Focal Pitch Accents and Subject Positions in Spanish: Comparing Close-to-
Standard Varieties and Argentinean Porteño

Christoph Gabriel

Fachbereich 7 (Sprach- und Literaturwissenschaft)
University of Osnabrück, Germany
cgabriel@uos.de

Abstract
In Spanish focus can be signaled by both prosodic and syntactic strategies. However, it remains controversial how these two components of grammar depend on one another. Based on the analysis of experimental data it is argued that in Spanish focus is primarily expressed through intonational means, namely the location of nuclear stress. Unlike most Spanish dialects, Argentinean porteño allows for a tonal distinction between neutral and contrastive focus in IP-final position. In other positions focus is expressed through increased F0 values and/or syllable-internal early peak alignment (EPA). As is shown with the example of non-clefted declaratives containing a focused subject the reordering of constituents can optionally apply (yielding the non-canonical ordering VO[3][S]). Movement as an additional strategy of focus marking is avoided in sentences with a full DP object, but strongly preferred with a clitic object (CL+[S][V]). The variation found in the data is best accounted for by assuming that the structures which are built up according to the Minimalist target/probe approach and associated with all of the possible F0 contours undergo an OT evaluation following the insights of the overlapping constraints model.

1. Introduction
Cross-linguistically focus can be expressed by syntactic, morphological and/or phonological means. The latter comprise phonological phrasing and relevant segmental cues as well as intonation, especially the placement and shape of (focal) pitch accents (e.g. [8, 11, 15] for Spanish). Cross-linguistically the phonological realization of focus seems to play a predominant role, given the fact that languages without any prosodic reflex of focus are extremely rare (e.g. Wolof using verbal affixes in combination with syntactic strategies [13]). Spanish is one of the languages that combine syntactic and intonational means. Interestingly, focus marking is quite homogenous across dialects, in sharp contrast to other areas such as segmental phonology where the different varieties display crucial differences.

Taking into account a subset of European and American dialects (Central-Northern Peninsular and Catalonian Spanish as well as the urban dialects of San Salvador, Irapuato (Central Mexico), Bogotá, and Buenos Aires), the only variety that crucially differs from the others with respect to the intonational expression of focus is the prestigious Argentinean porteño dialect, originally the substandard variety of certain Buenos Aires quarters (e.g. [4]) and nowadays spoken in the whole coastal region down to Southern Patagonia. For the present purpose the dialects mentioned above except for porteño are summarized under the term ‘close-to-standard’ (CTS) varieties. It should be pointed out, however, that this generalization only holds for the intonational expression of focus.

This paper investigates the prosodic and syntactic cues of focus in non-clefted declarative constructions with a focalized subject and a full DP or clitic direct object. Special emphasis is given to the intonational differences between porteño and CTS varieties.

2. Intonational and syntactic cues
Concerning the expression of focus Spanish exhibits the following general properties.

2.1. Spanish intonation and focus marking
The intonation of Spanish CTS varieties is characterized by rising pitch movements that differ in their alignment properties. I adopt Hualde’s [11] proposal of an underlying pitch accent /LH*/ which generally surfaces as a ‘late rise’ (default realization L*H), but is realized as an ‘early rise’ in words bearing final stress (e.g. compró in (1a)) and at the end of the intonational phrase (IP, e.g. diario in (1a,b)). In addition I assume a second underlying pitch accent /LH*/ that marks contrastively focused constituents and surfaces as LH* in all positions (1b) [8]. In addition post-focal pitch accents can undergo optional deletion (post-focal deaccentuation, in (1b) indicated by crossed out letters, e.g. [5]). Capitalization indicates nuclear stress; metrically strong syllables (as anchoring points for pitch accents) are underlined.

(1) a. ‘What happened?’
   [Maria compró un DAri]o.
   rl[SV][O]j
   /   /   /   /
   (LH)* (LH)* (LH)*
   L*H  LH*  LH*
   ‘Mary bought a newspaper.’

b. ‘Julia bought a newspaper.’ (contrastive focus)
   r[O][S]r
   [Maria compró un diario.]  rl[SV][O]
   /   /   /
   LH*  (LH)* (LH)*
   LH*  LH*  LH*
   ‘(No.) MARY bought a newspaper.’

It should be pointed out that – as a consequence of the neutralization effects mentioned above – in Spanish CTS varieties the distribution of pitch accents in (1a) María compró un DAri0 is not only compatible with a broad focus reading, but also with an IP-final narrow neutral and contrastive focus interpretation (i.e. it is felicitous in the contexts ‘What did Mary buy?’ and ‘Mary bought a book, didn’t she?’).

The intonational system of porteño differs from Spanish CTS dialects in several respects: First, pre-nuclear accents are regularly realized as high tones H* (e.g. [4, 15, 16]; see examples (4) for illustration); second, the final contour of both broad focus declaratives and constructions with a (neutrally) focused constituent in IP-final position is obligatorily realized.
as a so-called long fall [12], consisting of the IP-final ‘allo-
tone’ HL* plus a low boundary tone L%. Given the fact that
all pre-nuclear accents are characterized by a tonal movement
reaching its peak within the time limits of the metrically
strong syllable, focus in situ cannot be signaled by means of
an alignment contrast L*H vs. LH* as is the case for CTS va-
rieties. The intonational strategies used by porteño speakers
in order to compensate for this ‘disadvantage’ are treated in de-
tail in section 3.2, below.

2.2. Syntactic marking of [S] in non-clotted declaratives

Syntactically the varieties of Spanish discussed here can all be
characterized as SVO dialects, i.e. varieties that do not accept
VSO as a felicitous answer to the question ‘What happened?’
(*‘¿Compró María un DÍArio?’). In SVO dialects the un-
marked subject position is post-verbal as long as there is no
further argument present in the structure (e.g. unaccusative
verbs ‘Llegó MiRAli’ ‘Mary arrived’, intranisitive use ‘Baila
mi sobRIna ‘My niece is dancing’), but the subject is pre-
verbal as soon as another full XP constituent is present VP-in-
ternally (‘Mi sobrina baila el papel del cisne negro’ ‘My
niece is dancing the role of the black swan’).

Most scholars adopting a derivational or OT perspective
claim that (neutrally) focused initial subjects as in (2) are un-
grammatical and predict obligatory movement of the presup-
posed material to a higher position, yielding structures like
(3), [S]VO is claimed to be only acceptable with a contra-
tractive focus reading, e.g. [14, 17].

(2) a. [MaRía] compró el diario. [S]VO
   b. [MaRía] lo compró. [S]CL+V
(3) a. Compró el diario. [MaRía] [S]VO
   b. Lo compró. [MaRía] [S]CL+V

In intonational studies, on the contrary, [S]VO is generally
taken to be perfectly acceptable with a neutral focus reading,
e.g. [7, 11, 15]. It is clear that such diverging acceptability
judgments should be checked with empirical data.

3. Methodology and results

The analysis is based on data from recordings made with a
total of 17 speakers of CTS and one of porteño Spanish, com-
prising answering to questions (elicitation of various focus
structures), reading of given sentences, and recording of spon-
taneous speech [8]. For the present purpose all non-clotted de-
claratives with a focused subject and a full DP or clitic object
were taken into account, as well as all instances of focal pitch
accents occurring in the data produced by the (female) porteño
informant, the latter providing a deeper insight into the special
strategies of intonational focus marking in porteño.

3.1. Subject positions in SVO dialects

No difference is made by the speakers between neutral and
contrastive fociization insofar as neither the use of clitic con-
structions (type: Es Blancanieves la que ...) nor the preverbal
position of the focused subject (type: [S]VO) are restricted to
contrastive contexts. Despite the predictions made in the
literature (see 2.2) all SVO varieties including porteño Spanish
display a strong tendency towards the preverbal realization of
[S] in constructions with full DP objects regardless of the
focus type (neutral or contrastive). However, [S] typically
occurs in a post-verbal position when there is a clitic object.
See [8] for a detailed presentation of the output distributions.

3.2. Focal pitch accents in porteño Spanish

The porteño data consist of 52 utterances, 27 of which contain
a (contrastively or neutrally) focused XP. In 17 of these cases
the narrow focused XP occupies the clause-final position, am-
ong which 6 utterances display a contrastive reading. In none
of these cases a long fall is realized (see (4b) for an ex-
ample). Consequently, the prosodic representation of contrast-
ive focus through H* is unambiguous in this position. The
difference between IP-final narrow and broad focus, however,
cannot be signaled through the shape of the relevant pitch
accents (the final nuclear accent being realized as HL* in both
cases). But as in CTS varieties, intermediate phrasing with a
high phrase accent (H-) placed at the end of the presupposed
material can mark the extension of the focus domain (4a,b).

(4) a. ‘To whom does Snow White hand over Tarzan?’
Blancanieves entrega Tarzan ‘Snow White hands over Tarzan to the 7 dwarfs.’
   b. ‘Snow White hands over Tarzan to the 40 thieves.’
Se lo entrega a los enañitos ‘She hands over Tarzan to the 40 thieves.’

Fig. 1: F0 contour of (4a).

Focal pitch accents occurring in non-final positions surface as
H*. The distinction between a neutral pre-nuclear pitch accent
and a focal pitch accent can be marked through increased F0
values and/or syllable-internal early peak alignment (EPA).

3.2.1. Increased F0 values of non-final focal pitch peaks

The tonal peaks of (non-final) focal pitch accents tend to reach
F0 values that are generally higher than the peaks of neutral
pre-nuclear pitch accents. Two aspects have to be taken into
account. First, IP-initial focal pitch accents reach higher F0
values in comparison with those of the initial non-focal pitch
accents: The average F0 value of the first (non-focal) pitch
accent within an IP is 204 Hz (average of a total of 35 utter-
ances starting with presupposed material or material that be-
longs to a broad focus domain). The peaks of IP-initial focal
pitch accents, in contrast, display F0 values of between 249 and 339 Hz (total of 7 utterances). This largely confirms Barjam’s [1] claim that focal pitch peaks are about 50 Hz higher than the non-focal ones. Second, focal pitch accents occupying neither the IP-initial nor the IP-final position tend to be ‘less downstepped’ as compared to neutral pitch accents:

\[
\begin{array}{c|c|c|c|c}
\text{Maria} & \text{le} & \text{da} & \text{el DIArri} & \text{a su hermano} \\
\hline
H^* & H^* & H^* & \text{low plateau} & L% \\
237 Hz & 194 Hz & 187 Hz & \\
\end{array}
\]

‘M. gives the NEWSPAPER to her brother.’

While the pitch accent placed on \text{da} undergoes a considerable downstep with respect to the first peak of the first one, the peak of the focal pitch accent almost reaches the tonal value of the preceding one.

3.2.2. (Syllable-internal) early peak alignment (EPA)

Focal pitch accents tend to reach their F0 peaks earlier than neutral accents. In 10 out of the 11 relevant utterances the pitch peak is reached within the first half of the syllable’s time slot (σ*), strictly speaking when the first third (32.2%) of the metrically strong syllable’s time slot has passed (average of 10 instances; single percentages: 31.25-42.8%). The pitch peak of non-focal accents, in contrast, is generally located at the centre or in the second part of the syllable’s time slot. Given the fact that the alignment contrast between neutral H* and focal H* is only slight in comparison with the clear alignment contrast found in CTS dialects (L*H vs. LH*), it is no wonder that \text{porteño} speakers in addition make use of the strategy described in 3.2.1.

3.2.3. Summary of the intonational cues

Non-final focal pitch accents are characterized by an increased F0 value (represented as \text{^H*}) and/or an EPA (\text{\langle-H*\rangle}). In IP-final position, no tonal contrast is possible between broad and narrow neutral focus due to the IP-final ‘allotone’ HL*+(+L%), but the general use of H* allows for a clear marking of final contrastive focus. Given the fact that in this position an XP marked with H* can solely be interpreted as contrastively focused no further distinction (through EPA or increased F0) is needed. A schematic representation of surfacing CTS and \text{porteño} pitch accents is given in Fig. 3. Dotted lines represent the default realization (‘late rise’ L*H in CTS and ‘early rise’ H* in \text{porteño}); plain lines stand for the focal pitch accents (‘early rise’ LH* in CTS and syllable-initial upstepped rise \text{\langle-H*\rangle} in \text{porteño}).

Fig. 3a,b: Schematization of alignment patterns.

4. Analysis and OT account

As already stated I assume two underlying pitch accents for Spanish CTS varieties: A neutral tone /LH*/ (corresponding to the different surface contours given in Table 1), and /\text{\langle-H*\rangle}/ marking (contrastively or neutrally) focused XPs. Given the fact that in \text{porteño} Spanish the pitch contours discussed in the last section allow for an unambiguous marking of contrastive focus at least in IP-final position, it seems reasonable to assume two underlying pitch accents, a neutral /H*/ and a contrastive one /\text{\langle-H*\rangle}/. Possible surface realizations are summarized in Table 1.

<table>
<thead>
<tr>
<th>CTS varieties</th>
<th>pre-nuclear</th>
<th>IP-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>neutral</td>
<td>/LH*/*</td>
<td>L<em>H, LH</em></td>
</tr>
<tr>
<td>focal</td>
<td>/LH*/</td>
<td>H*</td>
</tr>
<tr>
<td>\text{porteño}</td>
<td>neutral</td>
<td>/H*/</td>
</tr>
<tr>
<td>Spanish</td>
<td>contrastive</td>
<td>/\text{\langle-H*\rangle}/</td>
</tr>
</tbody>
</table>

Although \text{porteño} Spanish differs from CTS varieties both in the repertoire of underlying pitch accents and in the relevant surfacing contours there is no fundamental difference between the dialects considered here, all of them allowing for signaling focus through intonational means (but differing in the relevant neutralization properties, however). Concerning the syntactic strategies, they all behave identically insofar as all of the possible linear orderings using all possible core-syntactic operations, allowing for different output forms to be evaluated as the optimal candidate.

The assumed model of grammar is sketched in Fig. 4, below, with the example of a \text{porteño} [[S][P]]VO structure.
Let me finally illustrate the proposed account with the example of a non-clefted declarative containing a full DP object. The following constraints are needed:

(6) a. STRESSFOCUS (SF): A focused XP is prosodically more prominent than a presupposed one.
   b. ALIGNFOC: The right edge of $\alpha[XP]$ matches the right edge of IP, e.g. [10].
   c. FULLINT (FI): Parse lexical conceptual structure.
      Failed by expletives (e.g. pro_gu) and auxiliaries [9].
   d. STAY-P: No P-syntactic movement (one violation per moved syllable).

Due to the fact that ALIGNFOC and FULLINT overlap on GRS two different constraint hierarchies can be derived:

Fig. 5: Gradual ranking scale.

Consequently, two orderings can result as winning candidates: According to the overlapping properties of the relevant constraints VO$\alpha$[S]F is the rare and $\phi$[S]VO the frequent result.

Table 2: Tableau for VO$\alpha$[S]F and $\phi$[S]VO.

<table>
<thead>
<tr>
<th>overlapping constraints</th>
<th>SF</th>
<th>ALIGNFOC</th>
<th>FI</th>
<th>STAY-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>pro_gu, compré el diario, [Muñia],</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Muñia], compré el diario</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note that the third candidate is ruled out by both rankings due to its violation of the high ranked constraint SF. The ranking scale given in Fig. 5 is valuable for both porteño and CTS varieties; the characteristic shape of the resulting F0 contours is mediated by the specific repertoires of pitch accents: While CTS dialects mark a focused subject in preverbal position with LH* (early rise instead of the unmarked pre-nuclear late rise L*H), Argentinean porteño lacks this alignment contrast and instead makes use of the strategies described in section 3.2.

5. Conclusions

Both porteño and CTS dialects primarily signal focus through intonational means. In addition, reordering of constituents may apply yielding prosodically unmarked structures with IP-final nuclear stress (i.e. VO$\alpha$[S]F). The particular shape of porteño focal pitch accents results from the fact that this dialect has no basic alignment contrast L*H vs. LH* as is the case for CTS varieties. The tonal cues of porteño focus marking identified in my data are increased F0 values, suspension of downstream and/or EPA; it goes without saying that these findings need to be supported by further studies based on larger data sets. The variation resulting from the (optional) application of focus-induced movement operations is best accounted for by adopting an OT perspective with overlapping constraints.

6. References