (see Fig. 10) and that the selection point for Spec, $TP/[_FXP]$  can thus be higher at the time of evaluation, the grammar allows for the optional use of  $[_F\mathbf{O}]VS$  instead of  $SV[_F\mathbf{O}]$ .

In order to also capture the fact that speakers have the option of marking the left edge of the focus domain in constructions such as  $SV[_F \mathbf{O}]$  by means of intermediate phrasing (section 3, Fig. 2), two additional constraints are needed.

- (19) a. MATCHFOCUS (MF): The edges of the focus domain are aligned with the edges of a prosodic unit  $\geq$  ip.
  - b. AVOID(ip): No intermediate phrasing.

While MF requires that the edges of the focus domain match with the boarders of a prosodic constituent greater or equal to the intermediate phrase (ip), thus enhancing the perceptibility of the information structure, AVOID(ip) militates against the prosodic effort that the insertion of an additional intermediate phrasal boundary (H-) necessarily entails. Given the assumption that these two constraints also partially overlap, both prosodic realizations with and without intermediate phrasal boundaries at the left edge of the focus domain can be selected as the optimal form.

#### 6.4 FOCUSED DIRECT OBJECTS IN DOUBLE OBJECT CONSTRUCTIONS

I finally turn to focused direct objects in double object constructions and exemplarily refer to the two contexts eliciting structures with neutrally or contrastively focused direct objects. It turns out that some speakers of both varieties prefer the clause-final position of [FdO], while others favor the focalization of the direct object *in situ*. Consider the following examples and relative frequencies.

(20) What does Mary give to her brother?

(P2A16)

a. María le da [Fun DIArio] a su hermano.

BUE: 11/15 (73%), NQN: 10/12 (83%)

b. María le da a su hermano [Fun DIArio].

BUE: 4/15 (27%), NQN: 2/12 (17%)

(21) Mary gives a magazine to her brother, doesn't she?

(P2A17)

a. (No.) María le da [Fc un DIArio] a su hermano.

BUE: 8/12 (67%), NQN: 9/13 (69%)

b. (No.) María le da a su hermano [Fc un DIArio].

BUE: 4/12 (33%), NQN: 4/13 (21%)

The fact that both of the word orders, i.e.  $[_F dO]$ iO and  $iO[_F dO]$ , optionally occur in the data, both with neutral and contrastive interpretations, is already explained by assuming a CRS with overlapping properties, as demonstrated in Fig. 10. The question now arises as to how to explain the fact that *p-movement* is more acceptable with a focused direct object than with a focused subject. As already shown in section 6.2,  $VO[_FS]$  does occur, but not as frequently as focused direct objects are preceded by presupposed indirect objects, i.e.  $SViO[_F dO]$ , where the percentages amount to 27% and 33% for BUE and to 17% and 21% for NQN. A possible solution might be observed in the fact that  $VO[_FS]$  entails a violation of FI as well as a violation of STAY-PF, whereas the latter constraint is respected by  $SViO[_F dO]$ . Assuming now an additional overlap between FI and STAY-PF and thus the possibility for FI to dominate STAY-PF when a constraint ranking is derived from CRS at the time of EVAL, the linear ordering  $SViO[_F dO]$  is less problematic than  $VO[_FS]$ , the latter entailing a violation of FI. The relevant CRS is depicted in Fig. 11.

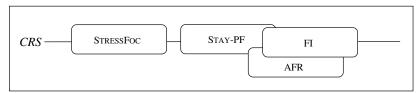


Fig. 11: CRS with multiply overlapping constraints (STAY-PF/AFR/FI).

Regarding the application of *p-movement*, which is interpreted here as the incorporation of a full constituent into the verbal head and the subsequent realization of the relevant material together with the verbal complex below T, it can be stated that both Argentinean dialects allow for deviations from the canonical word order. As is the case for the focused subject discussed in section 6.2, the variety spoken in Neuquén (NQN) seems to view this syntactic strategy of focus marking reluctantly, favoring prosodic marking via assignment of nuclear stress *in situ*.

#### 7. CONCLUDING REMARKS

The aim of the present paper was to demonstrate that both derivational and classical OT approaches are capable of accounting for instances of focus-induced word order variation, but that these run into problems as soon as optionality comes into play. The data from two varieties of Argentinean Spanish support the view that a certain degree of variability restricted to well-defined linguistic areas forms an integral component of the grammar of natural languages and thus must be incorporated into a formal model of grammar. Combining the

insights of Minimalist phrase structure building with the model of Stochastic OT seems to constitute a promising approach in this respect.

#### **APPENDIX 1: LIST OF ABBREVIATIONS USED**

AM autosegmental-metrical

Cl clitic

CRS Continuous Ranking Scale (stochastic OT)

dO direct object

EPP Extended Projection Principle

EVAL Evaluation process (OT)

F focus

Fc contrastive focus

Foc Focus (functional category)

FPR Focus Prominence Rule

GEN generator function (OT)

GLA Gradual Learning Algorithm (stochastic OT)

H- high intermediate phrasal boundary tone

H\* high pitch accent

iO indirect object

ip intermediate phrase

IP intontational phrase

L- low intermediate phrasal boundary tone

L% low boundary tone

L\* low pitch accent

O object

PF Phonetic Form

PIC Phase Impenetrability Condition

S subject

T Tense (functional category)

Top Topic (functional category)

*v* little *v* (causative head)

V verb

## **APPENDIX 2: VISUAL STIMULI**

# Picture story 1





# Picture story 2





Context questions (examples)<sup>12</sup>
Target: [<sub>F</sub>S]
[<sub>F</sub>S]VO, VO[<sub>F</sub>S], Cl+V[<sub>F</sub>S] etc.

Target:  $[_F dO]$ SV $[_F dO]$ iO, SViO $[_F dO]$ ,  $[_F dO]$ VSiO etc.

 $<sup>^{12}</sup>$  All context questions used for eliciting structures with focused subjects and objects are given in appendix 3 below.





#### **APPENDIX 3: RESULTS**

The following tables summarize the results and give examples of the structures produced by the speakers from Buenos Aires (BUE) and Neuquén (NQN) in the elicited production task. The different syntactic strategies are listed in the leftmost column: (1) non-complex declaratives, i.e. word order variation within the core sentence or focus *in situ*, (2) clefting, and (3) other strategies such as passive constructions or complete rephrasing of the answer. A selection of examples from the corpus is presented in column two. The various word order sequences displayed by the examples belonging to group (1) are indicated in column three. From the total of 13 contexts considered here, six involve a focused direct object ([F dO]) and seven a focused subject ([F S]), with both neutral and contrastive interpretations.

## **Results BUE**

¿Quién compra el diario en el kiosco? 'Who buys the newspaper at the kiosk?' Context:

Target:  $[_{F}S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	María compra / está comprando	[FS] V dO PP	11	44
	el diario en el kiosco. /			
	María compra el diario.	[FS] V dO		
	María lo hace.	[FS] Cl+V	1	4
	En este kiosco, el diario, ahora	(PP, dO) Cl+V[FS]	4	16
	lo está comprando María. /			
	El diario, lo compra María.			
	En el kiosco, compra el diario	PP, V dO [ <sub>F</sub> S]	1	4
	María.			
Clefting	María es (la persona) que/quien		7	28
	compra / está comprando el			
	diario en el kiosco.			
	La que / Quien compra / está			
	comprando el diario en el kiosco			
	es <b>María</b> .			
Others (passive voice)	El diario fue comprado por		1	4
	María.			

Context: Julia compra el diario en el kiosco ¿verdad?

'Julia buys the newspaper at the kiosk, doesn't she?'

Target:  $[F_cS]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	No. <b>María</b> está comprando el diario.	[Fc S] V dO	1	4
	No. Lo compra María.	Cl+V [Fc S]	1	4
Clefting	(No.) Es <b>María</b> la que compra / va a comprar el diario. / (No.) La que compra el diario es <b>María</b> . / No, es <b>María</b> .		22	88
Others (rephrasing)	Te dije que era <b>María</b> .		1	4

Context:

¿Quién le da el diario a su hermano? 'Who gives the newspaper to his/her brother?'

Target:  $[_{F}S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	María le da / le está dando el	[FS] V dO iO	18	72
	diario a su hermano. /			
	María le da el diario.	[ <sub>F</sub> S] V dO		
	Lo hace María. / El diario, se lo	(dO,) Cl+V [FS]	3	12
	da <b>María</b> .			
Clefting	Es María quien le da el diario a		4	16
	su hermano. /			
	María es la persona / es quien le			
	da el diario / le está dando el			
	diario a su hermano.			
Others			0	0

(P2A03BUE)

(P2A06BUE)

(P2A13BUE)

<u>Context</u>: Julia le da el diario a su hermano ¿verdad? (P2A15BUE)

'Julia gives the newspaper to her brother, doesn't she?'

 $\underline{\text{Target}}$ :  $[_{\text{Fc}}S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) <b>María</b> le da / le está dando el diario a su hermano.	[Fe S] V dO iO	6	24
	El diario, se lo da <b>María</b> a su hermano.	(dO,) Cl+V [Fc S] iO	1	4
	No. Se lo da <b>María</b> .	Cl+V [Fc S]	1	4
Clefting	(No.) Es María quien le da el diario a su hermano. / (No.) María es la persona / es quien le da el diario / le está dando el diario a su hermano. / La que le da el diario no es Julia, es María. / No. Es María.		17	68
Others			0	0

<u>Context</u>: ¿Quién secuestra a Tarzán? (P2A22BUE)

'Who kidnaps Tarzan?'

 $\underline{\text{Target}}$ :  $[_{F}S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	Blancanieves secuestra / está secuestrando a Tarzán.	[ <sub>F</sub> S] V dO	11	44
	<b>Blancanieves</b> lo secuestra / está secuestrando.	[ <sub>F</sub> <b>S</b> ] Cl+V	3	12
	(A Tarzán,) lo secuestra <b>Blancanieves</b> .	(dO,) Cl+V [FS]	4	16
	Secuestra a Tarzán Blancanieves.	V dO [ <sub>F</sub> S]	1	4
Clefting	Es Blancanieves quien secuestra a Tarzán. / Quien / La que secuestra a Tarzán es Blancanieves. / La que lo secuestra es Blancanieves.		6	24
Others			0	0

<u>Context</u>: La Bella Durmiente secuestra a Tarzán ¿verdad? (P2A24BUE)

'Sleeping Beauty kidnaps Tarzan, doesn't she?'

Target: [Fc S]

Strategy	Examples	Word order	n	%
Non-complex declarative			0	0
Clefting	(No.) Es <b>Blancanieves</b> quien secuestra a Tarzán. / (No.) La que secuestra a Tarzán es <b>Blancanieves</b> . / No es la Bella Durmiente la que secuestra a Tarzán, sino que es <b>Blancanieves</b> .		25	100
Others			0	0

<u>Context</u>: La Bella Durmiente le entrega a Tarzán a los siete enanitos ¿verdad? (P2A29BUE)

'Sleeping Beauty hands over Tarzan to the seven dwarfs, doesn't she?'

Target: [Fc S]

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) Blancanieves les entrega a	[Fc S] Cl+V (dO) iO	8	32
	Tarzán a los enanitos. /			

	(No.) <b>Blancanieves</b> se lo entrega a los siete enanitos.		
Clefting	(No.) Es <b>Blancanieves</b> la que les entrega a Tarzán a los enanitos. / (No.) La que les entrega a Tarzán es <b>Blancanieves</b> . / No es la Bella Durmiente quien les entrega a Tarzán a los enanitos, sino <b>Blancanieves</b> .	17	68
Others		0	0

¿Qué compra María en el kiosco? 'What does Mary buy at the kiosk?' Context:

(P2A02BUE)

Target:  $[_F dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	María compra / está comprando el diario. /	S V [F <b>dO</b> ]	10	40
	En el kiosco, María compra el diario.	PP, S V [F <b>dO</b> ]		
	María compra <b>el/un diario</b> en el kiosco.	S V [F <b>dO</b> ] PP	6	24
	María compra en el kiosco <b>el/un</b> diario.	S V PP [ <sub>F</sub> dO]	6	24
	Un diario está comprando María.	[F <b>dO</b> ] V S	1	4
Clefting	María en el kiosco lo que está comprando es <b>el diario</b> . / Lo que está comprando María es <b>el</b> <b>diario</b> .		2	8
Others			0	0

Context: María compra una revista de crucigramas en el kiosco ¿verdad? (P2A04BUE)

'Mary buys a puzzle magazine at the kiosk, doesn't she?'

Target:  $[_{Fc} dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) (María) compra / está comprando <b>el/un diario</b> .	S V [Fc dO]	10	40
	(No.) María compra <b>el/un diario</b> en el kiosco.	S V [Fc dO] PP	10	40
	María compra en el kiosco <b>el/un</b> diario.	S V PP [Fc dO]	1	4
Clefting	(No, mentira.) Lo que compra María en el kiosco es <b>el diario</b> . / Lo que está comprando es <b>un</b> <b>diario</b> .		3	12
Others (rephrasing)	No. Va al kiosco a comprar <b>un diario</b> .		1	4

Context:

¿Qué le da María a su hermano? 'What does Mary give to her brother?'

 $[_F dO]$ Target:

Strategy	Examples	Word order	n	%
Non-complex declarative	(María) le da / le está dando	S Cl+V [F dO] iO	11	44
	el/un diario a su hermano			

(P2A16BUE)

	(María) le da / le está dando el/un diario.	S Cl+V [F dO]	9	36
	María, a su hermano, le da <b>el/un</b> diario.	S, iO, Cl+V [F <b>dO</b> ]		
	(María) / Ella le da a su hermano el/un diario.	S Cl+V iO [F dO]	4	16
Clefting			0	0
Others (rephrasing)	Ella le entrega <b>el diario</b> que compró.	S Cl+V [F dO CP]	1	4

Context: María le da una revista a su hermano ¿verdad? (P2A17BUE)

'Mary gives a magazine to her brother, doesn't she?'

Target:  $[_{Fc} dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No, mentira.) (María) le da / le está dando / le entrega / <b>el/un</b> <b>diario</b> a su hermano	S Cl+V [Fc dO] iO	8	32
	(No.) (María) le da / le está dando <b>el/un diario</b> . María, a su hermano, le da <b>el/un</b> <b>diario</b> .	S Cl+V [Fc <b>dO</b> ] S, iO, Cl+V [Fc <b>dO</b> ]	10	40
	(No.) (María) le da a su hermano el/un diario.	S Cl+V iO [Fc dO]	4	16
Clefting	No. Lo que le entrega es un diario. / Es un diario lo que le da a su hermano. / En este caso, lo que le da María a su hermano es el diario, no una revista.		3	12
Others			0	0

 $\cite{A qui\'en secuestra Blancanieves?}$ Context:

(P2A20BUE)

'Whom does Snow White kidnap?'

Target:  $[_F dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	Ella / Blancanieves (lo) secuestra / está secuestrando a Tarzán.	S (Cl+)V [F dO]	22	88
	A Tarzán está secuestrando. / A Tarzán secuestra Blancanieves.	[F <b>dO</b> ] V(S)	2	8
Clefting	Al que secuestra ahora Blancanieves es a <b>Tarzán</b> .		1	4
Others			0	0

Context: Blancanieves secuestra a Mickey Mouse ¿verdad? (P2A21BUE)

'Snow White is kidnapping Mickey Mouse, isn't she?'

Target:  $[_{Fc} dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) (Ella) / (Blancanieves) (lo) secuestra / está secuestrando a Tarzán.	(S) (Cl+)V [ <sub>F</sub> <b>dO</b> ]	24	96
Clefting	(No.) Es a <b>Tarzán</b> a quien secuestra Blancanieves.		1	4
Others			0	0

# RESULTS NQN

Context:

(P2A03NQN)

¿Quién compra el diario en el kiosco? 'Who buys the newspaper at the kiosk?'

Target:  $[_{\rm F}S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	María compra / está comprando el diario en el kiosco. / para su hermano. /	[FS] V dO PP	12	48
	María compra el diario.	[ <sub>F</sub> S] V dO		
	María lo hace. / María lo está comprando.	[FS] Cl+V	4	16
	Lo compra María.	Cl+V[ <sub>F</sub> S]	1	4
Clefting	María es (la persona) que/quien compra / está comprando el diario en el kiosco. / La que / Quien compra / está comprando el diario en el kiosco es María. / Es María quien compra el diario en el kisoco.		8	32
Others			0	0

Context: Julia compra el diario en el kiosco ¿verdad? (P2A06NQN)

'Julia buys the newspaper at the kiosk, doesn't she?'

Target:  $[F_cS]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	No. Lo compra <b>María</b> , el diario.	Cl+V[Fc S], dO	1	4
Clefting	(No.) Es María la que compra / va a comprar el diario. / En realidad, María es la que / quien compra el diario. / (No.) La que compra el diario es María. / No, en realidad es María.		24	96
Others				

Context:

(P2A13NQN)

¿Quién le da el diario a su hermano? 'Who gives the newspaper to his/her brother?'

Target:  $[_FS]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	María le da / le está dando / le entrega el diario a su hermano.	[FS] V dO iO	19	76
	María se lo da.	[FS] Cl+V	1	4
	Se lo da <b>María</b> . / El diario, se lo da <b>María</b> . / El diario, a su hermano, se lo da <b>María</b> .	(dO, iO,) Cl+V [ <sub>F</sub> S]	3	12
Clefting	María es la persona / es la que le da el diario / le está dando el diario a su hermano.		2	8
Others			0	0

Context: Julia le da el diario a su hermano ¿verdad? (P2A15NQN)

'Julia gives the newspaper to her brother, doesn't she?'

Target:  $[F_c S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) <b>María</b> le da / le está dando el diario a su hermano.	[Fc S] V dO iO	16	64

	(No.) <b>María</b> se lo da.	[Fc S] Cl+V	1	4
	No. Se lo da María.	Cl+V [Fc S]	1	4
Clefting	(No.) Es <b>María</b> quien / la que le da el diario a su hermano. /		5	20
Others (rephrasing)	No. Su nombre es <b>María</b> . / Es mentira. Se llama <b>María</b> .		2	8

¿Quién secuestra a Tarzán? 'Who kidnaps Tarzan?' Context:

(P2A22NQN)

 $[_FS]$ Target:

Strategy	Examples	Word order	n	%
Non-complex declarative	Blancanieves secuestra / está secuestrando a Tarzán.	[FS] V dO	14	56
	Blancanieves lo secuestra.	[ <sub>F</sub> S] Cl+V	3	12
	(A Tarzán,) lo secuestra <b>Blancanieves</b> .	(iO,) Cl+V [ <sub>F</sub> S]	4	16
Clefting	Blancanieves es la que secuestra a Tarzán. / Blancanieves es la que lo secuestra. / Es Blancanieves quien secuestra a Tarzán.		4	16
Others			0	0

La Bella Durmiente secuestra a Tarzán ¿verdad? Context:

(P2A24NQN)

'Sleeping Beauty kidnaps Tarzan, doesn't she?'

Target:  $[F_cS]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) <b>Blancanieves</b> secuestra a Tarzán.	[Fc S] V dO	1	4
Clefting	(No.) Es Blancanieves quien / la que secuestra a Tarzán. / (En realidad.) la que secuestra a Tarzán es Blancanieves. / No es la Bella Durmiente la que secuestra a Tarzán, sino que es Blancanieves. / No, es Blancanieves.		24	96
Others			0	0

La Bella Durmiente le entrega a Tarzán a los siete enanitos ¿verdad? Context:

(P2A29NQN)

'Sleeping Beauty hands over Tarzan to the seven dwarfs, doesn't she?'

Target:  $[F_c S]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) <b>Blancanieves</b> les entrega a Tarzán a los enanitos. / (No.) <b>Blancanieves</b> se lo entrega a los siete enanitos.	[Fc S] Cl+V (dO) iO	9	36
Clefting	(No.) Es <b>Blancanieves</b> la que les entrega a Tarzán a los enanitos. / (No.) La que les entrega a Tarzán es <b>Blancanieves</b> . / No es la Bella Durmiente quien entrega, sino <b>Blancanieves</b> .		16	64
Others			0	0

¿Qué compra María en el kiosco? Context: 'What does Mary buy at the kiosk?'

(P2A02NQN)

Target:  $[_F dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(María) compra / está	$SV[_F dO]$	10	40

	comprando <b>el/un diario</b> . / En el kiosco, María compra <b>el</b> <b>diario</b> .	PP, S V [F dO]		
	María compra <b>el/un diario</b> en el kiosco / para su hermano.	S V [ <sub>F</sub> <b>dO</b> ] PP	13	52
	María compra en el kiosco <b>el/un diario</b> .	S V PP [F dO]	1	4
	Un diario compra María.	[FdO] V S	1	4
Clefting			0	0
Others			0	0

Context: María compra una revista de crucigramas en el kiosco ¿verdad? (P2A04NQN)

'Mary buys a puzzle magazine at the kiosk, doesn't she?'

Target:  $[_{Fc}dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) (María) compra / está comprando el/un diario.	S V [Fc dO]	8	32
	(No.) María compra <b>el/un diario</b> en el kiosco.	S V [Fc dO] PP	15	60
Clefting	(No.) Lo que compra María en el kiosco es <b>el diario</b> . / Lo que está comprando es <b>un diario</b> .		2	8
Others			0	0

Context:

(P2A16NQN)

¿Qué le da María a su hermano? 'What does Mary give to her brother?'

Target:  $[_F dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(María) le da / le está dando	S Cl+V [F dO] iO	10	40
	el/un diario a su hermano			
	(María) le da / le está dando	(S) Cl+V [F <b>dO</b> ]	10	40
	el/un diario.			
	María, a su hermano, le da el/un	S, iO, Cl+V [F <b>dO</b> ]		
	diario.			
	(María) le da a su hermano el/un	(S) Cl+V iO [F <b>dO</b> ]	2	8
	diario.			
	El diario le da / le está dando	[FdO] Cl+V S iO	2	8
	María a su hermano.			
Clefting			0	0
Others (rephrasing)	María le da a su hermano un	S Cl+V iO [F dO CP]	1	4
	periódico que compró en el			
	kiosco.			

Context: María le da una revista a su hermano ¿verdad?

'Mary gives a magazine to her brother, doesn't she?'

[Fc dO] Target:

(P2A17NQN)

Strategy	Examples	Word order	n	%
Non-complex declarative	(En realidad,) (María) le da / le está dando / le entrega / <b>el/un</b> <b>diario</b> a su hermano	S Cl+V [Fc dO] iO	9	36
	(No.) (María) le da / le está dando <b>el/un diario</b> .	S Cl+V [Fc dO]	10	40
	(No.) (María) le da a su hermano el/un diario.	S Cl+V iO [Fc dO]	4	16
	No. <b>Un diario</b> le da.	[Fc dO] Cl+V	1	4
Clefting	No. Lo que le da María es <b>el diario</b> .		1	4
Others			0	0

¿A quién secuestra Blancanieves? Context:

(P2A20NQN) 'Whom does Snow White kidnap?'

Target: [FdO]

Strategy	Examples	Word order	n	%
Non-complex declarative	Ella / Blancanieves secuestra / está secuestrando a Tarzán. /	S V [F dO]	24	96
	Lo secuestra a Tarzán. / Secuestra a Tarzán, Blancanieves.	Cl+V [F <b>dO</b> ] V [F <b>dO</b> ], S		
	A Tarzán secuestra.	[F <b>dO</b> ] V	1	4
Clefting			0	0
Others			0	0

Context: Blancanieves secuestra a Mickey Mouse ¿verdad?

'Snow White is kidnapping Mickey Mouse, isn't she?'

Target:  $[_{Fc} dO]$ 

Strategy	Examples	Word order	n	%
Non-complex declarative	(No.) (Blancanieves) secuestra / está secuestrando a Tarzán.	(S) V [F <b>dO</b> ]	22	88
	A Tarzán secuestra.	[FdO] V	1	4
Clefting	(No.) Es <b>a Tarzán</b> a quien secuestra Blancanieves. / El que secuestra es <b>a Tarzán</b> .		2	8
Others			0	0

#### REFERENCES

- 1. AGUILAR, Lourdes; DE LA MOTA, Carme; PRIETO, Pilar Prieto. Sp\_ToBI. Training materials. 2009. [http://prosodia.upf.edu/sp\_tobi/en/, accessed July 19, 2010].
- 2. AISSEN, Judith. Markedness and Subject Choice in Optimality Theory. Natural Language and Linguistic Theory 17, 1999.
- 3. ANTTILA, Arto. Variation and Phonological Theory." In: CHAMBERS, Jack K.; TRUDGILL, Peter; SCHILLING-ESTES, Nathalie. The Handbook of Language Variation and Change. Malden, Mass.: Blackwell, 2002.

(P2A21NQN)

- 4. BAKER, Mark. Incorporation. A Theory of Grammatical Function Changing. Chicago: University of Chicago Press, 1988.
- 5. BAKER, Mark. The Polysynthesis Parameter. Oxford: Oxford University Press, 1996.
- BARBOSA, Pilar. On Inversion in Wh-Questions in Romance." In HULK, Aafke C. J.;
   POLLOCK, Jean-Yves. Subject Inversion and the Theory of Universal Grammar. Oxford:
   Oxford University Press, 2001.
- 7. BOERSMA, Paul; HAYES, Bruce. Empirical Tests of the Gradual Learning Algorithm. Linguistic Inquiry 32, 2001.
- 8. BROEKHUIS, Hans. Derivations (MP) and Evaluations (OT). *Linguistics in Potsdam* 25, 2006.
- 9. CASIELLES-SUÁREZ, Eugenia. *The Syntax-Information Structure Interface. Evidence from Spanish and English.* London: Routledge, 2004.
- 10. CHOMSKY, Noam. Deep structure, surface structure and semantic interpretation. In: STEINBERG, Danny D; JAKUBOVITS, Leon A. Semantics: An interdisciplinary reader in philosophy, linguistics and psychology. Cambridge: Cambridge University Press, 1971.
- 11. CHOMSKY, Noam. The Minimalist Program. Cambridge, Mass.: MIT Press, 1995.
- 12. CHOMSKY, Noam. Minimalist Inquiries: the Framework. In: MARTIN, Roger; MICHAELS, David; URIAGEREKA, Juan. *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*. Cambridge, Mass.: MIT Press, 2000.
- 13. CHOMSKY, Noam. Derivation by phase. In: KENSTOWICZ, Michael. *Ken Hale: A Life in Language*. Cambridge, Mass.: MIT Press, 2001.
- 14. COSTA, João. Emergence of Unmarked Word Order. In: LEGENDRE, Géraldine; GRIMSHAW, Jane; VIKNER, Jane. Optimality-Theoretic Syntax. Cambridge, Mass.: The MIT Press, 2001.
- 15. DOMÍNGUEZ, Laura. The Effects of Phonological Cues in on the Syntax of Focus Constructions in Spanish. In: BOK-BENNEMA, Reineke; HOLLEBRANDSE, Bart; KAMPERS-MANHE, Brigitte; SLEEMAN, Petra. Romance Languages and Linguistic Theory 2002. Amsterdam: Benjamins, 2004.
- ERTESCHIK-SHIR, Nomi; STRAHOV, Natalia. Focus structure architecture and Psyntax. *Lingua* 114, 2004.
- 17. ESTEBAS-VILAPLANA, Eva; PRIETO, Pilar. La notación prosódica en español. Una revisión del Sp\_ToBI. *Estudios de Fonética Experimental* 18, 2009.
- 18. FACE, Timothy. Focus and Early Peak Alignment in Spanish Intonation. *Probus* 13, 2001.

- 19. FACE, Timothy. *Intonational Marking of Contrastive Focus in Madrid Spanish*. Frankfurt: Lang, 2002.
- 20. FELDHAUSEN, Ingo; GABRIEL, Christoph; PEŠKOVÁ, Andrea. Prosodic Phrasing in Argentinean Spanish: Buenos Aires and Neuquén. Speech Prosody Chicago IL, 2010. [http://speechprosody2010.illinois.edu/papers/100111.pdf]
- 21. FIGUEIREDO SILVA, Maria Cristina; ARAÚJO, Flávio Martins. Prosódia e ordem das palavras: o caso dos advérbios ditos monossilábicos átonos. *Revista Virtual de Estudos da Linguagem (ReVEL)* 6, 2008.
- 22. GABRIEL, Christoph. Focal Pitch Accents and Subject Positions in Spanish: Comparing Close-to-Standard Varieties and Argentinean *Porteño*. In: HOFFMANN, Rüdiger; MIX-DORFF, Hansjörg. *Speech Prosody 2006*. Dresden: TUDpress, 2006.
- 23. GABRIEL, Christoph. Fokus im Spannungsfeld von Phonologie und Syntax. Eine Studie zum Spanischen. Frankfurt: Vervuert, 2007.
- 24. GABRIEL, Christoph; FELDHAUSEN, Ingo; PEŠKOVÁ, Andrea; COLANTONI, Laura; LEE, Su-Ah; ARANA, Valeria; LABASTÍA, Leopoldo. Argentinian Spanish Intonation. PRIETO, Pilar; ROSEANO, Paolo. *Transcription of Intonation of the Spanish Language*. Munich: Lincom, 2010.
- 25. GABRIEL, Christoph; FELDHAUSEN, Ingo; PEŠKOVÁ, Andrea. Prosodic Phrasing in Porteño Spanish. GABRIEL, Christoph; LLEÓ, Conxita. *Intonational Phrasing in Romance and Germanic: Cross-Linguistic and Bilingual Studies*. Amsterdam: Benjamins, 2011.
- 26. GREWENDORF, Günther. Minimalistische Syntax. Tübingen/Basel: Francke, 2002.
- 27. GRIMSHAW, Jane; SAMEK-LODOVICI, Vieri. Optimal Subjects and Subject Universals. BARBOSA, Pilar; FOX, Danny; HAGSTROM, Paul; MaGINNIS, Martha; PESETSKY, David. *Is the Best Good Enough?* Cambridge, Mass.: MIT Press, 1998.
- 28. GUTIÉRREZ-BRAVO, Rodrigo. Focus, Word Order Variation and Intonation in Spanish and English. In: WILTSHIRE, Caroline R.; CAMPS, Joaquim. *Romance Phonology and Variation*. Amsterdam: John Benjamins, 2002.
- 29. GUTIÉRREZ-BRAVO, Rodrigo. Subject Inversion in Spanish Relative Clauses. A Case of Prosody-induced word Order Variation without Narrow Focus. In: GEERTS, Twan; JACOBS, Haike. Romance Languages and Linguistic Theory 2003. Amsterdam: John Benjamins, 2005.
- 30. GUTIÉRREZ-BRAVO, Rodrigo. Structural markedness and syntactic structure. A study of word order and the left periphery in Mexican Spanish. New York: Routledge, 2006.

- 31. HORNSTEIN, Norbert. A Theory of Syntax. Minimal Operations and Universal Grammar. Cambridge: Cambridge University Press, 2009.
- 32. HUALDE, José Ignacio. Intonation in Spanish and the other Ibero-Romance Languages: Overview and Status Quaestionis. In: WILTSHIRE, Caroline R.; CAMPS, Joaquim. *Romance Phonology and Variation*. Amsterdam: Benjamins, 2002.
- 33. HUALDE, José Ignacio. The Sounds of Spanish. Cambridge University Press, 2005.
- 34. KOVACCI, Ofelia. El adverbio. In: BOSQUE, Ignacio; DEMONTE, Violeta. *Gramática descriptiva de la lengua española. Tomo 1: Sintaxis básica de las clases de palabras.* Madrid: Espasa, 1999.
- 35. LABASTÍA, Leopoldo. Prosodic Prominence in Argentinian Spanish. *Journal of Pragmatics* 38, 2006.
- 36. LÓPEZ, Luis. Toward a grammar without TopP or FocP." *Georgetown Working Papers in Linguistics* 2, 2002.
- 37. LÓPEZ, Luis. A derivational syntax for information structure. Oxford: Oxford University Press, 2009.
- 38. MARTÍN BUTRAGUEÑO, Pedro. La construcción prosódica de la estructura focal en español. KNAUER, Gabriele; BELLOSTA VON COLBE, Valeriano. *Variación sintáctica en español. Un reto para las teorías de la sintaxis*. Tübingen: Niemeyer, 2005.
- 39. MATUSHANSKY, Ora. Head Movement in Linguistic Theory. *Linguistic Inquiry* 37, 2006.
- 40. MÜLLER, Gereon. Optionality in Optimality-theoretic Syntax. In: CHENG, Lisa; SYBESMA, Rint. *The Second Glot International State-of-the-Article Book. The Latest in Linguistics*. Berlin: De Gruyter, 2003.
- 41. ORTIZ LIRA, Héctor. Acentuación y desacentuación de la información dada en inglés y español. *Lenguas modernas* 22, 1995.
- 42. OTHERO, Gabriel de Ávila; FIGUEIREDO SILVA, Maria Cristina. Focalização em Português: Interface entre Condições de Natureza Sintática e Prosódica. To appear.
- 43. PRINCE, Alan; SMOLENSKY, Paul. Optimality Theory. Constraint Interaction in Generative Grammar. Malden: Blackwell, 2004.
- 44. REGLERO, Lara. A'-Dependencies in Spanish and Basque. Ph.D. Diss., University of Connecticut, 2004.
- 45. REYNOLDS, Bill; NAGY, Naomi. Phonological Variation in Faetar: an Optimality Account. In: BEALS, Katherine. *Papers from the Parasession on Variation and Linguistic Theory*. Chicago: The Chicago Linguistic Society, 1994.

- 46. RIALLAND, Annie; ROBERT, Stéphane. The intonational system of Wolof. *Linguistics* 39, 2001.
- 47. RIZZI, Luigi. The Fine Structure of the Left Periphery. In: HAEGEMANN, Liliane M. *Elements of Grammar*. Dordrecht: Kluwer, 1997.
- 48. SAMEK-LODOVICI, Vieri. Crosslinguistic Typologies in Optimality Theory. In: LEGENDRE, Géraldine; GRIMSHAW, Jane; VIKNER, Jane. *Optimality-Theoretic Syntax*. Cambridge, Mass.: The MIT Press, 2001.
- 49. SAMEK-LODOVICI, Vieri. Prosody Syntax Interaction in the Expression of Focus. *Natural Language and Linguistic Theory*, 23, 2005.
- 50. SAMEK-LODOVICI, Vieri. Optimality Theory and the Minimalist Program. *Linguistics in Potsdam* 25, 2006.
- 51. SOSA, Juan Manuel. La entonación del español. Madrid: Cátedra, 1999.
- 52. STECHOW, Arnim von. Current Issues in the Theory of Focus. In: STECHOW, Arnim von; WUNDERLICH, Dieter. *Semantics: An International Handbook of Contemporary Research*. Berlin: De Gruyter, 1991.
- 53. TOLEDO, Guillermo. Señales prosódicas del foco. *Revista Argentina de Lingüística* 5, 1989.
- 54. ZAGONA, Karen. The Syntax of Spanish. Cambridge: Cambridge University Press, 2002.
- 55. ZUBIZARRETA, María Luisa. *Prosody, Focus, and Word Order*. Cambridge, Mass.: MIT Press, 1998.
- 56. ZUBIZARRETA, María Luisa. Las funciones informativas: Tema y foco. BOSQUE, Ignacio; DEMONTE, Violeta. *Gramática descriptiva de la lengua española. Tomo 3: Entre la oración y el discurso. Morfología.* Madrid: Espasa, 1999.
- 57. ZWART, Jan-Wouter. Agreement and remnant movement in the domain of West-Germanic verb movement." In: KOSTER, Jan; RIEMSDIJK, Henk van. *Germania et alia:* a linguistic Webschrift for Hans den Besten. Universiteit van Groningen, 2003. [http://www.let.rug.nl/~koster/DenBesten/Zwart.pdf].