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# Focus Realization in Romance and Beyond

*Edited by*
Marco García García
Melanie Uth

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**Volume 201**

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# Preface

This volume emerged out of a workshop on *Focus Realization and Interpretation in Romance and Beyond* at the University of Cologne in January 2014. The main motivation for organizing this workshop and publishing the present book was the observation that we are still far from solving the question of how different focus types are realized in different (Romance) languages. In fact, studies from different linguistic fields, including syntax and prosody, have come to diametrically opposed results with respect to the grammar of even a single language, such as Spanish. We believe that many of these inconsistencies are due to the lack of interdisciplinary dialogue in this area, which has led not only to numerous terminological differences and misunderstandings, but also to methodological problems which strongly hinder the comparability of the results. Thus, the main objective of both the workshop and the present volume was to bring together specialists on focus realization from different linguistic fields in order to facilitate a direct discussion and foster constructive interdisciplinary dialogue.

Several people and institutions helped to bring about the workshop and the book in important ways. Martin Becker, the Romance Department of the University of Cologne, and the Cologne Center of Language Sciences were the backbone of organizing the workshop, and many helpers contributed their minds, arms, and feet to make it a success. For their assistance, we would like to thank in particular Javier Caro Reina, Ramona Rescigno, Claudia Grimm, Carina Cals, and Mirko Ruf. Special thanks go to the Fritz Thyssen Foundation for financial support for accommodation and transport to Cologne.

Furthermore, we would like to thank the participants and contributors of the workshop for stimulating and productive discussions. The publication of this volume has been funded by the German Research Foundation (DFG) as part of the SFB 1252 "Prominence in Language" in the projects A05 "Prominence marking and language contact in Spanish" and B04 "Interaction of nominal and verbal features for Differential Object Marking" at the University of Cologne. We are greatly indebted to our anonymous reviewers for their elucidating and constructive feedback that helped to considerably improve the final versions of the submitted papers. We are also very grateful to Elin Arbin for her professional proofreading and to Johannes Hofmann and Julio Manero González for helping us with the formatting.

# Introduction

## Core issues of focus realization in Romance

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Despite numerous theoretical approaches and empirical analyses, it is not entirely clear how different focus types and constructions are realized and interpreted in individual Romance languages. Due to the complexity of this linguistic area, an interdisciplinary and cross-linguistic approach seems most appropriate for exploring the topic further. This introductory article gives an overview of the core problems related to focus realization in Romance, such as methodological incongruences, differences regarding the conceptualization of focus categories, and nonobservance of diatopic variation. Moreover, it gives an outline of the present volume and situates the contributions with respect to the aforementioned issues.

## 1. Introduction

This volume presents a collection of papers that address the realization of focus in Romance languages and beyond from a variety of perspectives. Their common goal is to improve our understanding of how different focus categories (e.g. narrow information focus, contrastive focus) and related meaning components are realized and/or interpreted in different Romance languages and varieties. About half of the contributions adopt an onomasiological perspective, investigating the realization of particular pragmatic categories on the basis of morphology, syntax, or prosody. The other half of the studies approach the issue from a semasiological perspective by analyzing the interpretation of clefts, exclamatives, additive particles, etc. in discourse in several Romance languages. Further insights are drawn from comparative studies and grammatical investigations put forward in the context of language acquisition and language contact.

Despite numerous theoretical approaches and empirical analyses, it is not entirely clear how different focus types and constructions are realized and interpreted in individual Romance languages. Due to the complexity of this linguistic area, an interdisciplinary and cross-linguistic approach seems most appropriate

for exploring the topic further. Even with respect to the grammar of the same language, linguists from different fields often come to diametrically opposed conclusions. To cite but one example, syntactic approaches such as those proposed by Zubizarreta (1998, 1999) and Gutierrez Bravo (2006, 2008) claim that the marking of narrow information focus in Standard Spanish cannot take place in non-final sentence position (cf. 1a.). This is because the focused constituent must be in linearly final position for the sentence accent to be assigned there (cf. 1b., the so-called *p-movement*; cf. Zubizarreta 1998: 139f., Gutierrez Bravo 2006: 379f., and Büring & Gutierrez Bravo 2001 for more details).

(1)   *¿Quién te regaló     la   botella  de  vino?*
      Who    to  you gave  the  bottle  of   wine
      'Who gave the bottle of wine to you?'
      a.  *[*[_F_ *María] me      regaló la    botella  de  vino*.
          María        to-me gave   the  bottle  of   wine
          'María gave me the bottle of wine.'
      b.  *Me      regaló la    botella  de  vino  [_F_ María]*.
          to-me gave   the  bottle  of   wine  María
          'María gave me the bottle of wine.'             (Zubizarreta 1998: 125f)

On the other hand, prosodic works on focus realization reach the conclusion that "narrow focus" (cf. e.g. Hualde 2005) is generally realized in non-final position in Standard Spanish, which seems to sharply contrast with the aforementioned view. However, there are good reasons to assume that discrepancies like the one mentioned as well as others to be described below are at least partly due to terminological confusion. (The issue of Spanish subject placement in different focus categories in particular is discussed in Section 3 of the present introduction.)

    We may be able to mitigate such disagreements and increase comparability across disciplines – such as between phonetic and semantic approaches – by fostering interdisciplinary dialogue within the area of research on information structure in Romance languages. Thus, the main objective of our volume is to bring together specialists on Romance focus realization from different linguistic fields in order to constructively facilitate interdisciplinary dialogue. Moreover, the cross-linguistic perspective of several contributions enables us to consider a fairly wide range of different focus realization strategies and to compare different languages and varieties. In this introductory paper, we will outline several methodological, conceptual, and empirical issues regarding research on focus realization in Romance languages in more detail. Please note, however, that an exhaustive overview of the existing scientific landscape related to focus realization in Romance languages is far beyond the scope of this introduction. Instead, the central aim of this chapter is to

illustrate the main challenges that still exist in this branch of linguistic research by revealing some of the incongruities in the interdisciplinary dialogue that impede comparability.

The outline of this chapter is as follows. In Section 2, we dwell on the frequent lack of comparability due to (partly implicit) methodological differences. In Section 3, we address the problem of conceptual or terminological differences regarding the different focus types/categories. Section 4 considers the important factor of linguistic variation and the fact that many investigations still fail to take regional boundedness adequately into account. In Section 5, we present the outline of the volume and briefly summarize the main contents of the contributions.

## 2.  Methodology

As already mentioned, there are good reasons to assume that both the empirical and theoretical issues regarding focus realization in Romance languages are due to (i) methodological divergence and (ii) the disregard of methodological details in the relevant theoretical discussions or research surveys. Before getting into this aspect in more detail, again it should be noted that investigations and accounts on focus realization in Romance languages are abundant and the discussion of the methodological differences cannot be exhaustive for reasons of space and relevance to our main issue. Moreover, we are aware of the fact that methodological discussions are becoming increasingly common both among Romanists and beyond (cf. e.g. the discussions in Vanrell et al. in press; Wagner et al. 2015; Schwab & Avanzi 2015; Face 2003a for prosody; Weskott & Fanselow 2011; Schütze & Sprouse 2013; Schütze 2005; Adli 2005). As far as we can tell, most of these works are in agreement that "a generally increased methodological awareness and a higher variety of investigated styles of speech will promote our research progress further than a continuing argument for or against using one particular type of speech data" (Wagner et al. 2015: 1).[1] We wholeheartedly subscribe to this view and do not wish to further prolong the debate related to the merits of different methodologies here. Rather, the main objective of this section is to show (i) the relevance of methodological details for the theoretical discussion of focus realization in Romance languages and (ii) the extent to which this relevance is not yet being sufficiently considered in parts of this field of research.

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[1].   But cf. e.g. Muntendam & Torreira (2016: 73) or Colantoni et al. (2016) for arguments in favor of the superiority of spontaneous tasks.

The paradigm case we will be discussing below relates to the often debated question to what extent Spanish can be considered a "word order language" as opposed to an "intonation language" such as English (see e.g. Face & D' Imperio 2005; Zubizarreta & Nava 2011; Domínguez 2013; Zubizarreta 2016 for discussions and references). In what follows, we will first briefly illustrate the methodological complexity in this field of investigation by comparing a number of different analyses. Afterwards, we will concentrate on the challenge this complexity poses for theoretical discussions and typological classifications. We argue that the methodological diversity in this field of research involves at least the following four parameters: (a) the type of data collection (cf. 2a.); (b) the type and degree of embedding of the focused constituents (cf. 2b.); (c) the classification of focus categories such as *broad, presentational, neutral, narrow, contrastive, emphatic, identificational, exhaustive, corrective, mirative*, etc.; and (d) non-linguistic variables such as the place of origin, residence, sex, age, and educational background of the speakers. In this subchapter, we will briefly dwell on (a) and (b), while parameters (c) and (d) will be treated in the next two subchapters. Tables (2a) and (2b) roughly classify the most important works in the realm of investigation with regard to parameters (a) and (b).

(2)   a.   Type of data collection

Sample of works on Spanish intonation and/or word order:

| | |
|---|---|
| Introspection | Zubizarreta 1998, 1999; Gutiérrez-Bravo 2006, 2008; Ortega-Santos 2016 |
| Reading tasks (with or without oral backing) | de-la-Mota 1997; Face 2002a,b,c, 2003a; Domínguez 2004a,b; O'Rourke 2012b; Vanrell et al. 2013 |
| Discourse completion task | Vanrell & Fernández-Soriano 2013; papers in Prieto & Roseano 2010 |
| Picture-based interactive contrasting games | van Rijswijk & Muntendam 2012; Muntendam & Torreira 2016 |
| Picture-based information querying | Buitrago 2013 |
| Short story-based information querying | Gabriel 2007, 2010; Vanrell & Fernández-Soriano 2013; Feldhausen & Vanrell 2014 |
| Short story-based role plays | Uth 2014, in press |
| Acceptability judgements | Gutiérrez-Bravo 2006; Gabriel 2007, 2010; Adli 2011; Jiménez-Fernández 2015; Hoot 2016 |

b.    Type and degree of embedding of focused constituents

Sample of works on Spanish intonation and/or word order:

| | |
|---|---|
| Syntactic phrases in subordinate *que*-clauses (*Dijo que [$_F$ X]*) | Face 2001, 2002a, b, c |
| Lexical items in syntactic phrases of subordinate *que*-clauses (*Dijo que [$_F$ X]*) | Face 2001, 2002a, b, c |
| Lexical items in syntactic phrases of SVO matrix sentences | van Rijswijk & Muntendam 2012; Muntendam & Torreira 2016; de-la-Mota 1997; Zubizarreta 1998 |
| Definite descriptions as subjects or objects in SVO matrix sentences | Gutiérrez-Bravo 2006; O'Rourke 2012b; Buitrago 2013; de-la-Mota 1997; Zubizarreta 1998; Domínguez 2004a,b; Gabriel 2007, 2010; Vanrell & Fernández-Soriano 2013; Feldhausen & Vanrell 2014; Uth 2014, in press |
| Proper names as subjects or objects in SVO matrix sentences | de-la-Mota 1997; Zubizarreta 1998; Domínguez 2004a,b; Gabriel 2007, 2010; Vanrell & Fernández-Soriano 2013; Feldhausen & Vanrell 2014; Uth 2014, in press |
| Subjects and objects with generic reference | Buitrago 2013 |

The difference between read data and non-read data is probably the most important one with respect to speaking styles and the diverse related effects on prosodic realization (cf. e.g. Muntendam & Torreira 2016: 73; Colantoni et al. 2016).[2] However, there are many more details that appear to have an impact on prosodic or syntactic realization, such as the presentation of focalized constituents in capital letters (Vanrell et al. 2013) vs. lower case (de-la-Mota 1997) in reading tasks, the use of proper names vs. definite descriptions, focalization of lexical items within NPs/DPs

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**2.**   The corresponding discussions in the literature almost exclusively concentrate on the dichotomy between "lab speech" and "spontaneous data" (cf. e.g. Xu 2010; Face 2003a, among others, and the references therein). These works largely ignore semi-spontaneous data as elicited by the rest of the above-mentioned scholars, meaning that they are not entirely useful as reference for the present discussion (albeit the relevant paradigms are marginally commented on by both Face 2003a and Xu 2010).

(e.g. de-la-Mota 1997; van Rijswijk & Muntendam 2012) vs. focalization of lexical items within entire phrases (e.g. Gabriel 2007, 2010; O'Rourke 2012b, inter alia), or the difference between information querying with generic referents (Buitrago 2013) vs. the focalization of non-generic referents (e.g. Face 2002a, b, c; Domínguez 2004a,b; Gabriel 2007, 2010). Moreover, the results of the comparison of elicitation designs by Uth (2014, in press) suggest that even slight differences in the design of picture-based elicitation materials may have a crucial impact on both word order and intonation. The different elicitation designs compared in this study prompted the participants to produce essentially different speaking styles, resulting in largely opposed word order frequencies and intonation contours.

Another important methodological issue concerns the fact that several investigations diverge with respect to the size, complexity, and degree of embedding of the focalized constituents under investigation. It is true that most of the above-cited works are comparable in that they investigate the realization of syntactic phrases in simple SVO(X) matrix sentences. However, some studies such as Face (2001, 2002a,b,c) concentrate on phrases and lexical items in subordinate *que*-sentences (cf. 3a.), while others such as van Rijswijk and Muntendam (2012) and Muntendam and Torreira (2016) investigate nouns and adjectives in object constituents of (S)VO sentences (cf. 3b). For example, both (3a) and (3b) are cited in the corresponding texts as instances of broad focus elicitation.

(3)  a.  A:  *¿Qué dijo Mario?*
         'What did Mario say?'
     B:  *Que termin<u>ó</u> la ba<u>na</u>na de la chica.*
         'That he finished the girl's banana'                    (Face 2001, 228)
  b.  A:  *¿Qué tienes?*
         'What do you have?'
     B:  *Tengo <u>un toro verde</u>.*
         'I have a green bull.'          (van Rijswijk & Muntendam 2012: 621)

Comparing these paradigms to the investigations concentrating on subject and object constituents, it is first of all not clear to what degree the different scopes of the foci in itself already go along with a difference in (prosodic) realization. Hence, it is by no means evident to what extent we can compare e.g. the pitch alignment under focus in the work contributed by Face (2001, inter alia) with the one revealed by the various analyses of focalized subject or object constituents (i.e. most of the remaining above-cited papers). Moreover, the empirical designs by Face (2001, inter alia), van Rijswijk and Muntendam (2012), and Muntendam and Torreira (2016) face the important problem that the relevant alleged broad focus utterances are all answers to direct object constituent questions, meaning that they generally contain narrowly focalized object constituents. Hence, contrary to what is taken for granted

in these works, it is not possible to compare broad and contrastive focus realization with a design such as that displayed in (3a, b). Taking into consideration that the crucial lexical items are part of the object constituents, we conclude that the corresponding papers actually do not compare contrastive focus with broad focus, but contrastive focus with narrow information focus (with the further complication that, in Face 2001, 2002a, b, c, the narrow information focus extends over the entire subordinate clause).

In view of the purpose of the present chapter, we cannot go into the details of this discussion any further. Moreover, we would like to underline once again that it is not our aim to discredit the highly valuable empirical contributions achieved by the different works enumerated under (2a, b). We entirely agree with Wagner et al. (2015) and many other scholars in advancing the view that all different methodologies have genuine advantages and drawbacks, meaning that the various empirical paradigms are to be considered complementary rather than in competition with one another. For the rest, it is true that (i) almost all of the above-cited authors comment on methodological issues to a certain extent and (ii) the methodological details are stated fairly explicitly in many of these papers.

However, it is also evident that methodological details are still not sufficiently taken into consideration in important theoretical discussions or state-of-the-art surveys related to the issue of Spanish word order and intonation. Take, for example, the interesting discussion by Face & D'Imperio (2005) regarding the typological classification of Spanish and Italian as word order languages (signaling focus by means of word order perturbations, for example, as opposed to "intonation languages" such as English that achieve comparable pragmatic goals by means of intonation). Face and D'Imperio (2005) argue that this dichotomy is too simplistic and does not correspond with the empirical evidence since (i) "both Spanish and Italian use intonation, unaccompanied by focal word order, to mark narrow focus" (p. 278); (ii) "[w]ith regards to the [considered] word order and intonation facts, in both Castilian Spanish and Neapolitan Italian there appears to be no difference between different types of narrow focus" (p. 285f); and (iii) "[w]hile Spanish does not distinguish intonationally between broad focus and narrow focus in final position, Italian does" (p. 279). Against this background, it is argued that the "word order language" vs. "intonation language" dichotomy is too rigid in the following two regards. First of all, the gap between English and Romance languages seems to be much smaller than traditionally assumed (see references to "traditional" accounts in Face & D'Imperio 2005: 271f.). Second, Romance languages such as Spanish and Italian do not constitute a homogeneous category but use both mechanisms of focal marking (word order and prosody) to different degrees.

With this, Face and D'Imperio (2005) provide a new alternative approach to the above-mentioned simplistic typological categorization of Spanish, Italian,

and English with respect to the languages' intonation – word order interface. Nevertheless, their contribution raises several questions regarding the empirical basis of their line of argumentation. For one thing, all references cited by Face and D'Imperio (2005) to works on Spanish intonation except one are based on read data only. More precisely, in support of the view that Spanish uses intonation (pitch accents) alone in order to mark "narrow focus", Face and D'Imperio (2005) cite the considerable range of Face's (2001, 2002a, 2002b, 2002c, 2003) contributions, which are all based on read data. However, apart from the difficulty regarding the notion of "narrow focus", which is dealt with in more detail below, it should immediately be evident that results obtained from read data cannot actually contribute anything to the above-stated typological debate. The participants of the corresponding experiments are required to read aloud written sentences whose word order is fixed by design. When confronted with focalized constituents, they obviously do not have the possibility of choosing among different focus realizations (word order or intonation); rather, their only options are either (i) to use some sort of prosodic focus marking or (ii) not to linguistically mark the focal meaning component at all. Hence, contrary to what is suggested by Face and D'Imperio (2005), it may just as well be possible that the relevant prosodic marking in Spanish is due to an artificial last resort situation, which might be an interesting field of investigation on its own (degree of system convergence or flexibility in cases of supposed non-availability of linguistic resources). However, such data cannot reasonably be cited as evidence for or against the "word order language vs. intonation language" dichotomy (cf. Gabriel 2007: 158, 2010: 188 for similar observations).

In fact, the only study based on oral data that is cited by Face and D'Imperio (2005) is Face's (2000) picture-based elicitation of narrow information focus. This study included just three participants, with each answering a set of 40 broad focus questions and 40 questions designed to elicit statements of narrow information focus. However, since the task was to answer clarification questions of the type *¿Quién tiró el balón?* ('Who threw the ball?', Face 2000: 61), after (i) looking at the picture stimulus and (ii) reading the corresponding declarative sentence (e.g. *Angélica tiró el balón*, 'Angelica threw the ball', ibid.), this can hardly be considered an elicitation of narrow information focus for pragmatic reasons (cf. Uth 2014 for details).

An additional problem with the empirical basis of Face and D'Imperio (2005) relates to their above-cited supposition according to which in Castilian Spanish "there appears to be no difference between different types of narrow focus" (p. 285f) as far as word order and intonation are concerned. This categorical statement is astonishing in view of the fact that, except for the 120 pragmatically equivocal picture-based clarification sentences by the three participants tested in Face (2000), all investigations on Castilian Spanish intonation cited by Face and D'Imperio (2005) are restricted to the comparison of broad focus utterances with

corrective focus utterances.[3] First of all, it is not entirely clear how the authors come to their sweeping generalization regarding the realization of narrow information focus in Castilian Spanish. Second, the disentanglement of the different focus categories is essential in this context, since the dispute at issue here solely concerns "non-contrastively focused" (Zubizarreta 1998) constituents, whereas the existence of "emphatic stress" displacement (Zubizarreta 1998) in the context of corrective focus, for example, is uncontroversial. This issue is further commented on in Section 3.

Another case in point illustrating a problematic disregarding of methodological details is Zubizarreta (2016). In this article, Zubizarreta presupposes the dichotomy described above in order to delineate and argue in favor of her "metrically-interpreted syntactic approach" to nuclear stress assignment, which essentially builds on the existence of this very same dichotomy between "word order languages" and "intonation languages".

> This chapter discusses and evaluates different approaches to the nuclear stress (NS) algorithm in light of the variability in stress pattern observed for certain constructions in German and English in wide focus contexts ('unmarked' stress patterns), in opposition to the rigid (right-most) nature of NS in Spanish/Italian.
>
> (Zubizarreta 2016: 165)

In this context, it is important to bear in mind that the word order (alone) property is widely called into question in research on Spanish and Italian, for example, as mentioned above (see also D'Imperio 2001; 2002 for Italian; Gabriel 2007, 2010; Heidinger 2014 for Spanish, among others). Irrespective of this, Zubizarreta (2016), Zubizarreta and Nava (2011), and related studies propose a fundamental, typological divide between Germanic and Romance languages according to which "[i]n Germanic, functional categories may be interpreted as metrically invisible, while in Romance, functional categories are always visible" (Zubizarreta 2016: 176).

It is true that this generalization, together with the reformulated version of the nuclear stress rule (NSR) in (4), facilitates an elegant account of sentence stress patterns in languages like English, cf. (5).

(4)   NSR according to Zubizarreta and Nava (2011), Zubizarreta (2016): Given two metrical sister nodes A and B: (i) If A is a head and B is its argument, assign S [=metrical strength, MU] to B (specific-NSR). Otherwise, (ii) assign S to the rightmost constituent node in the phrase (general-NSR)

(Zubizarreta 2016: 177)

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**3.**   Note that, in addition, the material employed by Face is often not suited to elicit broadly focused utterances at all, as has already been discussed on the basis of the examples illustrated in (3a).

(5)   Nuclear stress assignment to syntactic argument (a) vs. rightmost constituent (b) as predicted by (4):

a.

$N_S$          $V_W$

(a) <u>dog</u>   (is) barking

b.

$N_W$          $T_S$

                    $T_W$      $V_S$

(a) <u>dog</u>      is      <u>barking</u>      (Zubizarreta 2016: 178)
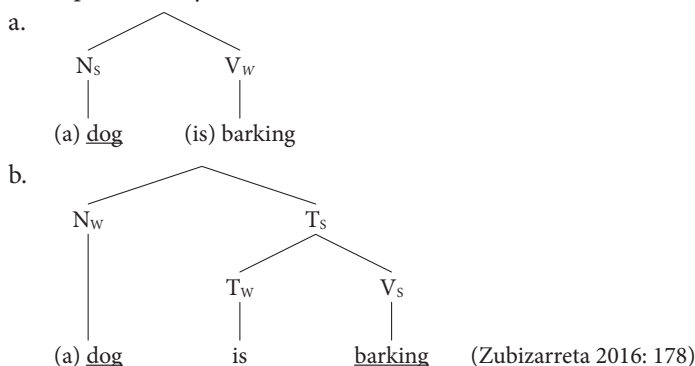
However, if we further follow Zubizarreta (2016: 166) in assuming that "[t]he focused constituent must contain the rhythmically most prominent word, i.e. the word that bears the Nuclear Stress", it is by no means evident that Spanish may be so easily classified as a word order language as suggested by Zubizarreta, since the above-mentioned references against the strict typological dichotomy still do report on (non-contrastive) prosodic focalization in pre-final (i.e. non-rightmost) position in the phrase.

Note that Zubizarreta (2016) does take the empirical contribution by Gabriel (2010) into account:

> More recent research suggests that sentence-internal narrow focus is not completely excluded in Spanish, and that it is in fact preferred in some cases. Gabriel (2010) reports data on Argentinian dialects, which reveal that (…), [i]n the case of an informationally narrow-focused subject in transitive structures with a lexical object, the SVO order (…) is preferred to the VOS order (…). For such dialects, it is possible …   (Zubizarreta 2016: 183)

However, reducing the phenomenon to dialectal variation does not contribute any new insights to the actual controversy but rather blurs it considerably, since the data provided by studies on European Spanish (Gabriel 2007; Domínguez 2004a,b; Heidinger 2014, among others), for example, are left uncommented and unexplained.

The present volume tries to circumvent such inconsistencies by assembling contributions with explicit methodological premises and statements. Moreover, the combination of syntactic (e.g. Heidinger 2018), prosodic (e.g. Martín Butragueño & Mendoza 2018), and semantic papers (e.g. Reich 2018) with contributions concentrating on language acquisition (e.g. Gabriel & Grünke 2018), language contact (e.g. Stein & Trips 2018), and language variation (Vanrell & Fernández-Soriano 2018)

ensures that the issue of Romance focus realization is tackled in an interdisciplinary context covering a large range of different perspectives and methodologies.

## 3.    Focus categories

From the above, it is evident that the investigation concerning the position of non-contrastively focused subjects in Spanish highly depends on Zubizarreta's (1998, 1999) categorical distinction between narrow information focus – i.e. new, non-presupposed information of an utterance – on the one hand, and 'contrastive focus', conceived of as "a quantification-like operation which involves exhaustive identification on a set of entities" (Gutiérrez-Bravo 2008: 164) on the other. This approach will be referred to as the dualistic account in what follows. However, it should be noted that the notion of contrast to disentangle different types of focus is highly debated in the literature. Thus, whereas Zubizarreta's (1998, 1999) distinction is based on Chomsky (1971), who argues that there is a categorical difference between ordinary syntactic focus and expressive, i.e. contrastive focus, many influential semantic accounts of focus start from the assumption that, in general, "[f]ocus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions" (Krifka 2007: 247). Moreover, it is generally assumed that by focusing a constituent a speaker aims at relating it to the Common Ground (CG) by establishing a set of alternatives containing an element that is (semantically) given in the CG (cf. e.g. Büring 2006: 148). Roughly speaking, the CG can be equated with the "information that is mutually known to be shared and continuously modified in communication" (Krifka 2007: 15).

Against the background of this general semantic principle, the fact that the 'focusing mechanism' may be used in order to achieve different communicative goals ("pragmatic uses of focus", Krifka 2007: 250ff) accounts for the different sub-types of focus, which are often accompanied by additional emphasis or prominence marking. One example of a subtype is 'corrective focus', in which case (i) "the focus alternatives must include a proposition that has been proposed in the immediately preceding CG" (Krifka 2007: 251) and (ii) "[i]t is expressed that among the alternatives the ordinary meaning is the only one that holds" (Krifka 2007: 252).

Based on the notions of communicative goals and CG management, the dualistic account proposed by Zubizarreta (1998), among others, is evidently easy to reconcile with the classification proposed by Krifka (2007). To do so, we assume that narrow information focus is an instance of neutral focalization, whereas the notion of 'contrastive focus' as used by the dualistic accounts covers a range of focalization strategies. These various strategies serve different communicative goals and imply additional emphasis, such as correction (cf. the different syntactic and

prosodic analysis of contrastive focus mentioned above), obviousness (Uth 2014), or unexpectedness (Cruschina 2012). However, on closer inspection, the issue is not as clear as it seems at first, since works such as Cruschina (2012) or Bianchi et al. (2016) are based on a tripartite system (neutral focus – contrastive focus – pragmatically specified uses such as REPLACEMENT, RESTRICTION, SELECTION of alternatives, Cruschina 2012: 14), which is no longer compatible with Krifkas (2007) categorization.[4]

Bearing in mind that virtually all of the works dedicated to Spanish focus realization employ the notion of 'contrastive focus' in one sense or another, it is evident that the different results regarding syntactic and prosodic focus realization in Romance languages cannot be compared without thoroughly retracing the different focus taxonomies and trying to correlate them. This task is further complicated by approaches that (i) merely deal with broad and "narrow" focus (cf. above) and/or (ii) define focus categories based on form-oriented notions of prominence marking. Consider O'Rourke (2012a: 178), who states that "[u]tterances with narrow focus are those which give particular emphasis to a portion of the utterance or proposition".

On the other hand, it is evident that tripartite approaches such as Bianchi et al. (2016) are outnumbered by dualistic accounts, and the 'non-pragmatic' concept of "contrastive focus" as utilized by Cruschina (2012) has been underrepresented and underdeveloped to this date. In order to contribute new insights to our understanding of this category, Torregrossa (2018) analyzes special instances of explicitly contrasted referents. He argues that these need to be thoroughly distinguished from the notion of contrast inherent in the operation of focalization and offers empirical evidence in favor of the need of this category by showing its impact on prosodic focus realization in Italian.

Finally, it is interesting to note that accounts such as Cruschina (2012) and Torregrossa (2018) are increasingly calling into question the usefulness of the "traditional" dualistic distinction between neutral (information/presentational) focus and non-neutral (contrastive, corrective, etc.) focus by contributing more and more evidence in favor of the need for more fine-grained pragmatic distinctions. It is precisely in this vein that Reich (2018) argues for a flexibilization of focus types/categories, showing that evidence from various languages that suggests the existence of a complex interplay between (a) what is traditionally understood as pertaining to

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4.   Moreover, this particularity is not always made explicit by the authors. For example, Bianchi et al. (2016: 1) succinctly localize their study in the context of "narrow" focus, merely giving an implicit definition regarding their focus taxonomy in a footnote related to the experimental make-up of one of their experiments ("These experimental items were part of a larger syntactic experiment aimed to test the acceptability of focus fronting in Italian under different conditions, which, in addition to mirative and corrective, also included merely contrastive focus (…)", ibid.: 40).

focalization and (b) (other) illocutionary acts, propositional attitudes, or epistemic meaning components. Another interesting aspect that is often disregarded when conceptualizing focus categories in a cross-linguistic perspective is alluded to by Dimroth and Benazzo (2018). This contribution compares French and German with regard to their most frequently employed strategies of discourse organization/ cohesion through focus marking (focalization of discourse referents in French vs. focalization of assertion components in German). Accordingly, this investigation broadens our understanding of the possible parameters of cross-linguistic variability in the context of focus realization. Its particular importance for the present purpose derives from the fact that the corresponding parameters are largely understudied in the context of Romance focus realization. This suggests that the value of discursive analyses of focus realization in Romance languages and beyond might be increased even more by taking such understudied discourse-related, cross-linguistic differences into consideration.

## 4.    Diatopic variation

At least in general surveys about focus realization in a given Romance language such as Spanish, focus realization is presented as a rather homogeneous phenomenon (cf. for example O'Rourke 2012a). However, such generalizations should be treated with caution, all the more since most of the studies are restricted to certain diatopic varieties. While many concentrate on Peninsular Spanish (cf. e.g. de-la-Mota 1997), the varieties spoken in certain areas such as Catalonia (cf. Adli 2011), or even the varieties of certain cities such as Madrid (cf. Face 2001, 2002a, b, c), there is also an increasing number of studies that deal exclusively with American Spanish, focusing on the varieties of Mexico (cf. e.g. Gutiérrez-Bravo 2006), Argentina (cf. Gabriel 2010), Colombia (cf. Buitrago 2013), or Peru (cf. Muntendam 2013). More recent contrastive research on Spanish as well as other Romance languages has shown that focus realization is actually subject to considerable variation (cf. Frota & Prieto 2015 and the literature cited therein). This comes as no surprise in light of the fact that variation is supposed to affect particularly those aspects of language where competing motivations are at play, i.e. where different pragmatic functions as well as syntactic and prosodic means interact with each other, as in the case of focus marking (cf. Haiman 1993: 903). At least as far as Spanish is concerned, variation may affect both syntax and prosody. This will be illustrated in the next two sections.

## 4.1     Syntactic variation

With respect to syntax, we will briefly illustrate two phenomena that clearly seem to depend on diatopic variation, namely the so-called focalizing *ser* construction in Caribbean Spanish and the differing syntactic preferences for focus marking in varieties of European Spanish.

Let us begin with the focalizing *ser* construction, a non-standard construction that has been reported only in a small number of Caribbean varieties, more precisely in some variants of the Spanish spoken in Venezuela (cf. Sedano 1990, passim), Colombia (cf. Mendez Vallejo 2009), the Dominican Republic (cf. Toribio 2002), Panama and Ecuador (cf. Bosque 1999). In addition, it has also been attested in both Brazilian Portuguese (cf. e.g. Kato & Mioto 2016 and Reich 2008) and European Portuguese (Sedano 2001), but it is apparently absent in all other Romance languages. (6a) illustrates a Spanish example of this construction.

(6)  a.  *Quier-o   es      pan.*
         want-1SG be.3SG  bread
         'What I want is bread.'                              (Kany 1963: 303)

     b.  *Lo       que que quier-o   es      pan.*
         3SG.ACC  that   want-1SG be.3SG  bread
         'What I want is bread.'

While a literal translation of (6a) to English would be 'I want is bread', a non-literal translation is achieved via a pseudo-cleft construction ('What I want is bread'). This is no coincidence since in many, though not all, cases a focalizing *ser* construction such as (6a) is more or less equivalent to the pseudo-cleft sentence in (6b), a pan-Hispanic alternative that is also very common in the above-mentioned varieties.

Due to this functional overlap as well as formal similarities such as the presence of a copula, the literature has concentrated on the question of whether the focalizing *ser* construction is a reduced pseudo-cleft construction, i.e. a pseudo-cleft with either an erased or empty wh-operator (cf. Wheeler 1982; Sedano 2003; Toribio 1992), or whether it should be seen as an independent construction (cf. Bosque 1999; Camacho 2006; Curnow & Travis 2004). Here, we neither want to enter this discussion nor go into detail concerning the syntactic differences between the focalizing *ser* and the pseudo-cleft construction. Instead, we want to draw attention to the controversial issue of the focalizing *ser* construction and focus type. According to some scholars, such as Bosque (1999) and Camacho (2006), the focalizing *ser* construction is confined to identificational or contrastive contexts, as in (7).

(7)   A:   *¿No habías comprado dos botellas de whiskey?*
           'Had you not bought two bottles of whiskey?'
     B:   *No, compr-é     fue       tres    canastas  de cerveza*
           no buy-1SG.PST be.3SG.PST three boxes    of beer
           'No, it was three boxes of beer that I bought.' (Méndez Vallejo 2009: 314)

This has also been claimed for the corresponding construction in Brazilian Portuguese (cf. Mioto 2012 and Kato & Mioto 2016). In contrast, Curnow and Travis (2003) as well as Méndez Vallejo (2009) argue that, at least in Spanish, the focalizing *ser* construction can also be used in non-contrastive contexts, as in (8).

(8)   A:   *¿Qué compraste?*
           'What did you buy?'
     B:   *Compr-é    fue       tres    canastas  de cerveza*
           buy-1SG.PST be.3SG.PST three boxes    of beer
           'It was three boxes of beer that I bought.'      (Méndez Vallejo 2009: 314)

Sedano (1990), in her study of Caracas Spanish, found that in 58% of the relevant utterances the focalizing *ser* construction is used in contrastive contexts. This suggests that it is indeed used in both contrastive and non-contrastive contexts, though with a remarkable preference for contrastive contexts. Still, it is not clear whether this holds for all of the above-mentioned Spanish varieties or only some of them, such as Caracas Spanish. In other words, it might well be the case that the information structural use conditions of the focalizing *ser* construction are subject to diatopic variation.

    In addition to the focalizing *ser* construction, the Mexican Spanish variety spoken on the Yucatán Peninsula exhibits a less well-known focus-marking construction that has not been attested in other Spanish varieties, namely a verb-fronting construction in which the main verb is fronted and a finite verb form of *hacer* 'to do' is inserted as a dummy verb into the clause (cf. Gutiérrez Bravo et al. in press and Uth 2018). An example of this verb-fronting construction, which is generally confined to contrastive focus statements, is given in (9).

(9)   *Ellos, VEN-IR    hic-ieron    acá   en Yucatán*
     they   come-INF do.PST-3PL here in Yucatan
     'They, what they did was come here to Yucatán.'

                                     (Gutiérrez Bravo et al. in press)

Let us turn to the different syntactic means of focus marking in European Spanish, such as *in-situ* marking, p-movement, and canonical (pseudo-)clefts and focus fronting constructions. Recent studies have shown that there is considerable

variation with respect to the preference of these and other syntactic strategies depending on the language variety. This will be briefly illustrated in the remainder of this section.

As mentioned in Section 2, Spanish has been considered a word order language with respect to focus marking. In this context it is generally assumed that e.g. focus fronting is restricted to contrastive focus (Zubizarreta 1998, 1999). However, this assumption is challenged by recent studies on different varieties of European Spanish. Jiménez-Fernández (2015) carried out a contrastive study on Southern Peninsular Spanish (i.e. Andalusian and Extremaduran Spanish) vs. Standard Peninsular Spanish (including areas from northern Spain and Madrid) based on a grammaticality judgment task. His findings show that in Southern Peninsular Spanish focus fronting is highly acceptable not only for the realization of contrastive focus, but also for expressing information focus, as in (10).

(10)   A:   *¿Qué está comiendo Ángela?*
            'What is Angela eating?'
       B:   *Pasta   est-á     comiendo.*
            pasta   be-3sg   eating
            'She is eating pasta.'                          (Jiménez-Fernández 2015: 126)

For Southern Peninsular Spanish, the acceptability rates for fronted objects in information focus contexts, as in (10), are particularly high, ranging from 74% to 81%. The opposite holds true for Standard Peninsular Spanish, where the acceptability rates for focus fronting under the very same conditions are rather low, approximately 20% (cf. Jiménez-Fernández 2015: 130). Similar observations concerning the acceptability of focus fronting in information focus contexts have also been made for the Spanish variety spoken in the Basque Country (cf. Vanrell & Fernández-Soriano 2013, 2018) as well as for other Romance languages such as Eastern Catalan (cf. Vanrell & Fernández-Soriano 2013) and Sardinian (cf. Cruschina 2012).

Based on a contrastive elicitation study comprising four European Spanish varieties, namely Canarian Spanish, Castilian Spanish, Basque Spanish (with L1 Basque), and Basque Spanish (with L1 Spanish), Vanrell & Fernández-Soriano (2018) observe a number of further patterns of syntactic variation related to focus marking. With regard to information focus on the subject constituent, for example, they found that while speakers of Castilian and Basque Spanish (both with L1 Spanish and L1 Basque) tend to use *in-situ* marking, speakers of Canarian Spanish show a significant preference for cleft constructions. Examining the overall effect of the factor "language variety", Canarian Spanish turns out to differ significantly from the other varieties in the realization of both information and contrastive focus. Vanrell & Fernández-Soriano's (2018) results suggest that there are no variety-independent preferences for marking focus, neither for the realization of

information nor for contrastive focus. On the contrary, each variety seems to have its own preferred syntactic strategy. This can be illustrated with regard to contrastive focus on the direct object constituent: Whereas Basque Spanish (both with L1 Spanish and L1 Basque) speakers tend to use cleft constructions in these cases, Castilian Spanish speakers resort to focus fronting constructions, and Canarian speakers show a clear preference for focus *in situ*.

## 4.2    Prosodic variation

As far as intonation is concerned, Vanrell and Fernández-Soriano (2018) did not find any differences with regard to language variety. Rather, the different attested intonational patterns seem to hinge on the position of the focused constituent. Across the studied varieties, focus in sentence-final position shows a falling intonation (L*+L%), whereas focus in non-final position is expressed by means of a rising-falling intonation, in which the fall is aligned with the end of the intermediate phrase (L+H*L-).[5] However, preceding studies on American Spanish varieties have revealed that the intonational dimension of focus marking is subject to considerable diatopic variation, too. For illustration purposes, we will confine ourselves to the focus-related variation of pitch accents in Buenos Aires and Mexican Spanish, acknowledging that the domain of regional variation is considerably broader, and significant variation may also affect boundary tones (cf. Hualde & Prieto 2015: 363 and Martín Butragueño & Mendoza 2018).

Like most other Spanish varieties, Buenos Aires Spanish usually presents a falling nuclear intonation (L* L%) for broad focus statements (cf. Sosa 1999: 187). However, as shown by Gabriel et al. (2010) Buenos Aires Spanish differs in at least two respects. First, it is important to note that broad focus statements are realized with different prenuclear accents. While most Spanish varieties present a rising intonation with a rise throughout the metrically strong syllable and a peak in the posttonic syllable (L+>H*), in Buenos Aires Spanish the prenuclear peak is aligned within the metrically strong syllable (L+H*). The prenuclear configuration of Buenos Aires Spanish is reminiscent of a number of Italian varieties and might thus have been influenced by the considerable contact between Spanish and Italian in Buenos Aires during the 19th and 20th centuries (cf. Gabriel & Kireva 2012). Second, Buenos Aires Spanish presents a clearly different pattern in the realization of contrastive focus: Whereas, for example, speakers of Peninsular Spanish tend to use a bitonal nuclear pitch accent with rising intonation for this communicative

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**5.**   As noted by the authors, this contour falls within the phonological category of L+H*, i.e. within the canonical contour associated with contrastive focus in European Spanish.

goal (L+H*, cf. Hualde & Prieto 2015: 368f. among others), speakers of Buenos Aires Spanish show a tritonal nuclear pitch accent L+H*+L, i.e. a rising-falling intonation contour aligned *within* the metrically strong syllable.

According to Gabriel et al. (2010) the mentioned rising-falling intonation contour typically occurs in utterances with a contrastive statement, though it is also attested in exclamative utterances, such as *¡Qué ricas medias lunas!* 'What delicious croissants!' (for further observations on exclamatives and focus, see García García, 2018).

Mexican Spanish is a further variety in which focus realization appears to differ considerably from the European Spanish varieties analyzed by Face (2000), Domínguez (2004a, b), and others. One of the most peculiar and well-known intonation contours of Mexican Spanish is the so-called circumflex pitch contour (L+¡H* %L or L+H* %L), i.e. a rising-falling intonation with a (clear) rise on the nuclear accented syllable that is often followed by a low boundary tone (cf. Martín Butragueño 2004; de-la-Mota et al. 2010). Though circumflex configurations are attested in a number of other European and American Spanish varieties as well, particularly the variant of L+H* %L that is used to highlight an element in final position, these circumflex contours clearly have a different distribution than in Mexican Spanish (cf. de-la-Mota et al. 2010). Whereas, for example, in Castilian Spanish the L+H* %L circumflex intonation is restricted to contrastive focus statements, in Mexican Spanish the very same intonation can also be used in broad focus statements (cf. Willis 2005; de-la-Mota et al. 2010; Martín Butragueño & Mendoza 2018).

Further variation patterns are also found in inner-Mexican varieties, in particular in Yucatecan Spanish. As shown by Barnes and Michnowicz (2013), speakers of Yucatecan Spanish produce early prenuclear peaks, i.e. peaks aligned within the stressed syllable, in 64% of cases in broad focus contexts, whereas e.g. Face (2003b) identifies a rate of only 25% of early prenuclear peaks for spontaneous Castilian Spanish. Uth (in press, 2018) points to another particularity related to the inner-Mexican prosodic variation of Spanish. Her data shows that in Yucatecan Spanish contrastive focus is expressed by means of falling intonation contours, which is diametrically opposed to the rising contours found in Central Mexican Spanish, for example.

Beyond diatopic variation, Martín Butragueño and Mendoza (2018) illustrate that the intonation of focus in Central Mexican Spanish also very much depends on sociolinguistic parameters such as age, sex sociolinguistic stratification, and speech style. Their data suggest that speakers with a lower level of education, older people, males, and speakers involved in tight social networks generally favor higher nuclear prominences and complex boundary tones.

Summing up, both the prosodic and the syntactic realization of focus in Spanish strongly depend on diatopic variation. Among other things, the observed variation

include the existence of specific syntactic means such as (i) the focalizing *ser* construction attested in Caribbean Spanish and Portuguese, (ii) differing syntactic preferences with regard to e.g. the use of focus fronting for narrow information focus, and (iii) intonational differences in the form of, for example, particular pitch accents, such as the tritonal nuclear pitch accent used for contrastive focus in Buenos Aires Spanish (L+H*+L) or the nuclear circumflex pitch contour attested in Central Mexican Spanish (L+H*L%). These considerable and often disregarded diatopic differences strongly suggest that diatopic variation must be taken more seriously, in order to get reliable generalizations about focus realization in Spanish. Clearly, this holds for other (Romance) languages as well.

## 5.    Outline of the volume

This volume is divided into five parts, each dedicated to a core aspect in the study of focus: prosody and word order (part one); prosody, focus, and related pragmatic functions (part two); modality and exclamatives (part three); cleft constructions (part four); and focus and language acquisition (part five). The studies presented in this volume cover a broad range of Romance languages, including French, Italian, Portuguese, and different varieties of Spanish, such as European, Central Mexican, and Yucatecan Spanish. Moreover, the book also offers new insights into several non-Romance languages, such as English, German, and Quechua. As for the methodology, the studies adopt different empirical methods, such as corpus analysis, elicitation experiments, acceptability judgments, and language comparison taking into consideration both synchronic and diachronic variation.

The first part of the volume ("Prosody and word order") comprises two studies that investigate the realization of focus within the prosody-syntax interface and one that is confined to syntax. The volume opens with **Vanrell and Fernández-Soriano's** paper on "Language variation at the prosody-syntax interface: Focus in European Spanish". As mentioned in Section 4.1, this paper makes an important contribution to diatopic variation in focus marking. It investigates the syntactic and prosodic realization of focus by considering three different factors: (i) focus type (information vs. contrastive focus); (ii) the syntactic function of the focalized constituent (subject vs. direct object); and (iii) language variety, including Basque, Canarian, and Castilian Spanish. It is shown that focus marking is conditioned by a complex interaction between these factors. The study is mainly based on elicited production data, though it also considers the results of an acceptability judgment task, which converge with those obtained from the production experiment. As far as focus type is concerned, the data indicates that there are no general, i.e. variety-independent, preferences for marking each type of focus. Rather, each variety seems to have

its preferred strategy. Regarding the influence of the syntactic function, the data shows that in most varieties focused subjects tend to be realized *in situ* regardless of focus type. With direct objects there is more variation, including the syntactic options of focus *in situ,* p-movement, fronting, and it-clefting. Examining the overall effect of the factor "language variety", the authors show that Canarian Spanish differs significantly from the other varieties in the realization of both information and contrastive focus. In addition, they also observe a significant effect of Basque Spanish (L1 Spanish) concerning the expression of information focus, where focus on the direct object tends to be expressed by focus fronting.

**Melanie Uth's** contribution, entitled "Focus realization at the prosody-syntax interface: Yucatecan Spanish opposed to Standard Mexican Spanish", studies the interplay between prosody and syntax with respect to broad and contrastive focus marking in these two Mexican varieties. On the basis of a coherent and explicit experimental setting comprising two elicitated production experiments and think-aloud protocols, it is shown that the two Mexican varieties behave in opposite ways with respect to both syntax and prosody. Whereas Standard Mexican Spanish appears to largely disallow focus fronting and to prefer different kinds of rising pitch accents in broad and narrow focus contexts, Yucatecan Spanish shows a strong tendency for focus fronting and falling pitch contours. Uth proposes that the syntactic differences in focus realization can be derived from the different prosodic means for the expression of focus. In this context, focus fronting in Yucatecan Spanish is interpreted as a prosodically motivated movement of the corresponding constituents to the left. Finally, it is suggested that the striking typological particularities of Yucatecan Spanish with respect to focus marking might be linked to the longstanding contact of this variety to Yucatec Maya.

The first part of the book closes with **Heidinger's** paper on "Acceptability and frequency in Spanish focus marking". This study provides new insights into the expression of both information and contrastive focus in Spanish and their correlation with three syntactic positions: sentence-initial, sentence-internal, and sentence-final position. On the basis of frequency and acceptability data stemming from several experimental studies, it is shown that for information focus, sentence-final and sentence-internal position are preferred over sentence-initial position. Contrary to what is assumed in the literature (cf. Zubizarreta 1998, 1999 and Revert Sanz 2001, among others), this result suggests that information focus is not only frequent and acceptable in sentence-final, but also in sentence-internal position. As for the expression of contrastive focus, the findings reveal that sentence-internal position is clearly preferred over final position, while sentence-initial position is again the least preferred option. Combining the perspective of frequency and acceptability judgments, the study shows that the corresponding data usually match. A more acceptable syntactic position for the realization of a given focus type is usually also the

more frequently used option in speech production. For example, this is the case for expressing contrastive focus in sentence-internal position, which is both the most acceptable and the most frequent option. However, there is also an interesting case of mismatch between acceptability and frequency: Focused objects and secondary predicates in sentence-initial position receive high acceptability scores, but are only produced very infrequently.

The second part of the book ("Prosody, focus, and related pragmatic functions") presents two studies mainly addressing prosodic questions and their relation to focus and focus-like phenomena. It opens with **Martín Butragueño and Mendoza's** paper on "Prosodic nuclear patterns in narrow and broad focus utterances: Pragmatic and social factors in Central Mexican Spanish". This paper is concerned with the complex distribution of focus pitch patterns in Central Mexican Spanish. On the basis of a dataset comprising 2,000 tokens, mainly provided by sociolinguistic interviews and discourse completion tasks, the authors show that broad focus tends to be expressed by non-rising pitch accents, while narrow focus is typically associated with L+¡H⋆. However, these are only statistical tendencies, i.e. the tonal realization of both broad and narrow focus is far from categorical and displays a wide range of variation. In order to explain this variation the authors show that the expression of focus is significantly constrained by a number of further pragmatic functions that are not directly related to information structure, such as expressivity and irony. Moreover, focus realization is also constrained by the type of oral data (sociolinguistic inter-views, discourse completion tasks, utterance reading). Focus realization turns out to be more variable in sociolinguistic interviews and discourse completion tasks than in utterance reading. Finally, the authors present empirical evidence for linking the different pitch realizations of focus types to sociolinguistic parameters such as age groups, gender, educational level, and social network type.

The paper of **Torregrossa**, entitled "Distinguishing contrast and focus at PF: A view from Italian", deals with the hypothesis that contrast and focus are two independent information structural concepts. First, it is argued that contrast and focus differ semantically. Although both contrast and focus have the function of evoking alternatives, the respective alternatives induced by contrast and focus seem to be related to different domains. It is claimed that focus induces alternatives with respect to the focus constituent, whereas contrast generates alternatives within the background. Second, the paper investigates whether contrast and focus also differ with respect to their prosodic expression. On the basis of a reading experiment with speakers from the Italian variety spoken in Rionero (Basilicata region), it is argued that contrast and focus are expressed by different prosodic means such as specific pitch configurations.

The third part of the volume ("Modality and exclamatives") is concerned with semantic and pragmatic aspects of focus. It contains two studies that touch upon

focus and its relation to different kinds of alternatives, including not only alternative referents and propositions but also presupposed modal operators. **Reich's** paper on "Presupposed modality" is concerned with the dimensions of surprise and obviousness and their relation to focus or, more generally, information structure. Based on a brief overview of how surprise and obviousness are grammatically encoded by different intonational, morphological, and syntactic means in different languages of the world, it is shown that surprise and obviousness are important linguistic meanings that are at least partly related to focus in Quechua or Spanish, for example. However, up to now there have been no general pragmatic approaches that account for the dimensions of surprise and obviousness. In order to fill this research gap, Reich's paper develops a model of presupposed model operators. It is claimed that linguistic expressions conveying a meaning of surprise presuppose an operator for impossibility or prohibition, while linguistic expressions transmitting a meaning of obviousness presuppose an operator for certainty or obligation. Along the same lines, it is argued that "[b]oth deontic and epistemic evaluation of discourse worlds construct the expectation of events and states of affairs that conflict or align with the events asserted in at-issue meanings" (p. 217). Moreover, it is shown that the deontic and epistemic presuppositions related to surprise and obviousness mirror the logical and pragmatic relations of lexical modal operators as described by Horn (1973) and Levinson (2000), among others.

The paper by **García García**, entitled "NP exclamatives and focus", investigates the relation between Spanish NP exclamatives such as ¡*Las tonterías que dicen!* 'The silly things they say!' and the notion of focus. It is shown that although NP exclamatives cannot be used to express a contrastive focus, they share a number of crucial syntactic and prosodic features with focus-fronting constructions and cleft sentences, i.e. two canonical focus-marking constructions used for encoding contrastive focus in Spanish. Considering the similarities and differences between these various constructions, it is argued that NP exclamatives exhibit a special kind of focus that points not to the propositional content, but rather to the relation between the propositional content and the exclamative illocution. On the basis of both focus theory and speech act theory, it is claimed that exclamative constructions express a non-contrastive focus that indicates the presence of non-fulfilled speaker expectations.

The fourth part of the volume ("Cleft constructions") provides contrastive synchronic and diachronic analyses of different cleft constructions in French, Italian, and English. **De Cesare's and Garassino's** paper on "Adverbial cleft sentences in Italian, French and English: A comparative perspective" is a synchronic study focusing on adverbial clefts, such as *It's with great ease that Stella reads Kant.* These cleft constructions differ in several respects from subject cleft sentences, such as *It's Stella who reads Kant.* On the basis of approximately 400 cleft sentences extracted

from a larger comparable corpus of Italian, French, and English electronic newspaper articles, the cross-linguistic study reveals both striking similarities and differences in the use of adverbial clefts in the mentioned languages. Though adverbial clefts are more frequent in French than in Italian and English, for each of these languages the relative frequency of adverbial clefts compared to other types of clefts, such as subject and object cleft sentences, is very similar: In all three languages adverbial clefts are the second most frequent type of cleft sentence. Moreover, the data suggest that in all three languages adverbial clefts are closely connected to what Prince (1978) calls informative presupposition clefts, i.e. clefts coding new or given information in the copula clause and new information in the subordinate clause (e.g. *It was about 50 years ago that Henry Ford gave us the weekend*). In addition to these similarities, the cross-linguistic study shows that the French adverbial clefts clearly differ from their Italian and English counterparts, not only because they are more frequent, but also because they display the greatest flexibility with respect to the syntactic and semantic categories that can appear as cleft adverbials. The authors propose that these findings might be explained by the fact that clefts are more grammaticalized in French than in Italian and English.

The second contribution to cleft constructions is **Trips and Stein's** paper on "Cleft sentences in the history of French and English: A case of pragmatic borrowing?". This contribution explores the historical influence of French on English cleft constructions based on extensive corpus research, which provided approximately 200 comparable cleft and cleft-like sentences each for French (Old and Middle French) and English (Old and Middle English). The authors argue that the rise of English cleft constructions in general, and informative presupposition clefts in particular, have been caused or at least fostered by contact with Old French in medieval Britain. They suggest that this influence represents a case of pragmatic borrowing in the sense of Prince (1988) and Andersen (2014). For methodological reasons, the analysis examines not only clefts but also unmarked predicative constructions. The latter cannot be considered proper clefts from a functional point of view, but are syntactically equivalent to cleft sentences. Interestingly, these unmarked predicative constructions seem to have accelerated the contact-induced development of cleft constructions in Middle English.

The fifth part of the book ("Focus and language acquisition") takes on the perspective of language acquisition. **Dimroth and Benazzo's** paper on "Developing strategies for encoding additive and contrastive relations in French and German child narratives" investigates the acquisition of the preferred means for the expression of additive and contrastive discourse relations in L1 French compared to L1 German. The study builds on previous research showing that French and German adults use different strategies to express these relations. Whereas speakers of French prefer an entity-based strategy as in *Pierre aussi était malade* 'Pierre also

was sick', German speakers typically use an assertion-based strategy as in *Peter war auch krank* 'Pierre was also sick'. The study considers three different groups of monolingual children of each language (4, 7, and 10 years of age) in order to find out at which age speakers of French and German acquire the preferred strategies of their respective languages. On the basis of a production experiment with 10 to 15 children per language and age group, it is shown that German children tend to use the assertion-based strategy already at the age of 4, while French children start preferring the entity-based strategy at the age of 7. The authors argue that this difference is due to the fact that the language-specific acquisition task faced by L1 learners of French is more difficult than that of L1 learners of German.

The volume closes with **Gabriel and Grünke's** study on "Focus, prosody, and subject positions in L3 Spanish: Analyzing data from German learners with Italian and Portuguese as heritage languages". This study examines the syntactic expression of focused subjects in L3 Spanish by comparing German monolinguals with multilingual learners for whom German is a dominant language and Italian or Portuguese are a heritage language. The study is based on elicited production data, acceptability judgments, as well as semi-structured interviews focusing on the learners' attitudes towards their languages and their metalinguistic awareness. Applying Rothman's (2010, 2011) Typological Primacy Model, the authors expected the multilingual learners to produce post-verbal focused subjects in a more target-like manner than the monolingual German learners. Interestingly, the results do not confirm this expectation and thus challenge the above-mentioned Typological Primacy Model. Taking into consideration the collected interview data as well as a second experiment with the same participants, the authors argue that the potential advantages of typological proximity can only be exploited for the positive transfer into the target language if the learners have explicit metalinguistic knowledge of their heritage language. The paper also provides an explicit theoretical proposal in terms of Stochastic Optimality Theory in order to represent the interlanguage grammars of the different learner groups with respect to focus-induced word order.

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# Prosody and word order

# Language variation
# at the prosody-syntax interface
## Focus in European Spanish

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Spanish is generally considered a "word order language" with respect to focus marking, since the syntactic strategies used to alter the canonical order seem to depend on focus type. Thus, prosodically motivated movement is utilized for information narrow focus, and focus fronting, clefting, and focus *in situ* are used in contrastive focus cases. However, recent empirical studies do not fully support this assumption. This paper investigates the effect of focus type and syntactic function of the focused constituent on the syntactic and prosodic realization of focus in different varieties of European Spanish. Our data show that Spanish employs both word order and intonation to different degrees depending on the language variety, the nature of the focused constituent (subject or object), and the constituent's informational vs. contrastive features.

## 1. Introduction

It is generally assumed that, like other Romance languages (e.g. Italian), Spanish employs syntactic movement to mark focus (Bolinger 1954, 1954–55; Contreras 1978, 1980; Büring & Gutiérrez-Bravo 2001; Büring 2010; Domínguez 2004a, 2004b; Gutiérrez-Bravo 2002, 2008; Ordóñez 2000; Zubizarreta 1998). The specific strategies used to alter the canonical word order seem to depend on focus type. Thus, according to Contreras (1976) and Zubizarreta (1998, 1999), informational focus must be in sentence-final position, where it receives phrasal stress or nuclear accent by means of the Nuclear Stress Rule (NSR) (Chomsky & Halle 1968; Zubizarreta 1998). Given that *prominence/stress shift* (also described as prosodically marked focus *in situ*) does not seem to be an available strategy in Spanish (see (1b)), in this language the non-focal material has to move to a non-canonical position (*prosodically motivated movement* or *p-movement*) (see (1c)) to ensure that the focused constituent is in the rightmost position.

(1) a. *¿Quién trajo    manzanas?*
       who    brought  apples
       'Who brought apples?'

   b. *\*[Blancanieves]$_F$ trajo    manzanas*
       Snow.White        brought  apples
       'Snow White brought apples.'

   c. *Trajo     manzanas [Blancanieves]$_F$*
       brought  apples      Snow.White
       'Snow White brought apples.'

Whereas information focus in Spanish declaratives is marked through p-movement (as an alternative strategy to prominence shift), according to Zubizarreta (1998, 1999) a variety of mechanisms are available for contrastive focus: the focused constituent can be clefted (2b), fronted (2c), or remain *in situ* (2d). It is generally agreed that in sentences similar to those in (2), the focused constituent, *manzanas* 'apples', bears the nuclear accent.

(2) a. *Blancanieves trajo    pomelos,    ¿no?*
       Snow.White  brought  grapefruits  no
       'Snow White brought grapefruits, right?'

   b. *No, fue [manzanas]$_{CF}$ lo que trajo    Blancanieves*
       no was  apples          what  brought  Snow.White
       'No, it was apples what Snow White brought.'

   c. *No, [manzanas]$_{CF}$ trajo     Blancanieves*
       no   apples          brought  Snow.White
       'No, Snow White brought apples.'

   d. *No, Blancanieves trajo    [manzanas]$_{CF}$*
       no  Snow.White   brought  apples
       'No, Snow White brought apples.'

However, this relation between different syntactic strategies and focus types might not be as clear-cut as proposed in the previous literature. First, recent empirical studies (Gabriel et al. 2009; Gabriel 2010 for Argentinean Spanish; Muntendam 2009, 2013 for Andean Spanish; Leal-Méndez & Shea 2012 and Hoot 2012a,b for Mexican Spanish; Vanrell & Fernández-Soriano 2013 for Basque and Canarian Spanish; Jiménez-Fernández 2015 for Southern Peninsular Spanish) demonstrate that: (a) information focus constituents in Spanish can also remain *in situ* even if they are not VP internal (Gabriel et al. 2009; Gabriel 2010; Muntendam 2009, 2013; Leal-Méndez & Shea 2012; Hoot 2012a,b; and Vanrell & Fernández-Soriano 2013; Uth 2014), and (b) focus fronting is not restricted to contrast (Jiménez-Fernández 2015 and Vanrell & Fernández-Soriano 2013). Second, although Zubizarreta (1999: 4242) claims that clefting is restricted to those cases involving rejection of an alternative (contrastive/

corrective focus), Moreno Cabrera (1999),[1] Dufter (2009) and Feldhausen & Vanrell (2015) demonstrate that different types of cleft constructions (it-clefts, pseudo-clefts, and inverted pseudo-clefts) can be related to different focal structures.

In the literature on prosodic focus marking in Spanish, no special emphasis has been placed on the different syntactic strategies or how these interact with prosody; rather, the studies pay more attention to the pitch accent choice of the focus stretch or how the focal material is marked off from the non-focal material. No intonational difference between information and contrastive focus has been reported (Estebas & Prieto 2008; Hualde & Prieto 2015) and the question of deaccentuation of the postfocal material is still a matter of debate. Whereas it has been generally assumed that Romance languages do not deaccent postfocal material in the same way as Germanic languages do (Cruttenden 1993; Swerts et al. 2002; Ladd 2008 and others), acoustic analysis of the postfocal stretch in Spanish reveals suprasegmental hypoarticulation (lower intensity and F0 range), suggesting that deaccentuation does exist in this language (Nadeu & Vanrell 2015). Since this topic is outside the scope of this paper, we will just use "postfocal compression/reduction" in a general sense.

Still from a prosodic perspective, it is often claimed that the main correlate of focus is prominence and that alignment (between the edge of a syntactic/phonological constituent and the focused stretch of a sentence) is a consequence of it (Büring 2010; Truckenbrodt 1995; Zubizarreta 1998 and others). In this paper we will test the idea put forward by Féry (2013) that alignment and prominence are two different prosodic mechanisms for marking focus, which may coincide, but not always do. This author also predicts that foci that are "stronger" in the hierarchy (e.g. contrastive/corrective foci) have a tendency to be accompanied by additional phonetic correlates (Féry 2013: 729). Féry illustrates her theory of prosodic focus realization in different languages and argues that alignment may be achieved in various ways, including syntactic movement (as in scrambling languages like Hungarian, op. cit.: 700–703), cleft constructions or right and left dislocations (as in Italian and French, 693–700), changes in the prosodic structure (as in Japanese), addition of a special morpheme (as in Chadic, Kwa, and Gur languages, 720–724), or pitch accent *in situ* and postfocal deaccentuation/compression of pitch (as in English or

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**1.**    Moreno Cabrera (1999) distinguishes three types of clefts: PdR COP-CES, or relative clauses which present the copula in the first position (also called *it-clefts*); PdR RL, or clauses with the relative clause in sentence-initial position (*pseudo-clefts*); and PdR CES, or sentences with the cleft clause in the first position (*inverted pseudo-clefts*). Interestingly, according to this author, different types of cleft structures correspond to different information structures. Thus, *it-clefts* tend to be used in contrastive contexts (*contextos posespecificativos* according to his terminology), whereas pseudo-clefts and inverted pseudo-clefts are common in neutral contexts (or *contextos específicativos*).

German, 716–719). In (3)–(5) relevant examples are provided. In (3), the subject is under contrastive focus and alignment with an intonational phrase ($\iota$-phrase)[2] is achieved by means of it-clefting. This involves the insertion of a $\iota$-phrase boundary to the right edge of the cleft constituent. By contrast, in (4) syntactic movement of the focused constituent to the right is triggered by prosodic alignment requirements. As illustrated in (5), in languages like German (also English or Dutch), a pitch accent is assigned to a narrow focus (apparently also to a contrastive focus, see Féry 2013: 718) *in situ* and postfocal material is deaccented. Importantly, a $\Phi$-boundary is also inserted after the focused constituent.

(3)  Is a woman pushing the car?
     *Non,  ((c'est  un homme$_{CF}$)$\iota$  (qui pousse    la voiture)$\iota$)$\iota$*
     no     it-is   a man            who pushes   the car
     'No, a man is pushing the car.'

(4)  Who laughed?
     *(Ha  riso       Gianni$_F$)$\iota$*
     has  laughed  Gianni
     'John laughed.'

(5)  Is a woman cutting the watermelon?
     *Nein,  ((ein Mann$_{CF}$)$\Phi$  (schneidet  die Melone)$\Phi$)$\iota$*
     no     a man             cuts       the melon
     'No, a man is cutting the melon.'

Regarding focus marking, subject/non-subject (also called subject/object) asymmetries have been attested in Spanish (Büring & Gutiérrez-Bravo 2001; Zubizarreta 1998) since subject focus, compared to non-subject focus, always requires either a special marking (marking asymmetry) or is realized differently (structural asymmetry). According to Fiedler et al. (2010), the reason for this asymmetry is that with this special marking, languages avoid the default interpretation of subjects as topics. Since we controlled for the focused constituent in our data (either subject or direct object), we will be able to test whether these asymmetries are also present.

Traditional studies of Spanish dialectology tend to focus on lexicon and phonology. However, very few studies have looked at the syntax-prosody interface. Going back to the inconsistencies found between the predictions made by Zubizarreta (1998, 1999) and the results yielded by Gabriel et al. (2009), Muntendam (2009), Jiménez-Fernández (2015), and others, one could hypothesize that they are attributed to diatopic variation (since the varieties explored in the studies which

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2.  Please note that Féry (2013) assumes a different prosodic hierarchy from that assumed in the present paper. For further information about different views of prosodic structure, see Frota et al. (2012).

cast doubt on the predictions made by Zubizarreta (1998, 1999) are different from Castilian Spanish). However, these inconsistencies might also be related to methodology, since only recent work on focus and prosody-syntax interface in Spanish relies on experimental data (Zubizarreta's data were based on speakers' intuitions).

This study will therefore address the following research questions:

RQ1.   Can Spanish still be considered a "word order language" with regard to the marking of focus?

RQ2.   Is there a clear-cut relationship between focus types and syntactic or phonological strategies? Do these syntactic and phonological mechanisms constitute evidence in favor of the view that alignment and prominence should be treated as two separate phenomena (Féry 2013)?

RQ3.   What is the role of language variation in the expression of focus?

Empirical studies on focus and the syntax-prosody interface in Spanish have mainly used either judgment tasks (Hoot 2012a,b; Muntendam 2009, 2013) or production tasks based on picture stories (Gabriel et al. 2009, 2010; Vanrell & Fernández-Soriano 2013; Muntendam 2013; Uth 2014). With the exception of Uth (2014), the assessment of the accuracy of the methodology used was not of prime concern in these papers. We therefore have little information about the methodology itself. Only in Uth (2014) is this issue specifically addressed. She detects two potential problems in picture-based elicitation tasks: first, the possible clash between the vagueness of the visual stimuli and the familiarity of the references (given that they are introduced into discourse by their first names), and second, the possible influence of the visual stimuli on the elicitation questions. Since the participants are asked about what they have already seen in the pictures, the answers are obvious and this could favor the marking of evidentiality (in the sense of a (visual) source of information), but also epistemicity (since what they are asked is patently obvious given that it has already appeared in the pictures). In this context and based on Uth's (2014) observations, we also want to test the accuracy of the methodology used in this paper and therefore whether semi-spontaneous picture-based experiments are suitable for investigating focus at the syntax-prosody interface.

This article is organized as follows. Section 2 describes the methodology used for the production experiment as well as the prosodic and syntactic annotation of the data. Section 3 presents the main findings of the experiment according to focus type, focused constituent, and language variety, as well as the preliminary results of a perception experiment. Finally, Section 4 discusses the main implications of our findings for a better understanding of focal typology in Spanish.

## 2. Methodology

### 2.1 Participants

Six women and two men between 22 and 45 years of age participated in the experiment. They spoke different varieties of European Spanish: two female Basque Spanish speakers whose L1 was Basque (from Gernika and Zeberio, Biscay), two female Basque Spanish speakers whose L1 was Spanish (from Bilbao, Biscay), three[3] female Castilian Spanish speakers (from Madrid), two male Canarian Spanish speakers (from Las Palmas). All participants were native speakers of Spanish, or Basque in the specific case of the Basque Spanish (L1 Basque) speakers. See Figure 1 for a map showing the locations where the recordings were carried out.



**Figure 1.** Map showing the locations where the recordings were carried out

### 2.2 The corpus/data

The corpus presented in this paper consists of data that was elicited by showing subjects short picture stories in a PowerPoint slide show (similar to the one used by Gabriel 2010) and then recording their answers to questions about what they had seen. These short stories consisted of a set of single sentences each accompanied by

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**3.** The reason why an extra participant was added to the Castilian Spanish data is that part of the data of one of the speakers was discarded due to low quality of the recordings.

a picture and featured various characters such as a girl called María, a sailor, and Snow White. All sentences exhibited a canonical syntactic structure: subject, verb, direct object and indirect object/adjunct (see (6)).

(6) *El  marinero  escribió la   carta en el   balcón.*
     the sailor        wrote   the letter on  the balcony
     'The sailor wrote the letter on the balcony.'

After presenting the pictures (see Figure 2) with sentences, the participants were asked to answer a series of recorded wh-questions or tag questions specifically designed to elicit broad and information/contrastive narrow focus on different constituents (as in (7)). No mirative foci were considered. We assume that information focus is the answer to a wh-question, whereas contrastive focus "marks a constituent that is a direct rejection of an alternative" (Gussenhoven 2007: 91). Participants were also asked to include all the constituents that appeared in the short stories in their answers, but they were given total freedom to use any syntactic order or strategy they wished.



**Figure 2.** Picture of the first part of the story exemplified in (1)

(7) a.  *¿Qué ha   pasado?*
         what has  happened
         'What happened?'
    b.  *¿Qué escribió el   marinero en el   balcón?*
         what wrote    the sailor      on the balcony
         'What did the sailor write on the balcony?'
    c.  *¿Quién escribió la   carta en el   balcón?*
         who     wrote   the letter on  the balcony
         'Who wrote the letter on the balcony?'
    d.  *El   marinero escribió en el   balcón  la   canción, ¿verdad?*
         the sailor      wrote    on the balcony the song      right
         'The sailor wrote the song on the balcony, right?'

e.  *¿Dónde escribió la   carta el   marinero?*
    where  wrote   the letter the sailor
    'Where did the sailor write the letter?'

f.  *escribió la   carta en el   balcón   el   capitán, ¿verdad?*
    wrote   the letter on  the balcony the captain  right
    'The captain wrote the letter on the balcony, right?'

g.  *¿Qué hizo el   marinero con   la   carta?*
    what did  the sailor      with the letter
    'What did the sailor do with the letter?'

h.  *El   marinero escribió la   carta en la   barca, ¿no?*
    the sailor      wrote   the letter in  the boat   no
    'The sailor wrote the letter in the boat, didn't he?'

i.  *¿Qué hizo el   marinero en el   balcón?*
    what did   the sailor      on the balcony
    'What did the sailor do on the balcony?'

j.  *El   marinero firmó la   carta en el   balcón, ¿verdad?*
    the sailor      signed the letter on  the balcony right
    'The sailor signed the letter on the balcony, right?'

k.  *La   carta, la   escribió en el   balcón   el   capitán, ¿no?*
    the letter  it   wrote    on  the balcony the captain  no
    'The captain wrote the letter on the balcony, didn't he?'

The data obtained through this method were a total of 594 contours (22 contours x 3 stories x 9 speakers), although in this paper only data for focused subject and direct object were analyzed. Our final data set, thus, consisted of 483 contours.

## 2.3   Procedure

The researchers remained close at hand as the session began in order to solve potential problems, but then occupied a peripheral position in the room so that in effect the participants listened to the recorded questions alone. The experiment lasted approximately 30 minutes. We used a Zoom H4n digital audio recorder with an AKG C520 condenser microphone. Recordings were made in a relaxed atmosphere (speaker's homes) with the exception of the Canarian speakers, who were recorded in an office at the Universidad de Las Palmas de Gran Canaria.

## 2.4    Analysis

The long audio files were segmented and then annotated in Praat (Boersma 2001). Each TextGrid file contained the following information: (a) a tier with the orthographic transcription, (b) a tier with the syntactic strategy used by the speaker (canonical word order, dislocation of the non-focal material, it-clefting, constituent fronting, p-movement, etc., see (8)), (c) a tier with the syntactic order, (d) a tier with the type of focus (broad, information or contrastive/corrective) as well as the constituent under focus (subject, direct object, etc.), and (e) a tier with the prosodic transcription of the focused constituent in terms of pitch accents and boundary tones (using the ToBI annotation system, Hualde & Prieto 2015). Regarding prosodic phrasing, only the two major prosodic units will be considered in this paper: the intonational phrase (IP) and the intermediate phrase (ip). The boundary tones marked with the symbol "-" after the tone appear at the end of ips, whereas the boundary tones marked with the symbol "%" appear at the end of IPs. The existence of an intermediate phrase boundary was mainly determined through a combination of perception (the transcribers, native speakers of Spanish, were able to perceive a level of juncture that was looser than that existing between words but tighter than that between independent tonal units) and inspection of both the F0 curve and the spectrogram (the usual cues used to confirm the presence of an intermediate phrase boundary are a high or low tonal movement not in the vicinity of a stressed syllable, a pause, and/or preboundary lengthening).[4]

Data were quantified by calculating the frequency of the dependent variables SYNTACTIC STRATEGY (it-clefting, pseudo-clefting, inverted pseudo-clefting, p-movement, focus fronting, *in situ* focus, see (8)) and INTONATIONAL PATTERN (see Table 1) corresponding to the focused constituent. The independent variables were: LANGUAGE VARIETY (Canarian Spanish, Castilian Spanish, Basque Spanish (L1 Basque), Basque Spanish (L1 Spanish)), FOCUSED CONSTITUENT (subject, direct object), and FOCUS TYPE (narrow information focus or narrow contrastive/corrective focus). In (8) the different syntactic strategies corresponding to some of the questions presented in (7) are illustrated.
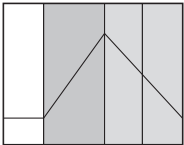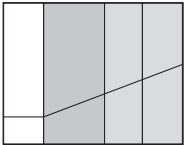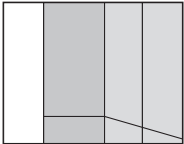
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**4.**   For more information about the phenomena related to these prosodic units, as well as how to differentiate between levels 3 and 4 of prosodic juncture (corresponding to the ends of an ip and IP, respectively), see Aguilar et al. (2009).

(8)   a.   *[Que el   marinero  escribió  la   carta  en  el    balcón]*$_F$
           that  the sailor     wrote    the letter  on  the balcony
           'The sailor wrote the letter on the balcony.'          neutral word order

      b.   *El  marinero  escribió  en  el   balcón   [la  carta]*$_F$
           the  sailor    wrote    on  the balcony   the letter
           'The sailor wrote the letter on the balcony.'          p-movement

      c.   *[El  marinero]*$_F$ *escribió  la   carta  en  el   balcón*
           the  sailor        wrote    the letter  on  the balcony
           'The sailor wrote the letter on the balcony.'          *in situ* focus

      d.   *No,  [la  carta]*$_{CF}$ *escribió  el   marinero  en  el   balcón*
           no   the letter     wrote    the sailor     on  the balcony
           'No, the sailor wrote the letter on the balcony.'          fronting

      e.   *[En  el   balcón]*$_F$ *fue  donde  escribió  la   carta  el   marinero*
           on   the balcony  was  where  wrote    the letter  the sailor
           'On the balcony was where the sailor wrote the letter.'

                                                          inverted pseudo-cleft

      f.   *No,  fue [el marinero]*$_{CF}$ *el que  escribió  la   carta  en  el   balcón*
           no   was the sailor        who   wrote    the letter  on  the balcony
           'No, it was the sailor who wrote the letter on the balcony.'      it-clefting

      g.   *No,  el que  escribió  la   carta  en  el   balcón   fue [el marinero]*$_{CF}$
           no,  who   wrote    the letter  on  the balcony   was the sailor
           'No, [the person] who wrote the letter on the balcony was the sailor.'

                                                          pseudo-clefting

In (8a) neutral word order is shown while p-movement appears in (8b). Clearly, the non-focal material is moved leftwards, so that the focal material, *la carta* 'the letter', is in final position where it can receive the nuclear accent. In (8c) the focused constituent, *el marinero* 'the sailor', remains *in situ* and bears the nuclear pitch accent. In (8d) the focused constituent, *la carta* 'the letter', is fronted. The nuclear pitch accent is realized on the focused constituent. In (8e) an inverted pseudo-cleft is exemplified. The clefted constituent is the focused constituent, *en el balcón* 'on the balcony', which precedes the pseudo-cleft clause. In (8f) the copula appears in initial position, followed by the clefted constituent, which precedes the subordinate clause. This is the typical structure of an it-cleft sentence. Finally, (8g) shows a pseudo-cleft where the clause appears at the beginning of the sentence preceding the copula. The clefted/focused constituent, *el marinero* 'the sailor', appears at the end of the sentence.

Table 1 offers schematic representations of the different intonational patterns (ToBI labels) found in the data, and a description of their phonetic realization.

**Table 1.**  Summary of the different intonational patterns found in the data

| Schematic representation | ToBI label | Description |
|---|---|---|
| | L+H* L- | A rise with the peak aligned with the end of the accented syllable followed by a fall aligned with the end of the intermediate phrase.[5] |
| | L+<H* H- | A rise throughout the accented syllable which continues to the end of the intermediate phrase. |
| | L* L% | A fall to the baseline of the speaker followed by another low boundary tone aligned with the end of the intonational phrase. |

## 3.   Results

In this section we will only present the preferred strategies seen in the data to mark focus (information or contrastive) either on the subject or the direct object for each variety. However, Tables 2 and 3 report the frequency (i.e. number of occurrences) of the variable SYNTACTIC STRATEGY (it-clefting, pseudo-clefting, inverted pseudo-clefting, *in situ* focus, p-movement, fronting, other) for each focus type and constituent under focus across language varieties.

### 3.1   Information focus

#### 3.1.1   *Focus on the subject*
The preferred strategy for marking information focus on the subject in Canarian Spanish was inverted pseudo-clefting (as in Figure 3) and the L+H* L- intonational pattern. Eleven out of 24 cases were produced with inverted pseudo-clefts and nine

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**5.**   The realization of this pitch accent can be quite variable. Thus, whereas some speakers tend to systematically align the peak at the end of the stressed syllable, others may realize the peak a little bit earlier or later. However, all these realizations fall within the category L+H*, since as native speakers we clearly perceive a rising movement over the stressed syllable.

of these consisted of the L+H* L- intonational pattern. The other dialectal varieties exhibited a clear preference for *in situ* focus together with the L+H* L- intonational pattern (see Figures 4 and 5 for Castilian Spanish and Basque Spanish spoken by L1 Basque speakers, respectively). The frequency of appearance of this syntactic pattern varied depending on the dialect. Thus, 14 out of 28 cases followed this pattern in Castilian Spanish, 20 out of 21 cases in Basque Spanish (L1 Basque), and all the cases in Basque Spanish (L1 Spanish) speakers. As for intonation, the L+H* L- pattern appeared in 11 out of the 14 structures with *in situ* subjects for Castilian Spanish and in all the utterances with this syntactic pattern in the two Basque Spanish varieties.

Figure 3 shows the inverted pseudo-cleft *[Blancanieves]_F fue quien se llevó las manzanas sin permiso* 'Snow White was [the person] who took the apples without permission' produced by a male speaker of Canarian Spanish. The clefted constituent, *Blancanieves*, corresponds to the constituent under focus as well as to the constituent bearing the nuclear accent. In this example we observe a L+H* nuclear accent aligned with the stressed syllable *-nie-* followed by a L- boundary tone associated with the right edge of the intermediate phrase. The material following the focused constituent undergoes postfocal compression.
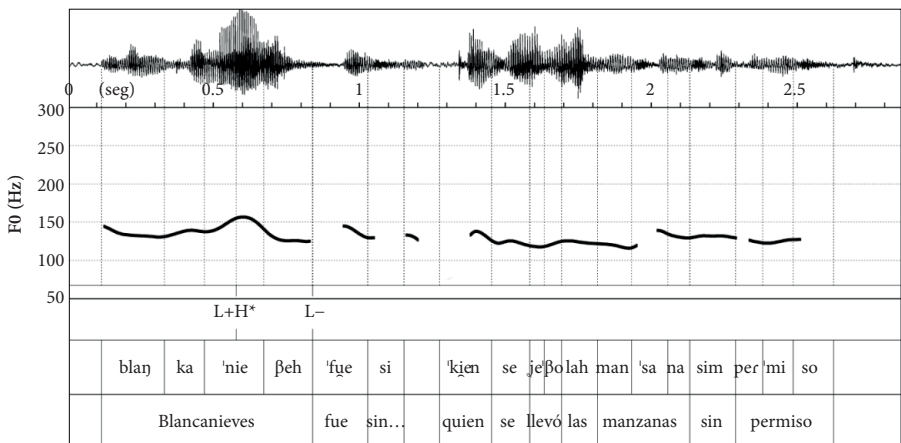


**Figure 3.** Waveform and F0 contour of the information focus declarative *[Blancanieves]_F fue quien se llevó las manzanas sin permiso* 'Snow White was [the person] who took the apples without permission' produced by a speaker of Canarian Spanish

For Castilian Spanish, Figure 4 illustrates the information focus declarative *[María]_F ha sacado el coche sin problemas* 'Maria got the car out (of the garage) without difficulty' with the focus prosodically realized *in situ*. This utterance was produced by a female Castilian Spanish speaker. Prosodically, this declarative is also characterized

by a L+H* nuclear accent on the syllable -*rí*- of the focused constituent (*María*) followed by a L- boundary tone aligned with the right edge of the intermediate phrase and postfocal compression.
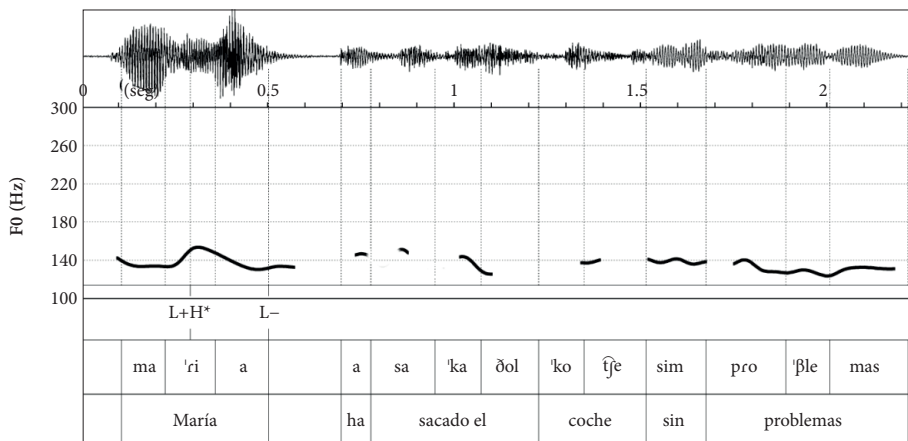


**Figure 4.** Waveform and F0 contour of the information focus declarative *[María]$_F$ ha sacado el coche sin problemas* 'Maria got the car out (of the garage) without difficulty' produced by a speaker of Castilian Spanish

The pattern illustrated in Figure 4 is found in both varieties of Basque Spanish. Figure 5 shows a contour produced by a female Basque Spanish (L1 Basque) speaker from Zeberio. As in the previous example, we find cases of information focus prosodically marked *in situ* by a L+H* nuclear accent and a L-[6] boundary tone. As in the previous examples, tonal compression is applied to the postfocal material.

### 3.1.2    *Focus on the direct object*

If the focus is on the direct object rather than the subject, a different picture emerges. Canarian Spanish speakers showed a slight preference for focus *in situ* marked by the L+H* L- intonational pattern (8 out of 27 cases). All these *in situ* constructions were realized with a L+H* L- intonation (see Figure 6). P-movement was used in Castilian Spanish (10 out of 29 cases) always accompanied by the L* L% pattern (see Figure 7), whereas Basque Spanish (L1 Basque) resorted to focus prosodically marked *in situ* and the L+H* L- pattern (7 out of 20 cases). Finally, a particularly

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**6.** As can be observed in Figure 5, the presence of an intermediate phrase boundary is not always supported by the usual cues, namely a high or low tonal movement not in the vicinity of a stressed syllable, a pause, or preboundary lengthening. Pause and preboundary lengthening are often optional and depend on the speaker's speech rate. Thus, the presence of a tonal movement not in the vicinity of a stressed syllable seems to be the most reliable cue.

interesting case was represented by Basque Spanish (L1 Spanish), which showed a preference for focus fronting and the L+H* L- pattern (see Figure 8). This was the pattern found in 11 out of 21 cases.

Figure 6 shows the information focus declarative *María llevó [el coche]_F a su prima* 'Maria took the car to her cousin' produced by a Canarian Spanish speaker. The element *el coche* 'the car' bears the nuclear accent of the sentence, which is a L+H* tonal accent followed by a L- phrase accent. Postfocal tonal reduction is again observed.
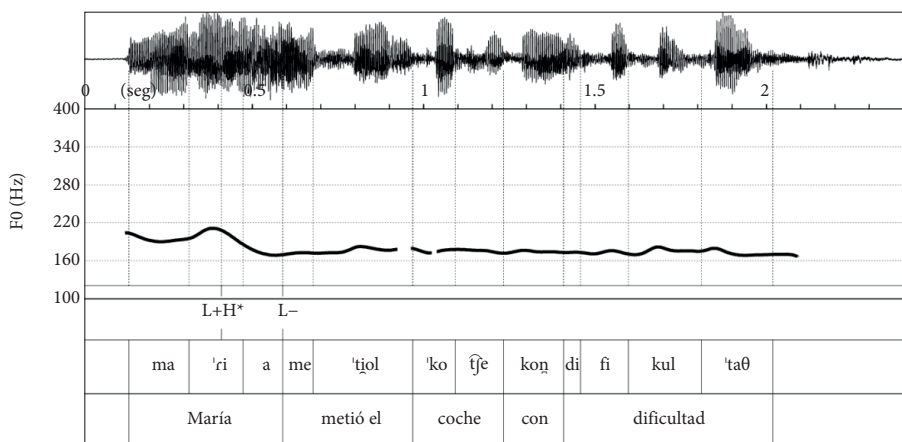


**Figure 5.** Waveform and F0 contour of the information focus declarative *[María]_F metió el coche con dificultad* 'Maria put the car (in the garage) with difficulty' produced by a speaker of Basque Spanish (L1 Basque) from Zeberio
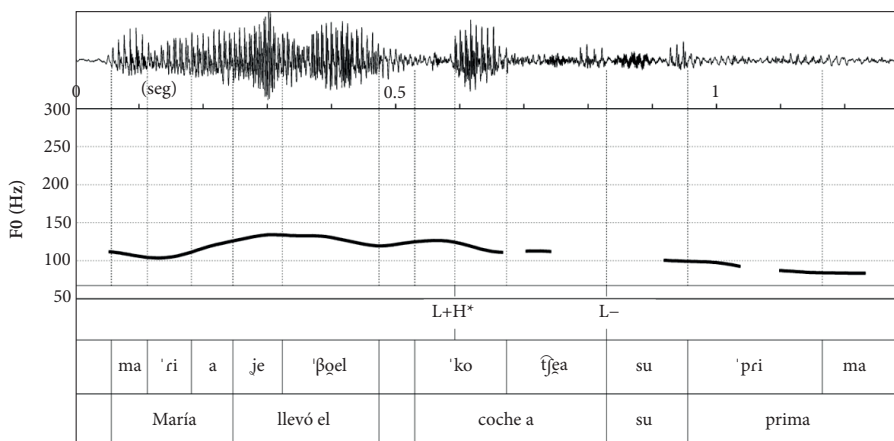


**Figure 6.** Waveform and F0 contour of the information focus declarative *María llevó [el coche]_F a su prima* 'Maria took the car to her cousin' produced by a speaker of Canarian Spanish

Castilian Spanish exhibits a rather different pattern (Figure 7). In the information focus declarative *María trajo con fatiga [las manzanas]$_F$* 'Maria brought the apples with tiredness' produced by a Castilian Spanish speaker, the non-focal material *(María trajo _____ con fatiga* 'Maria brought _____ with tiredness') is moved to non-final position so that the focused constituent, *las manzanas* 'the apples', is located in sentence-final position, where it receives the nuclear accent (a L* followed by a L%). In this example the focused constituent is marked by means of the nuclear accent, and also through a continuation rise which distinguishes non-focal information (*María trajo con fatiga*) from focal information (*las manzanas*). This strategy is reported in Hualde (2005: 261): "[…] if part of the sentence is 'given' or repeated information, the pitch will typically rise to reach a high point at the end of the 'given' portion of the utterance". As we can see in Figure 7, the final boundary tone L% is realized phonetically as a slight rise, which might be related to a higher degree of commitment or spontaneity (as in Italo-Romance varieties: Grice et al. 1997; Savino 2012 for Bari Italian; Roseano et al. 2015 for Friulian; Vanrell et al. 2015 for Sardinian) or simply a methodological artifact due to the type of materials (pictures) used to elicit focus in declarative sentences. The final configurations L+H* L!H% and L* HL% are associated with a nuance of obviousness in Spanish (see Hualde & Prieto 2015). One could hypothesize that the configuration appearing in Figure 7 is the truncated form of L* HL% and that by using this pattern the speaker expresses the notion that what she is saying is obvious, since it already appears in the pictures used to elicit the different focus structures. However, just to be safe, we prefer to maintain the L* L% label until we can clearly demonstrate that this is a different phonological entity, i.e. clearly associated with a different meaning.
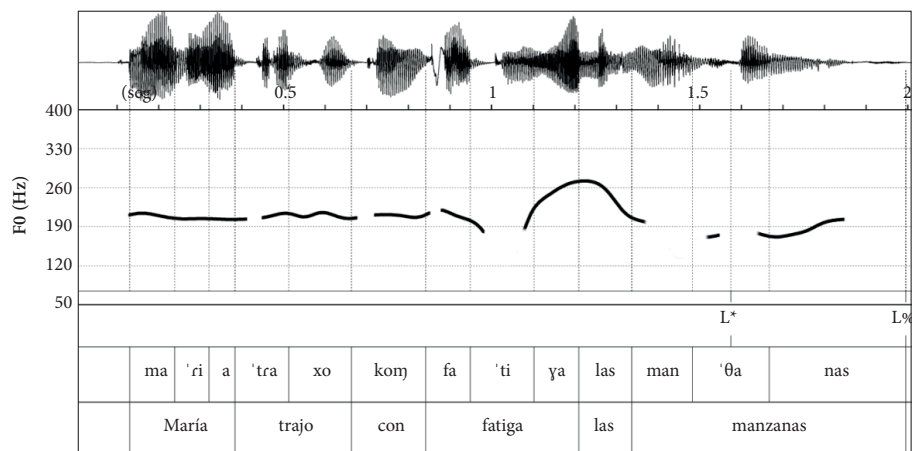


**Figure 7.** Waveform and F0 contour of the information focus declarative *María trajo con fatiga [las manzanas]$_F$* 'Maria brought the apples with tiredness' produced by a speaker of Castilian Spanish

Our data also show that in Basque Spanish (L1 Spanish) information focus can be fronted. In fact this seems to be the preferred strategy for expressing information focus on the direct object. As shown in Figure 8, the direct object *el coche* 'the car' is fronted to clause-initial position where it receives the nuclear accent L+H\*, which is followed by a L- boundary tone and postfocal tonal reduction.
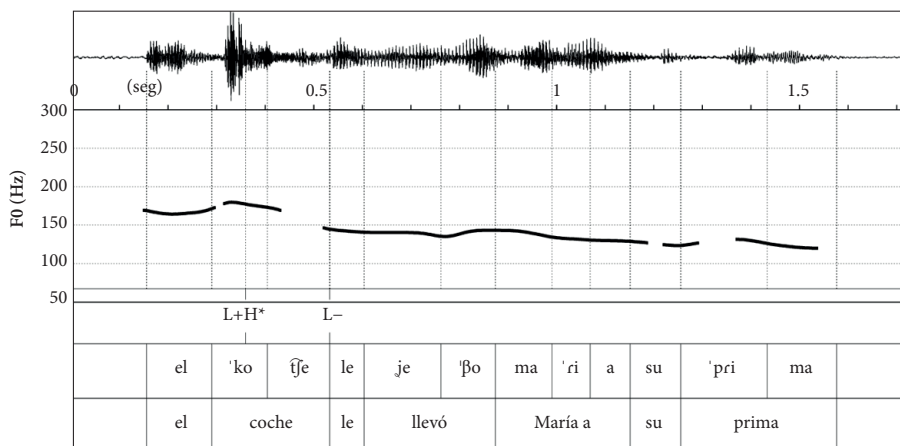


**Figure 8.** Waveform and F0 contour of the information focus declarative *[El coche]_F le llevó María a su prima* 'Maria brought the car to her cousin' produced by a speaker of Basque Spanish (L1 Spanish) from Bilbao

Table 2 summarizes the different syntactic strategies for marking information focus for each Spanish variety and constituent type.

**Table 2.** Frequency of the variable SYNTACTIC STRATEGY for subject and object information foci across different language varieties. The highest numbers are shaded

|  | CanSpa | | CastSpa | | BS-L1Ba | | BS-L1Spa | |
|---|---|---|---|---|---|---|---|---|
|  | S | O | S | O | S | O | S | O |
| It-clefting | 6 | 1 | 5 | 2 | 0 | 0 | 0 | 0 |
| Pseudo-clefting | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inverted pseudo-clefting | 11 | 4 | 2 | 2 | 1 | 0 | 0 | 0 |
| *In situ* | 5 | 8 | 14 | 2 | 20 | 7 | 21 | 4 |
| P-mov | 0 | 3 | 3 | 10 | 0 | 6 | 0 | 4 |
| Fronting | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 11 |
| Other | 1 | 5 | 4 | 2 | 0 | 3 | 0 | 2 |
| **Total** | **24** | **27** | **28** | **29** | **21** | **20** | **21** | **21** |

To determine whether the effects of LANGUAGE VARIETY on the dependent variable SYNTACTIC STRATEGY were significant, non-parametric tests were performed. The Friedman's ANOVA test was performed using SYNTACTIC STRATEGY as the dependent variable and LANGUAGE VARIETY as the independent variable. The SYNTACTIC STRATEGY variable was significantly affected by LANGUAGE VARIETY, $\chi^2(3) = 14.38$, $p < .001$. Wilcoxon tests were used to follow up this finding. In addition, a Bonferroni correction was applied. All effects are reported at a .008 level of significance. Only Basque Spanish (L1 Spanish) significantly differed from Basque Spanish (L1 Basque) ($T = 0$, $r = -.37$) and Canarian Spanish ($T = 106$, $r = -.29$). Overall, these statistical results show that language variety has an important effect on the syntactic strategy used to mark focus and, importantly, that the language variety that differ the most from other Spanish varieties is Basque Spanish (L1 Spanish).

To summarize, regarding syntactic marking of information focus we detected some preferences depending on the language variety and the focused constituent (subject or direct object). Thus, when the focus is on the subject, all language varieties resort either to focus prosodically marked *in situ* (Castilian Spanish and Basque Spanish – L1 Spanish and L1 Basque –) or to clefting (Canarian Spanish). By contrast, when the focus is on the direct object, different strategies are used: focus prosodically marked *in situ* in Canarian Spanish and Basque Spanish (L1 Basque), p-movement in Castilian Spanish and object fronting in Basque Spanish (L1 Spanish). Intonation seems not to depend on language variety, but rather on the position of the focused constituent. Thus, when the focus is in sentence-final position the falling intonational pattern is used, the L* L% Sp_ToBI label (see Figure 7 for Castilian Spanish). However when the focus appears in non-final position, the rising-falling intonational pattern is found, the L+H* L- label in the Sp_ToBI system (see Figures 3–6 and Figure 8).

## 3.2    Contrastive focus

### 3.2.1    *Focus on the subject*

In Canarian Spanish, contrastive focus on the subject was most often marked by means of it-clefting (10 out of 42 cases) and either the L+H* L- (6/10) or the L+<H* H- (4/10) intonational pattern (see Figure 9). Inverted pseudo-clefting was also used as an important strategy by Canarian Spanish speakers (see Table 3). Castilian Spanish speakers resorted primarily to the same syntactic strategy used for information focus, i.e. focus prosodically marked *in situ* (45 out of 67 cases). All these cases presented the L+H* L- nuclear accent. Basque Spanish (L1 Basque) speakers also employed focus marked *in situ* in 19 out of 44 cases (see Figure 10) with the L+H* L- intonational pattern. In 31 out of 48 cases, Basque Spanish

speakers with L1 Spanish chose it-clefting mainly with the L+H* L- pattern (20/31) but also with the L+<H* H- contour (11/31).

Figure 9 shows the contrastive focus declarative *No, no fue Caperucita, fue [Blancanieves]$_{CF}$ quien llevó las manzanas al príncipe* 'No, it was not Little Red Riding Hood, it was Snow White who brought the apples to the prince', produced by a male Canarian Spanish speaker. The clefted constituent *Blancanieves* 'Snow White' bears the nuclear accent L+!H*, followed by a L- phrase accent. This pitch accent is downstepped (lower in pitch) with respect to the previous pitch accent found on the syllable *Blan-*. This secondary accent (or emphatic stress, Nadeu & Hualde 2012) is quite common in contrastive focus declaratives.
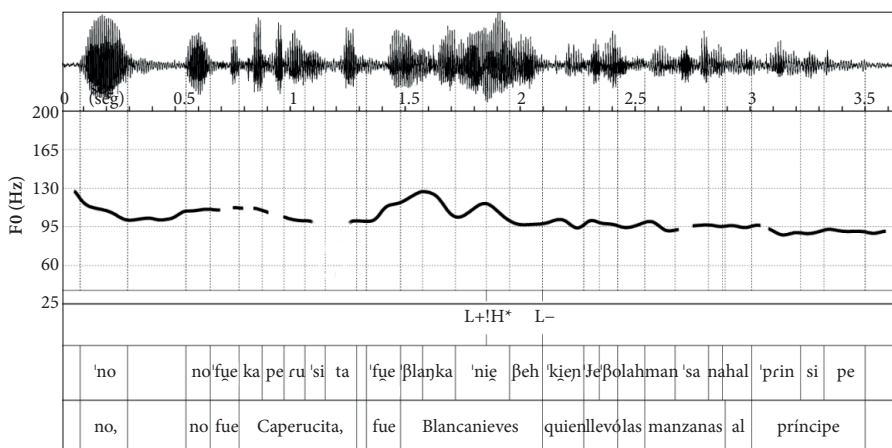


**Figure 9.** Waveform and F0 contour of the contrastive focus declarative *No, no fue Caperucita, fue [Blancanieves]$_{CF}$ quien llevó las manzanas al príncipe* 'No, it was not Little Red Riding Hood, it was Snow White who brought the apples to the prince' produced by a speaker of Canarian Spanish

As shown in Figure 10, in the contrastive focus declarative *No, [María]$_{CF}$ llevó el coche a su prima* 'No, Maria took the car to her cousin' produced by a female Basque Spanish (L1 Basque) speaker from Zeberio, contrastive focus on the subject is marked through a L+H* nuclear accent. The boundary tone is low and precedes reduction on the postfocal material. Both syntactic and intonational strategies shown in Figure 10 are also those preferred by Castilian speakers.

Figure 11 shows the contrastive focus declarative *No, fue [Blancanieves]$_{CF}$ la que trajo las manzanas a los enanitos* 'No, it was SNOW WHITE who brought the apples to the dwarves' produced by a female Basque Spanish (L1 Spanish) speaker from Bilbao. *Blancanieves* is the clefted constituent as well as the constituent that is focused, but it does not bear the nuclear accent, which falls on the constituent

*a los enanitos* 'to the dwarves' in final position (see the concluding section of this paper for an explanation of this phenomenon). The focus constituent bears the intonational pattern L+<H* H-, which marks continuation, i.e. non-finality.
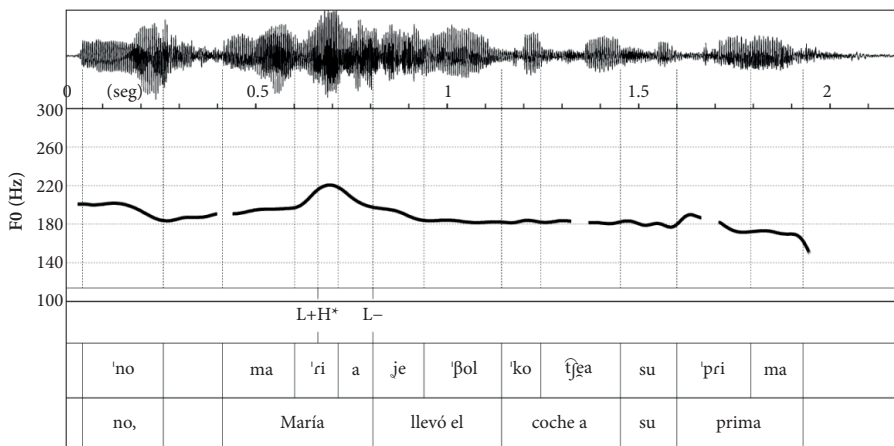


**Figure 10.** Waveform and F0 contour of the contrastive focus declarative *No, [María]_CF llevó el coche a su prima* 'No, Maria brought the car to her cousin' produced by a Basque Spanish (L1 Basque) speaker from Arratia
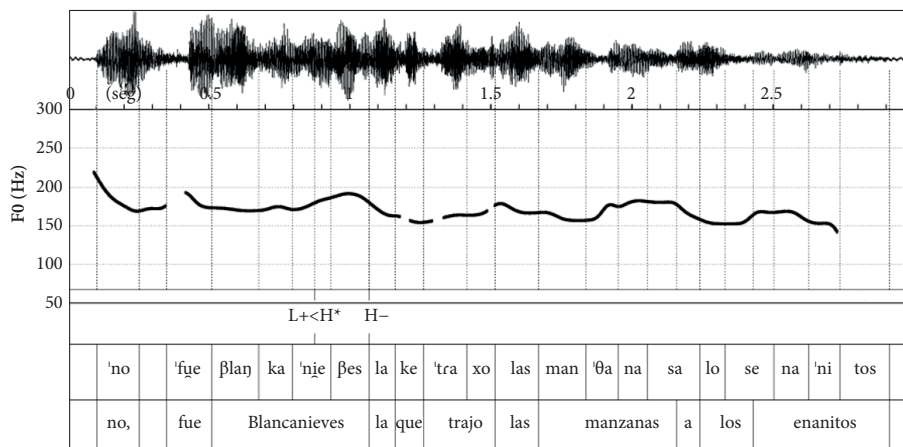


**Figure 11.** Waveform and F0 contour of the contrastive focus declarative *No, fue [Blancanieves]_CF la que trajo las manzanas a los enanitos* 'No, it was Snow White who brought the apples to the dwarves' produced by a Basque Spanish (L1 Spanish) speaker from Bilbao

### 3.2.2   *Focus on the direct object*

Contrastive focus on the direct object in Canarian Spanish is most often marked prosodically *in situ* (10 out of 24 cases) by using the L+H* L- pattern, as seen in Figure 12. In Castilian Spanish we find fronting of the direct object (in 10 out of 28 cases), which bears a L+H* L- intonational configuration (see Figure 13). Basque Spanish (L1 Basque) speakers resort either to it-clefting (7 out of 22 cases) and a L+H* L- tonal contour (see Figure 14) or to p-movement along with a L* L% configuration. Finally, Basque Spanish (L1 Spanish) speakers prefer it-clefting (8 out of 25 cases). The intonational pattern is always L+H* L-.

Figure 12 shows the contrastive focus declarative *No, Blancanieves llevó [manzanas]*$_{CF}$ *al príncipe* 'No, Snow White brought apples to the prince' produced by a male Canarian Spanish speaker. Focus is marked prosodically by means of phrasing and a L+!H* accent. As in the example in Figure 7 above, the H- boundary tone aligned with the end of the intermediate phrase serves to mark the end of the non-focal portion (*Blancanieves llevó* 'Snow White brought'), then a L+!H* is realized on the direct object *manzanas* 'apples', which in turn is separated from the following non-focal material by a L- boundary tone. Postfocal material is tonally compressed.
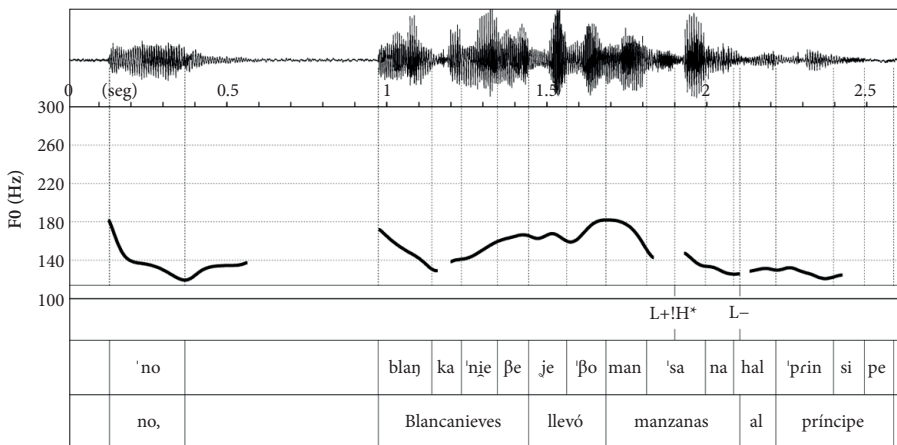


**Figure 12.** Waveform and F0 contour of the contrastive focus declarative *No, Blancanieves llevó [manzanas]*$_{CF}$ *al príncipe* 'No, Snow White brought apples to the prince' produced by a speaker of Canarian Spanish

In Castilian Spanish, in the declarative sentence with a contrastive focus shown in Figure 13, the focused direct object *la carta* 'the letter' is fronted and additionally receives a L+H* nuclear accent. A boundary tone L- marks the end of the focal material. As usual, postfocal stretch is characterized by tonal reduction.
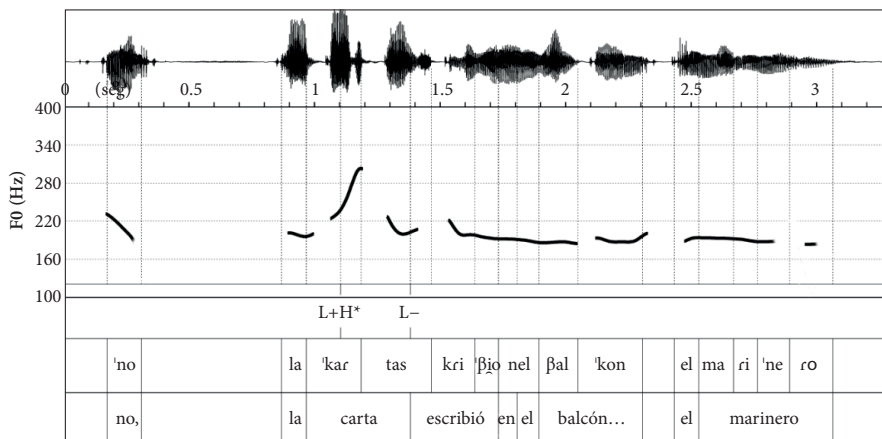
**Figure 13.** Waveform and F0 contour of the contrastive focus declarative *No, [la carta]*$_{CF}$ *escribió en el balcón el marinero* 'No, the sailor wrote the letter on the balcony' produced by a speaker of Castilian Spanish

Both Basque Spanish varieties (L1 Basque and L1 Spanish) use it-clefting and L+H* nuclear pitch accent on the cleft constituent as a preferred strategy for marking contrastive focus on the direct object (see Figure 14). As seen in this figure, the direct object *las manzanas* 'the apples' bears a L+H* nuclear pitch accent, which precedes a L- boundary tone. As observed in the data analyzed so far, the L- boundary tone precedes tonal compression of the non-focal material.
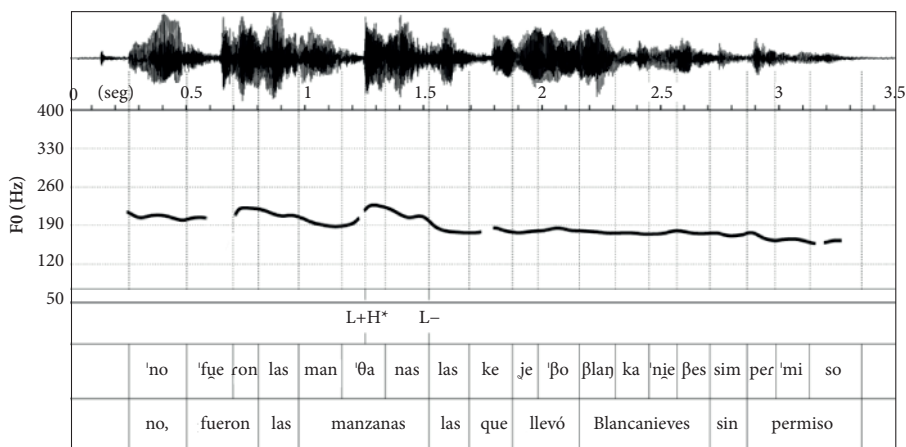


**Figure 14.** Waveform and F0 contour of the contrastive focus declarative *No, fueron [las manzanas]*$_{CF}$ *las que llevó María sin permiso* 'No, it was the apples that Snow White took without permission' produced by a Basque Spanish (L1 Basque) speaker from Gernika

Table 3 summarizes the different syntactic and prosodic strategies for each Spanish variety and constituent under contrastive focus.

**Table 3.** Frequency of the variable SYNTACTIC STRATEGY for subject and object contrastive foci across different language varieties. The highest numbers are shaded

|  | CanSpa | | CastSpa | | BS-L1Ba | | BS-L1Spa | |
|---|---|---|---|---|---|---|---|---|
|  | S | O | S | O | S | O | S | O |
| It-clefting | 10 | 2 | 18 | 5 | 17 | 7 | 31 | 8 |
| Pseudo-clefting | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inverted pseudo-clefting | 10 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| *In situ* | 7 | 10 | 45 | 6 | 19 | 6 | 16 | 5 |
| P-mov | 1 | 8 | 1 | 6 | 4 | 7 | 0 | 7 |
| Fronting | 0 | 0 | 0 | 10 | 0 | 1 | 0 | 3 |
| Other | 9 | 0 | 3 | 0 | 3 | 0 | 0 | 2 |
| Total | 42 | 24 | 67 | 28 | 44 | 22 | 48 | 25 |

We performed a Friedman's ANOVA using SYNTACTIC STRATEGY as a dependent variable and LANGUAGE VARIETY as an independent variable. A significant effect of LANGUAGE VARIETY on SYNTACTIC STRATEGY was found, $\chi^2(3) = 99.03$, $p < .001$. Wilcoxon tests were used to confirm this finding (Bonferroni correction: .008 level of significance). Thus, the syntactic strategies used by Canarian Spanish speakers were significantly different from those used by all other speakers (Canarian Spanish vs. Castilian Spanish, $T = 27$, $r = -.69$; Canarian Spanish vs. Basque Spanish (L1 Basque), $T = 27$, $r = -.64$; Canarian Spanish vs. Basque Spanish (L1 Spanish), $T = 27$, $r = -.72$). In addition, Basque Spanish (L1 Spanish) speakers significantly differed from Basque Spanish (L1 Basque) speakers, $T = 0$, $r = -.37$. Thus, as in information focus, an important effect of LANGUAGE VARIETY on SYNTACTIC STRATEGY was attested meaning that different Spanish varieties resort to different syntactic strategies to mark focus. This difference is statistically significant only in Canarian Spanish.

In sum, contrastive focus is marked differently depending on language variety and focused constituent. Thus, for subject contrastive focus, Canarian Spanish and Basque Spanish (L1 Spanish) speakers prefer clefting, whereas Castilian Spanish and Basque Spanish (L1 Basque) speakers resort to focus prosodically marked *in situ*. For object contrastive focus, clefting is preferred by Basque Spanish speakers, fronting by Castilian Spanish speakers and *in situ* focus by Canarian Spanish speakers. Interestingly, intonation does not appear to depend either on language variety or on focus type, but on the final/non-final position of focus. Thus, since contrastive focus tends to be in non-final position, a rising-falling intonational (L+H* L-) pattern is used (see Figures 9–14).

## 4.  A preliminary perception experiment

In connection with our research question 3 regarding the role of language variation in the expression of focus, one might ask whether it is possible to attribute the different syntactic patterns found in the realization of focus to diatopic variation alone or if they might also be due to interspeaker variation. As an anonymous reviewer points out, this is especially true when the data do not come from a large number of speakers for each language variety. In order to address this question, we performed a preliminary judgment task experiment. We created a series of pragmatic contexts consisting of a general statement to introduce the context (e.g. *El bizcocho que prepararon los enanitos estaba delicioso* 'The sponge cake prepared by the dwarves was delicious'), a question to elicit a structure with information/ contrastive focus either on the subject or on the verb (e.g. *¿Quién les trajo las manzanas?* 'Who brought the apples to them?'), and a sentence with focus either on the subject or on the object produced with different syntactic strategies (*in situ* focus, p-movement, fronting, inverted pseudo-cleft, it-clefting) as well as the most frequent intonational pattern found in production for each syntactic strategy (e.g. [Blancanieves]$_F$ *me dijeron que se las trajo* 'I was told that Snow White brought them to them') (see the Appendix for all the contexts used in this preliminary judgment task experiment). The sentences with focus were produced by three different native speakers of each of the language varieties under study (Canarian, Castilian, and Basque Spanish). The participants were asked to rate the degree of perceived naturalness of the target responses to the different questions on a seven-point Likert scale (1=totally unnatural, 7=totally natural). Ten volunteers for each language variety (10 Canarian speakers, 10 Madrid speakers, 10 Basque Spanish (L1 Basque) speakers, and 10 Basque Spanish (L1 Spanish) speakers) participated in the experiment. The experiment was run online using Survey Gizmo software and lasted approximately 15 minutes.

Figures 15 and 16 show the results as the mean of the NATURALNESS RATING (dependent variable) and the standard error for each focus type (information focus – Figure 15 and contrastive focus – Figure 16). We were particularly interested in testing whether the results obtained in production would be in any way reproduced in perception – that is, whether the listeners would rate the preferred strategies in production as sounding the most natural. With regard to the information focus results (Figure 15), the following observations can be made: (a) *in situ* focus for both the subject and the direct object was rated as one of the most natural strategies in Canarian Spanish (Figure 15, upper panel, left); (b) p-movement tended to be rated as the most natural in all varieties (Figure 15) although this might be

a.
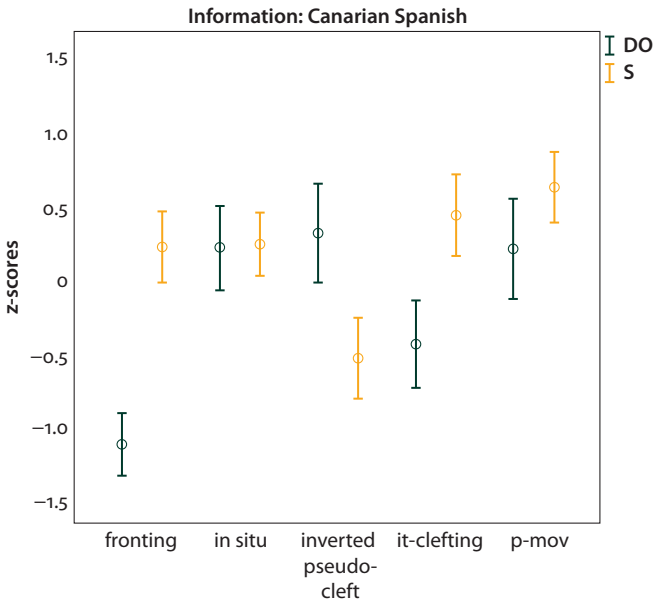


b.
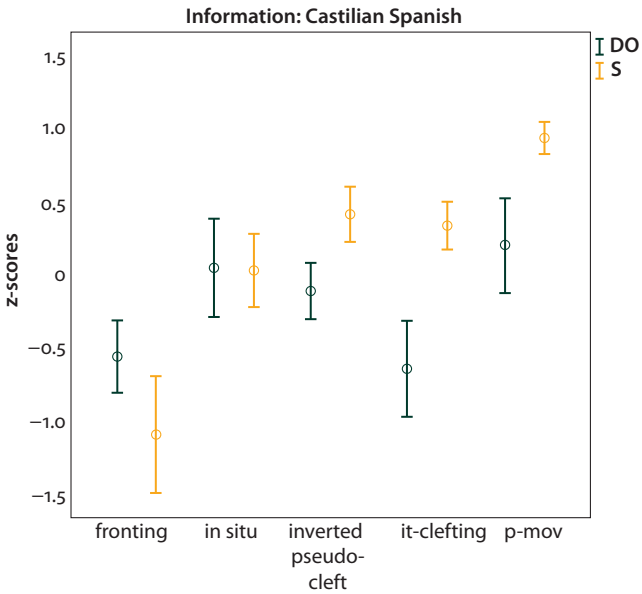
c.



d.



**Figure 15.** Mean naturalness rating for each syntactic strategy, constituent under focus, and language variety in information focus

**a.**



**Contrastive: Canarian Spanish**

**b.**
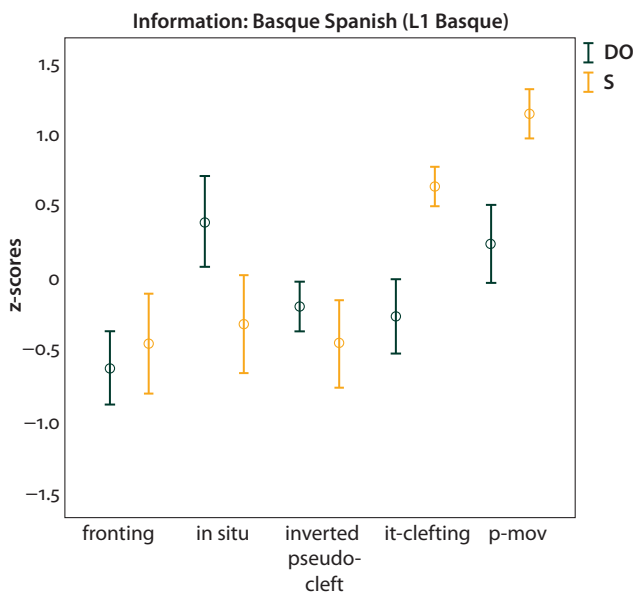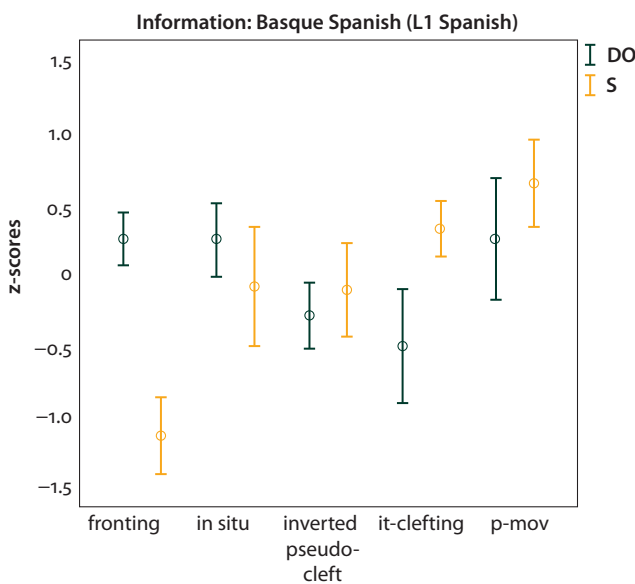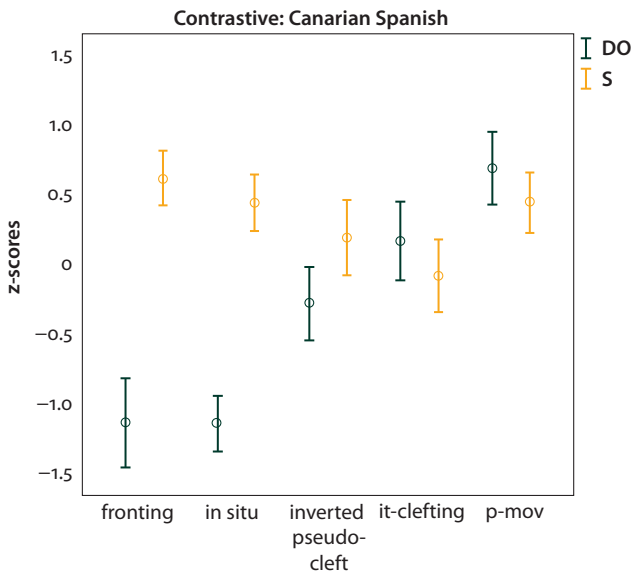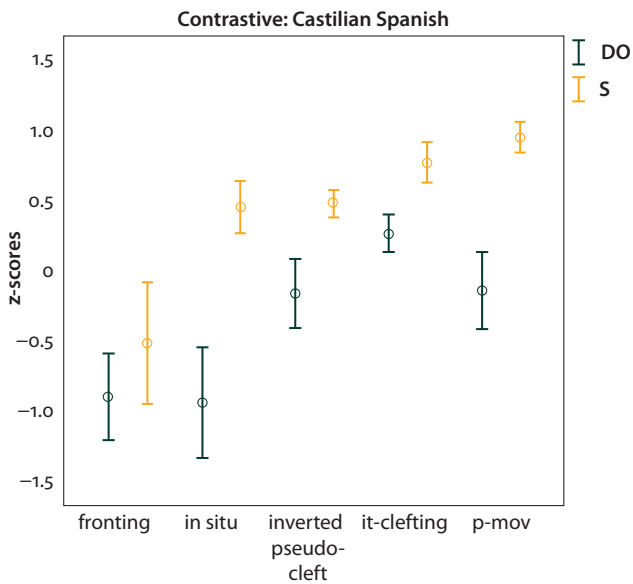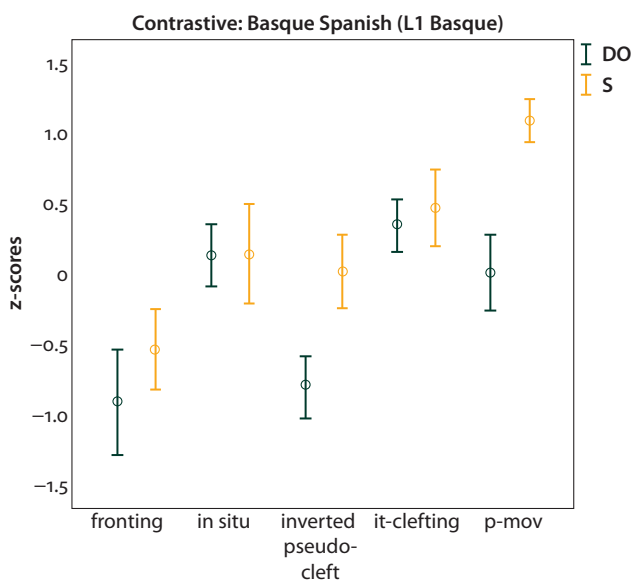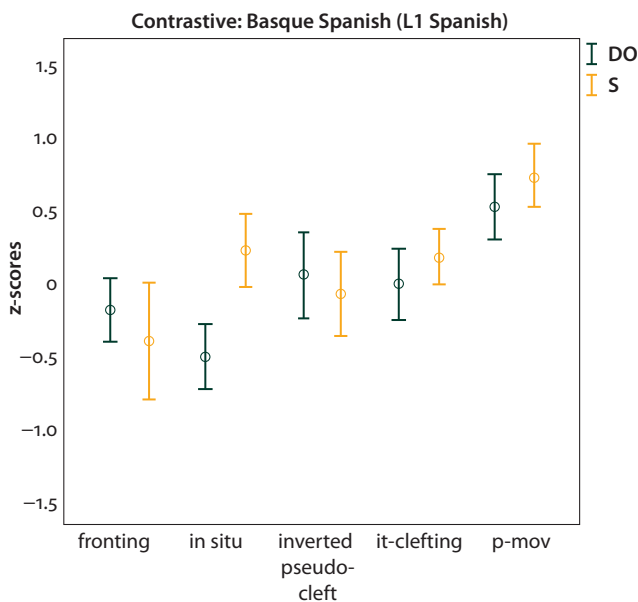


**Contrastive: Castilian Spanish**

c.



d.



**Figure 16.** Mean naturalness rating for each syntactic strategy, constituent under focus, and language variety in contrastive focus

due to the types of constructions used;[7] and (c) interestingly, fronted direct objects were rated as very natural by Basque Spanish (L1 Spanish) speakers (just as they were in production, see Table 2). As for contrastive focus, (a) p-movement and it-clefting tended to be rated as the most natural strategies (see Figure 16) while (b) unexpected results were found for Castilian Spanish (Figure 16, upper panel, right), since fronting was generally considered the least natural strategy in this variety.[8] In any case, though these results seem to be consistent with those obtained in production, this is undoubtedly a topic that deserves to be investigated further.

## 5. Discussion and conclusions

In this study we analyzed the realization of focus in four varieties of Spanish: Canarian Spanish, Castilian Spanish, Basque Spanish as spoken by L1 Basque speakers, and Basque Spanish as spoken by L1 Spanish speakers. The task used to elicit the data was a set of prompt questions about short picture stories presented in a PowerPoint slide show. The questions were designed to elicit information and contrastive/corrective narrow focus on the subject and direct object of sentences which also contained an indirect object (or an adjunct). The results were analyzed with regard to syntax and prosody. At the syntactic level, we identified the syntactic strategy used (focus fronting, p-movement, etc.) by the speakers. At the prosodic level, we transcribed the intonational configuration of the focused constituent using the ToBI system (Hualde & Prieto 2015). We then quantified two dependent variables: SYNTACTIC STRATEGY (it-clefting, pseudo-clefting, inverted pseudo-clefting, p-movement, focus fronting, *in situ* focus) (see Table 1) and INTONATIONAL PATTERN. Our results demonstrate that the focused constituent necessarily aligns with the right edge of either an intermediate phrase L- boundary or an intonational phrase. However, this requirement is satisfied through different phonological and syntactic strategies, which depend on the language variety, the constituent under focus, and the focus type, specifically in the case of Castilian Spanish and Basque Spanish (L1 Spanish) speakers.

Focus subjects in the Spanish varieties under study may appear either clefted or prosodically marked *in situ* by means of a L+H* nuclear accent. Pseudo-clefted and *in situ* subjects bear the nuclear accent and in both cases we find insertion of an intermediate phrase L- boundary at the right edge of the focused constituent

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7. As shown in the Appendix, in the structures created for p-movement in focused subjects the DO was always realized as a clitic. This is known to be generally more acceptable than cases in which the DO is realized as a full DP (see Gabriel 2010 and Uth 2014, among others).

8. This may be due to the particular intonation patterns of the Madrid Spanish speaker who produced the experimental stimuli.

and compression of the postfocal material. Interestingly, focused subjects in it-clefts do not necessarily bear the nuclear accent (although this is an option). Sometimes merely a L+<H⋆ prenuclear accent followed by a H- boundary tone (see Figure 11) is found. In these cases, the nuclear accent falls on the sentence-final position. These results are not totally unexpected, since they follow the prediction made by Moreno Cabrera (1999: 4297) and are supported by recent empirical studies (Feldhausen & Vanrell 2015; Sánchez-Alvarado 2018). In the case of focused objects, there are other possible strategies, the most common being: clefting of the focused constituent, syntactic movement either of the non-focal (p-movement) or the focal (fronting) constituents, and also focus prosodically marked *in situ*. In all the strategies mentioned (with the exception of p-movement), focus constituents are right-aligned with an intermediate phrase L- boundary. In the case of p-movement, the focused object is right-aligned with an intonational phrase L% boundary.

An important finding, which supports Moreno Cabrera (1999) but does not fully agree with what is claimed by Zubizarreta (1998, 1999), is that the "strength" of the focus (contrastive/corrective vs. informative) is directly related to the possibility of using it-clefts as a focus-marking strategy. As seen in Tables 2 and 3, it-clefts constitute a preferred strategy only for contrastive focus.

Concerning prosodic marking, we saw that intonation seems to depend neither on language variety nor on focus type, but rather on the position of the focused constituent. Thus, focused constituents in sentence-final position are characterized by a L⋆ L% nuclear configuration, whereas non-final foci present the L+H⋆ L- configuration. This is directly linked to the subject/non-subject asymmetry (already attested for Spanish by Zubizarreta 1998 and for Italian by Frascarelli 2000; Samek-Lodovici 2005) we found in our data, in the sense that subject focus always requires a special prosodic marking. As seen in Figure 7, while non-subject foci can bear the L⋆ L% pattern, which is the pattern found in broad focus declaratives in Peninsular Spanish, subject foci can bear the L+<H⋆ H- pattern, the default pattern for non-focused subjects, only in the case of it-clefts.

We return now to our three research questions. Concerning RQ1, i.e. whether Spanish could still be considered a word order language in the marking of focus, our results demonstrate that this statement should be refined to take into account important factors influencing the realization of focus, such as the nature of the focused constituent and the language variety. In particular, we saw that focused subjects tend to be realized *in situ* irrespective of focus type or language variety[9] (see Tables 2 and 3) and that some varieties (i.e. Canarian Spanish) more often

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**9.**   Note that Canarian Spanish, by contrast, resorts more often to clefting. We interpret this as additional evidence of subject/non-subject asymmetries, since subject focus requires a special structural marking (compared to object focus).

resort to focus marked *in situ* than to syntactic movement, especially when the direct object is under focus. These results for Canarian Spanish are not unexpected and are supported by the findings of Vanrell and Fernández-Soriano (2014) which revealed that Canarian Spanish shows a preference for preverbal subjects in yes-no questions, including non-pronominal subjects, indicating that no overt movement takes place. This suggests that Canarian Spanish, compared to other varieties such as Castilian Spanish, is – to use a term coined by Vallduví (1991) – a [+ plastic] language variety in the marking of focus. The author shows that a clear distinction can be drawn between languages that mark focus through prominence shift (see (9) for English), [+plastic] languages, and languages which utilize syntactic movement optionally combined with prosodic mechanisms (see (10) for Catalan), [−plastic] languages. Therefore, in English the intonational prominence may be shifted to different positions in the clause while the syntactic structure remains constant, as illustrated in (9), while, by contrast, in Catalan the intonational prominence is fixed at the end of the intonation phrase and word order variation is needed for marking focus (see the examples in (10)).

(9)  a.  *The boss hates BROCCOLI.*
     b.  *The boss HATES broccoli.*
     c.  *The BOSS hates broccoli.*

(10)  a.  *Fiquem  el  ganivet  al      CALAIX.*
          put      the knife    to.the  drawer
          'We put the knife in the drawer.'
      b.  *\*Fiquem el GANIVET al calaix.*

As demonstrated in Sections 3.1. and 3.2., also using statistical tests, Canarian Spanish clearly differs from the other Spanish varieties in disfavoring syntactic movement as a focus marker. In this regard, Canarian Spanish would be more similar to English as far as focus marking is concerned. This comes as no surprise, since Caribbean varieties have also been reported to be [+plastic] (Armstrong 2010 for Puerto Rican Spanish) and share many commonalities with Canarian Spanish (e.g. the use of the circumflex intonational pattern, the possibility of not having subject inversion in wh- questions, deletion of final *-s*). So in response to RQ1, our results are more in line with Face & D'Imperio's (2005) claim that Spanish utilizes word order and intonation to different degrees, depending on factors such as language variety, focused constituent, and focus type.

RQ2 addresses the correlation between focus type and different syntactic/phonological strategies, and aims to determine whether these strategies corroborate Féry's (2013) findings. In our data, we saw that Zubizarreta's (1998, 1999) claim that p-movement specializes as a mechanism to mark information focus only holds for focused objects in Castilian Spanish, and that fronting, focus *in situ*, and clefting are

not necessarily restricted to contrastive focus. Our data also show that as far as focus type is concerned, it seems that there are no general strategies to mark each type of focus; rather, each variety has its preferred strategies. Thus, for instance, fronting is a very common device for marking information focus on the direct object in Basque Spanish (L1 Spanish) (cf. Jiménez Fernández 2015 for Southern Spanish),[10] but very rare as a strategy for marking contrastive focus in the same variety. Overall, this constitutes evidence for the decisive role of language variation (RQ3) in the expression of focus. As proposed by Féry (2013), we observed that focus tends to be aligned prosodically with the right edge of a prosodic constituent in all the Spanish varieties under study, but there is variation in the strategies they use (whether syntactic or phonological) to fulfill this alignment requirement: syntactic movement (p-movement or focus fronting) in the case of Castilian Spanish, insertion of an intermediate phrase boundary (in it-clefts or pseudo-clefts) in Canarian Spanish, etc. Since in all the language varieties studied the focused constituent bore the nuclear accent, this does not constitute conclusive evidence in favor of the claim by Féry (2013), given that alignment seems to be always accompanied by prominence. But it must also be noted that, as we saw, in the case of it-clefts, the focused constituent may, but does not necessarily need to, bear the nuclear accent. Alternatively, the focused constituent could present a continuation rise (L+<H* H−) (see Figure 11). In this case, focus would be expressed on the basis of alignment alone, which suggests that the proposal made by Féry (2013) also works for Spanish, as already proposed by Feldhausen and Vanrell (2015).

Regarding RQ3, both our statistical tests and the preliminary results obtained in our judgment task experiment demonstrate that the variation found in the realization of focus can be attributed to diatopic variation. First, the statistical results obtained for each focus type including SYNTACTIC STRATEGY as the dependent variable and LANGUAGE VARIETY as the independent variable show that Canarian Spanish clearly differs from the other varieties (see Sections 3.2.) in the realization of contrastive focus. A statistically significant effect is also found for Basque Spanish (L1 Spanish) in information focus (see Section 3.1.). Second, we performed a judgment task experiment based on question-answer pairs using the main syntactic/

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**10.** Focus fronting is an available strategy in both Southern Spanish and Basque Spanish (L1 Spanish), but probably for different reasons. A possible hypothesis to explain the latter case might be contact with Basque, a language in which focal information must be preverbal. The information focus declarative [*El coche*]*_F le ha llevado María a su prima* 'Maria brought the car to her cousin' would show the same constituent order in Gernika Basque (p.c. Leire Gandarias): [*Kotxea*]*_F eraman zion Mariak bere lehengusinari*. Note, however, that bilingual speakers with L1 Spanish produced more fronting constructions than bilingual speakers with Basque as their first language. As one of the editors points out, this is similar to what has been found to be the case for Yucatecan Spanish-Mayan bilinguals (Uth, 2016) and deserves further research.

intonational strategies found in the production tests. As noted, regarding infor-mation focus, the preliminary results demonstrated that *in situ* focus for both the subject and the direct object is rated as one of the most natural strategies in Canarian Spanish and that fronted direct objects are also rated as very natural for Basque Spanish (L1 Spanish) speakers (as they were in production, see Table 2). As for contrastive focus, p-movement and it-clefting tend to be rated as the most natural strategies for all varieties. These results point to a certain parallel between production and perception of focus in the different varieties, which strengthens the hypothesis that diatopic variation plays a role in the syntactic realization of focus. However, we should be cautious about interpreting these results as definitive evidence. For this reason, we plan to conduct more perception experiments along the lines of those presented here, carefully controlling for methodological aspects like the precise production of the target sentences by native speakers, the presence of fillers in the experimental materials, etc.

Finally, we claim that semi-spontaneous picture-based experiments can be successfully used to investigate focus at the syntax-prosody interface. This is sup-ported by the fact that our results for Castilian Spanish, for instance, partially con-verged with previous observations made on the basis of speakers' intuitions (use of p-movement as a relevant strategy for marking information focus but only with focused objects) (Zubizarreta 1998, 1999). The fact that two methods seem to lead to the same results validates our data. However, this is only true for syntactic strat-egies. When we look at the intonational part, we see that there are some effects, such as the presence of a slight final rise (see Figure 7), that could be task-induced. By using the final rise, the participants might be manifesting their bewilderment at having to reply to questions whose answers were already evident from the pic-tures. An alternative methodology that might solve this problem would be to avoid using the same stories/pictures for the full battery of questions (see (7)). Changing the picture every two questions, for instance, would prevent the participants from having the impression that what they were being asked was self-evident.

To sum up, our results show that both word order and intonation are available mechanisms for marking focus in Spanish but that factors such as dialectal vari-ation, syntactic position/function of the constituent under focus, and focus type play an important role as well.

## Acknowledgments

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# Appendix

Contexts used in the preliminary judgment task experiment.

| | Information focus S | Information focus DO | Contrastive focus S | Contrastive focus DO |
|---|---|---|---|---|
| *In situ* focus | – *Parece que el vecino ya no tiene que coger el bus para ir a trabajar. ¿Quién le trajo el coche?*<br>– *[María]$_F$ se lo trajo.*<br>– Apparently our neighbor does not have to take the bus anymore. Who brought him the car?<br>– Maria brought him the car. | – *Parece que, desde que vino María, el vecino ya nunca toma transporte público.*<br>– *¿Qué le trajo María?*<br>– *María le trajo [el coche]$_F$ al vecino.*<br>– Apparently since Maria came, the neighbor does not take public transportation anymore.<br>– What did Maria bring to him?<br>– Maria brought the car to the neighbor. | – *Me dijiste que Talía le trajo el coche, ¿no?*<br>– *No, [María]$_{CF}$ se lo trajo.*<br>– You told me that Talia brought him/her the car, didn't she?<br>– No, maria brought it to him/her. | – *Tanta expectación solo por un broche…*<br>– *No, he dicho que María le trajo [el coche]$_{CF}$ a su vecino.*<br>– Such an expectation just for a brooch…<br>– No, I said that Maria brought the car to her neighbor. |

|  | Information focus S | Information focus DO | Contrastive focus S | Contrastive focus DO |
|---|---|---|---|---|
| P-movement | – *El bizcocho que prepararon los enanitos estaba delicioso. ¿Quién les trajo las manzanas?*<br>– *Se las trajo [Blancanieves]ₓ*<br>– The sponge cake prepared by the dwarves was delicious. Who brought the apples to them?<br>– Snow White brought them to them. | – *Blancanieves estuvo aquí para traer algo a los enanitos.*<br>– *¿Qué les trajo Blancanieves?*<br>– *Blancanieves les trajo a los enanitos [las manzanas]ₓ*<br>– Snow White was here to bring something to the dwarves.<br>– What did Snow White bring to the dwarves?<br>– Snow White brought the apples to the dwarves. | – *Qué extraño que Caperucita trajera las manzanas a los enanitos, ¿no?*<br>– *No, se las trajo [Blancanieves]_{CF}*<br>– How strange that Little Red Riding Hood brought the apples to the dwarves, isn't it?<br>– No, Snow White brought them to them. | – *¡Qué bien que Blancanieves trajera las bananas a los enanitos…!*<br>– *No, Blancanieves les trajo a los enanitos [las manzanas]_{CF}*<br>– How nice that Snow White brought the bananas to the dwarves…!<br>– No, Snow White brought the apples to the dwarves. |
| Fronting | *El bizcocho que prepararon los enanitos estaba delicioso. ¿Quién les trajo las manzanas?*<br><br>– *[Blancanieves]ₓ me dijeron que se las trajo.*<br><br>The sponge cake prepared by the dwarves was delicious. Who brought the apples to them?<br><br>– I was told that Snow White brought them to them. | – *El vecino me dijo que finalmente su suegra estaba contenta, porque le había enseñado algo.*<br>– *¿Qué le enseñó el vecino?*<br>– *[El coche]ₓ le enseñó el vecino.*<br>– The neighbor told me that finally his mother-in-law was happy, because he had shown her something.<br>– What did the neighbor show to her?<br>– The neighbor showed the car to her. | – *Me dijiste que había traído las manzanas Talía.*<br>– *No, [María]_{CF} te dije que había traído las manzanas.*<br>– You told me that Talia had brought the apples.<br>– No, I told you that Maria had brought the apples. | – *¿Y el vecino fue a casa de su suegra solo para enseñarle el broche…?*<br>– *No, [el coche]_{CF} le enseñó el vecino.*<br>– And the neighbor went to his mother-in-law's place just to show her the brooch…?<br>– No, the neighbor showed the car to her. |

*(continued)*

| | Information focus S | Information focus DO | Contrastive focus S | Contrastive focus DO |
|---|---|---|---|---|
| Inverted pseudo-cleft | – *La dama ya está informada de todo. Por cierto, ¿quién le envió la carta?*<br>– *[El marinero]$_F$ fue quien se la envió.*<br>– The lady is already informed. By the way, who sent her the letter?<br>– It was the sailor who sent it to her. | – *El marinero no sabía bien lo que debía enviar a su dama. Pero al final se decidió.*<br>– *¿Qué le envió el marinero?*<br>– *[La carta]$_F$ fue lo que le envió el marinero.*<br>– The sailor was uncertain about what to send to his lady. At the end he made up his mind.<br>– What did the sailor send to her?<br>– The letter was what the sailor sent to her. | – *No sé por qué el butanero envió la carta a la dama.*<br>– *No, [el marinero]$_{CF}$ fue quien se la envió.*<br>– I do not know why the gas-bottle delivery man sent the letter to the lady.<br>– No, it was the sailor who sent it to her. | – *Dijiste que el marinero envió la tarta a su dama, ¿verdad?*<br>– *No, [la carta]$_{CF}$ fue lo que envió el marinero.*<br>– You said that the sailor sent the cake to his lady, didn't he?<br>– No, the letter was what the sailor sent. |
| It-clefting | – *El encargado me enseñó todo lo que le regalaron con motivo de su jubilación.*<br>– *¿Quién le regaló el libro?*<br>– *Fue [Juan]$_F$ quien se lo regaló.*<br>– The manager showed me all he got for his retirement.<br>– Who gave him the book?<br>– It was <u>Juan</u> who gave it to him. | – *El sobrino de Juan me estuvo enseñando todos los regalos de cumpleaños.*<br>– *¿Qué le regaló Juan?*<br>– *Fue [un libro]$_F$ lo que le regaló Juan a su sobrino.*<br>– Juan's nephew showed me all the presents he got for his birthday.<br>– What did Juan give him?<br>– It was a book that Juan gave him. | – *Qué extraño que Damián regalara un libro al encargado. Si Damián no tiene ni idea de libros…*<br>– *No, fue [Juan]$_{CF}$ quien se lo regaló.*<br>– How strange that Damian gave a book to the manager. Damian knows nothing about books…<br>– No, it was Juan who gave it to him. | – *No me puedo creer que Juan le regalase un móvil a su sobrino… ¡Si Juan odia este tipo de regalos!*<br>– *No, fue [un libro]$_{CF}$ lo que le regaló a su sobrino.*<br>– I cannot believe that Juan gave a cell phone to his nephew… Juan hates those types of presents!<br>– No, it was a book that Juan gave to his nephew. |

# Focus realization
# at the prosody-syntax interface

## Yucatecan Spanish opposed
## to Standard Mexican Spanish

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This article investigates the prosodic and syntactic realization of broad and narrow contrastive focus in Yucatecan Spanish compared to standard Mexican Spanish. Based on data from two production experiments and one acceptability judgment test, it is suggested that Yucatecan Spanish is diametrically opposed to standard Mexican Spanish in this domain of syntactic-prosodic realization of Information Structure. Due to the interrelatedness and the general nature of the differences, Yucatecan Spanish is argued to instantiate a different type of language compared to standard (Mexican) Spanish in this regard. Finally, it is argued that this typological particularity is probably to be traced back to the variety's long standing and intensive contact with Yucatec Maya.

## 1. Introduction

This article investigates the syntax and prosody of focus marking in Yucatecan Spanish (YS) in comparison to standard Mexican Spanish (MS). The particularity of the Yucatecan variety of Spanish is unanimously acknowledged by both the mainly descriptive linguistic literature concerning this variety, just as well as the (linguistically naïve and sophisticated) speakers of any of the Mexican Spanish varieties, including the Yucatecan Spanish speakers themselves. In the corresponding literature YS is generally said to be subject to important transfer from Yucatec Maya (YM) at all levels of linguistic representation. For example, the standard works treating the peculiarities of the YS 'accent' generally point to the variety's resemblance to YM when it comes to occlusive consonants (cf. e.g. Barrera Vásquez 1977: 71 a.o.), glottalization of consonants and vowels (e.g. Lope Blanch 1987: 107), and intonation (Suárez Molina 1996: 63, Mediz Bolio 1951: 19). At the lexical level, the

variety stands out from the other varieties of Mexican Spanish due to its considerable amount of regional vocabulary which equally stems more or less directly from the intensive contact with YM. First of all, YS is characterized by a high amount of direct borrowings from YM, which show different degrees of integration into the grammar of YS. For example, the adjective *kuch* ('shabby') in (1a.) is used analogously to other Spanish adjectives. Contrary to that, the intensifier *hach* ('very') in (1b.) is integrated into the sentence structure according to its Yucatec Mayan subcategorization frame.

(1)  a.  *Está       muy **kuch**  tu      sombrero.*
         bePRS3SG very tacky  your  sombrero
         'Your hat is very tacky.'                    (Suárez Molina 1996: 111)

   b.  *Me **hach**  gusta        ese traje.*
       me  very   like.PRS.3SG  that suit.
       'I like that suit very much.'                 (Suárez Molina 1996: 107)

The present article stresses the particularity of YS in the realm of broad and narrow focus realization, which I hold to result from a systematic interplay between different syntactic and prosodic particularities. After giving a brief overview of our data base and methodology in Section 2, I aim at showing that the way contrastive focus is realized in YS is diametrically opposed to the syntactic and prosodic focus realization in other (close to) standard varieties of Spanish. Most importantly, YS is also diametrically opposed to MS in this regard (Sections 3). Afterwards, the diametrical opposition between the two varieties is analyzed by focusing on the prosody-syntax interface. It is argued that the two main differences between YS and MS at the syntactic level and the prosodic level do not co-occur coincidentally but rather depend one on the other, meaning that the two varieties differ at a very basic level of linguistic representation, so that, at least as far as focus marking is concerned, YS should be conceived of as representing an entirely different *type* of language than MS (Section 4). Finally, several pieces of evidence are shown which argue in favor of the hypothesis that the corresponding characteristics of YS are very probably (equally) to be traced back to the variety's close contact with YM (Section 5). The main findings and conclusions are summarized in Section 6.

## 2. Data base and methodology

The data for the present analysis stems from two production experiments and one grammaticality judgment test, which were run in August 2012 and March 2013 in Quintana Roo, Mexico. The first sub-corpus is based on an elicitation experiment consisting of twenty cartoon pictures accompanied by questions. The questions are designed in order to elicit broad focus constructions as well as contrastively focused main verbs and subjects (cf. Figure 2). Every picture is shown twice to every informant, once to elicit broad focus (3.a) and contrastive focus on the verb (3.b) and on the subject (3.c). This experiment is abbreviated as ELIC01 in what follows.

| | | |
|---|---|---|
| ¿Qué pasa aquí?<br><br>La Familia Burrón y su perrito | ¿Condorito está rompiendo una carta, verdad?<br><br>Condorito | Don Gato y su pandilla<br>¿Aquí, el Chapulín Colorado juega golf, verdad? |
| 3.a: 'What happens?' | 3.b: 'Condorito is destroying a letter, right?' | 3.c: 'In this picture Chapulín Colorado plays golf, right?' |

**Figure 1.** Experimental design of ELIC01

The ten participants of the study are 20 to 70-years-old speakers of YS with a more or less considerable knowledge of YM. They have all been living at the Yucatecan peninsula from birth on. Five participants are Spanish-dominant, the remaining five speakers are balanced bilinguals. The interviews were conducted by a local field work assistant in order to avoid distracting effects of social distance, foreigner talk or linguistic convergence. The participants were told to avoid answers consisting of only one constituent, but to otherwise feel free regarding the phrasing of their answers. Tables 1 and 2 classify the utterances with contrastive focus on the verb (Table 1) and on the subject (Table 2) according to the syntactic configurations used by the participants of the query.

The second sub-corpus is based on an acceptability judgment test which was elaborated together with Rodrigo Gutiérrez Bravo and Martín Sobrino from El Colegio de México, Mexico, in order to investigate the syntactic acceptability of particular focus fronting constructions in YS (cf. Gutiérrez Bravo et al. 2018). The participants were required to rate 37 "typically Yucatecan" preverbal contrastive focus constructions such as *No él pagó nada, sino su abuelo* ('It was not him who

did not pay anything but his grandfather') with respect to acceptability. However, the data taken into consideration for the present analysis differs from the data considered by Gutiérrez Bravo et al.(2018) in two ways. First of all, the 15 participants of the corresponding query are living in Felipe Carrillo Puerto, Quintana Roo, whereas Gutiérrez Bravo et al.'s (2018) participants are living in the state of Yucatán. Secondly, the tokens taken into consideration in the realm of the present analysis are not part of the grammaticality judgment task itself, which is basically a reading task. Rather, the corresponding sentences were uttered by the participants during the survey in an informal way in order to additionally exemplify the regional expressions in the corresponding contrastive contexts. The 15 participants are monolingual speakers of YS who have all been living at the Yucatecan peninsula from birth on. At the time of the experiments, they were 19 to 28-years-old and about to complete their 12th grade at the local high school. In total, the recordings contain 28 semi-spontaneous utterances with contrastively focused verbs and subjects of the type displayed by Example (2). In the following sections, the corresponding sub-corpus is abbreviated as AJ02.

**Table 1.** Utterances with contrastively focused verbs of ELIC01

| Type | Example | N | % |
|------|---------|---|---|
| prefinal_V | No, Condorito está **escribiendo** una carta. | 76 | 76% |
| final_V | No, Barola Burrón y su esposo están **bailando**. | 6 | 6% |
| V_PP | No, está **jugando** el balón **con sus pies**. | 5 | 5% |
| VP | No, está **metiendo** una carta **al buzón**. | 9 | 9% |
| VP/PP | No, Caperucita Roja **está en la puerta de su casa**. | 4 | 4% |
| Total | | 100 | 100% |

**Table 2.** Utterances with contrastively focused subjects of ELIC01[1]

| Type | Example | N | % |
|------|---------|---|---|
| esSque | No, **es Cantinflas que** está fumando su cigarrillo. | 34 | 38% |
| esSger | No, **es Don Gato y su Pandilla jugando** con sus amigos. | 10 | 11% |
| esS | No es el Chavo del Ocho, **es don Regino**. | 14 | 16% |
| prevS | No, **Cantinflas** está consultando el oráculo. | 32 | 36% |
| Total | | 90 | 100% |

---

1.    Ten tokens had to be excluded from the data base for several reasons. In some cases, the corresponding elicitation scenarios and questions were conceived of by the informants as contexts of verb focus. In other cases, the utterances are no completed and/or are repeated by the participants hesitating as to the correctness of their answers.

(2)   *(…) por ejemplo mi mamá:* **'*Qué hace tu tía?'** – **'*¡Ah, tu primo sólo vaguear hace!'*** *Así como de que, 'Sólo en la calle anda' y … mis papas, mi familia, y ya entonces se nos pega esas frases, formas de decir y también nosotros lo decimos, por ejemplo vemos a una compañera:* **'*¿Qué hace? – Ay, pues, ella, sólo comer hacer.'** ¿no? (…).*

'(…) for example, my mother: '**How is your aunt doing. Oh, your cousin, the only thing he does is stroll around!**' This way, as if [in order to say] 'He is only wandering around' and … my parents, my family, and then we stick to these phrases, ways of saying, and we also say them [talk this way], for example, we see a schoolmate: '**What's she doing? – Oh, well, she [this girl], the only thing she does is eat,' right?** (…).'

The third sub-corpus is compiled on the basis of an elicitation design following the style of the picture based elicitation experiments developed by Gabriel (2010, 2007). First, short picture stories are shown to the informants in order to introduce the relevant referents and the scene the informants are supposed to be asked for. Afterwards, the same pictures are shown to the informants once again, but this time accompanied by speech balloons containing questions as well as wild-card characters which were to be replaced by contextually appropriate answers (cf. Figure 3).



| 3.a: 'What happens?' | 3.b: 'Aruma is stealing the newspaper, isn't she?' | 3.c: 'Julia gave the newspaper to you, right?' |

**Figure 2.** Experimental design of ELIC02
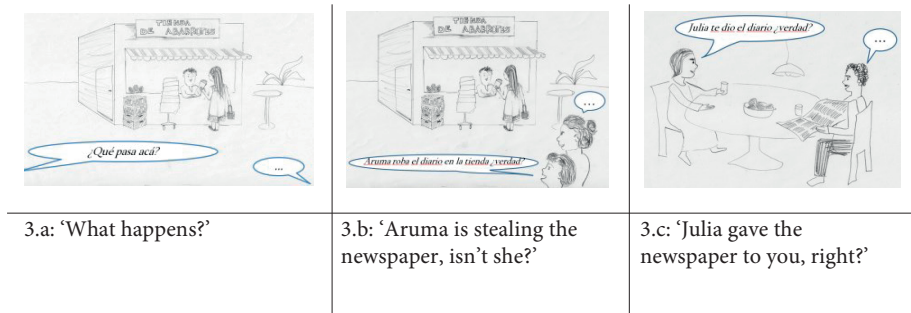
The experiment was realized with a sub-group of five participants of the acceptability judgment test. Table 3 classifies the utterances with contrastive focus on the subject according to the syntactic configurations used by the participants of the query.

Again, all tokens are taken into consideration for our analysis. In what follows, these tokens will be referred to as stemming from ELIC02.

**Table 3.**  Utterances with contrastively focused subjects of ELIC02

| Type | Example | N | % |
|------|---------|---|---|
| esSque (clefts_A) | No, fue **Aruma** la que me dio el diario. | 6 | 30% |
| esS (clefts_B) | No, la que lo secuestró fue **Blancanieves**. | 2 | 10% |
| cleft_C | No, **Blancanieves** fue la que lo hizo. | 1 | 5% |
| preverbalS | No, **Blancanieves** secuestró a Tarzán. | 1 | 5% |
| others final | No, me lo dio **Aruma**. | 10 | 50% |
| **Total** | | **20** | **100%** |

Altogether, the data base taken into consideration for our analysis of contrastive focus in YS contains a total of 251 utterances (82 utterances with contrasted verbs and 90 utterances with contrasted subjects from ELIC01, 59 focus fronting constructions from AJ02, and 20 utterances with contrasted subject from ELIC02). The intonational contours of the 251 contrastive utterances will be compared to the ones of the 200 broad focus sentences from ELIC01. Moreover, in order to control for the MS pronunciation, I conducted all three experiments with a speaker of standard MS who is working in the academic field in Germany since a couple of years and had 34 years at the time of the recordings.

## 3.    Contrastive focalization in Yucatecan Spanish compared to standard Mexican Spanish

In this section the main characteristics of the syntactic (3.1) and prosodic (3.2) realization of contrastive focus in YS and MS are compared. As indicated in the introduction, it will be suggested that the syntax and prosody of focus realization rely on diametrically opposed tendencies in these two varieties: Whereas YS is characterized by a preference for fronted foci and falling (contrastive) pitch accents, speakers of MS tend to place contrastively focused constituents at the sentence-final position, while at the prosodic level, rising pitch accents clearly outnumber falling ones.

## 3.1    Word order

The first underlying difference between YS and MS relates to the edge of the sentence, focused constituents tend to be place at. In a previous syntactic study on YS focus realization, Gutiérrez Bravo et al. (2018) call attention to the fact that in this variety of Spanish focus fronting notoriously common. Furthermore, two important syntactic particularities are revealed which fundamentally distinguish YS from other 'fronting varieties' of Spanish (ibid.: 278ff). First of all, it is shown that in YS, the negation of fronted constituents is to be conceived of as a case of constituent negation, meaning that negated foci can undergo long extraction, as in Example (3), taken from Gutiérrez Bravo et al. (2018: 279).

(3)   [*No* [$_{Foc}$ *JUGO*]]$_I$ *dijo*        *Abu* [*que vamos        a   tomar* t$_i$], *agua.*
      NEG juice            say.PST.3SG Abu that go.PRS.1PL to drink.INF water
      'Abu didn't say that we were going to drink juice, water, he said.'

<div align="right">Gutiérrez Bravo et al. (2018: 279)</div>

Secondly, we call attention to a very peculiar verb focus construction in which the main verb is fronted to a left peripheral position and a finite verb form of *hacer* ('to do') is inserted as a dummy verb into the clause, as in the examples below, taken from Gutiérrez Bravo et al. (2018: 279).

(4)   a.   *Ellos,* VENIR     *hicieron     acá   en Yucatán*
           they   come.INF  do.PST.3PL here in Yucatan
           'They, what they did was coming here to Yucatán.'
      b.   *Puro* LLORAR *hizo.*
           just   cry.INF  do.PST.3SG
           'S/he just cried.'

Furthermore, Gutiérrez Bravo et al. (2018) reveal that in the domain of focus fronting, YS exhibits considerable structural parallels to YM. To cite but one example for this kind of analogies, it is shown that the verb focus constructions in YM have essentially the same structure as the ones illustrated above for YS. As can be seen in Example (5), taken from Gutiérrez Bravo (2015: 25), the focused verb occupies the same left peripheral position as other kinds of focus, and a dummy verb *beet* ('to do') functions as the finite verb/auxiliary of the clause, a syntactic process that is not observed elsewhere in the syntax of Yucatec Maya.

(5)   *Okol-bil u* **beet**-*ik-ø            wale'.*
      steal-NFP  ERG.3do-IND-ABS.3SG perhaps
      'Maybe he used to steal it.'                    (Gutiérrez Bravo 2015: 25)

Taking into consideration this and many other structural parallels of the above cited YS fronting constructions to corresponding constructions in YM, Gutiérrez Bravo et al. (2018) trace back the above peculiarities of the syntax of YS to the variety's close contact with YM (ibid.: 17). Summing up the peculiarities of YS contrastive focus constructions that are most important for the present purposes, Gutiérrez Bravo et al. (2018: 16) note that (i) it is possible to negate fronted constituents in contrastive focus, (ii) the verb focus constructions are construed by means of fronting of the main verb plus insertion of a dummy '*hacer*'-form, and especially, (iii) the standard way to realize contrastive focus in YS seems indeed to be focus fronting.

Contrary to that, recent syntactic analyses of close to standard varieties of Spanish suggest that focus fronting in standard Spanish is at most a marginal phenomenon (cf. especially Heidinger 2018, 2014; Gabriel 2010, 2007). Indeed, focus fronting is generally indicated as an option in the main syntactic analyses and compendiums of standard Spanish (e.g. Bosque & Gutiérrez-Rexach 2009: 692ff.; Rodríguez Ramalle 2005: 558; Zubizarreta 1999: 4239). Besides that, fronted foci receive fairly high acceptability ratings by speakers of different varieties of Spanish (cf. again Heidinger 2018, 2014; Gabriel 2010, 2007). Nevertheless, there is not yet conclusive empirical evidence that corroborates the actual use by native speakers of Standard Spanish of the 'foco antepuesto' constructions such as (6).

(6)  *Manzana-s compró    Pedro (y   no   peras).*
     apple-PL    buy.PST.3SG Pedro and not pears
     'Pedro bought APPLES (not PEARS).'              (Zubizarreta 1999: 4239)

For example, no instances of this type of construction occurred in the production data of Gabriel (2007: 285). Furthermore, when asked to read out the corresponding constructions such as (7a) below, more than half of the informants either pronounced the sentences with a dubitative/inquiring contour or they used the prosodic contour characteristic of topic-comment constructions. One speaker even introduced a resumptive pronoun while reading the utterance displayed in (7a), suggesting that he or she reinterpreted the original fronting construction as an instance of object topicalization (7b).

(7)  a.  *¡No! Un diario    compró    María en el   kiosco.*
         NEG a newspaper  buy.PST.3SG María  in the stand
         'No! María bought A NEWSPAPER in the stand.'
     b.  [*El diario*]ᵢ    *se loᵢ   dio       a su hermano.*
         the newspaper to him it give.PST.3SG to his brother
         'The newspaper, he gave it to his brother.'      (Gabriel 2007: 286)

Finally, it is also important to note that the possibility of having fronted foci is subject to dialectal variation. While e.g. the informants of Gabriel (2007: 287f) accepted the contrastive *foco antepuesto* to a quite high degree in the corresponding perception experiments, the introspective data cited by Gutiérrez Bravo (2006: 171) suggests for MS that fronted foci like (6b) or (7b) are ungrammatical in this variety. Moreover, and most importantly for the present purposes, Gutiérrez Bravo (2006: 170) reports for MS that contrastive foci typically appear in sentence-final position, just as do presentational foci in this variety, unless the focalized constituents are highly definite and individuated:

> My data on fronted and in-situ contrastive focus in Mexican Spanish is too scant for me to draw any conclusions at this point. Speakers of Mexican Spanish, however, readily reject cases of preposed foci like [(8)], and to my ear, they are downright ungrammatical.    (Gutiérrez Bravo 2006: 171)

(8)  PREPOSED CONTRASTIVE FOCUS: Zubizarreta (1998).
   *Las ESPINACAS detesta    Pedro (y    no    las papas).*
   the  spinach        hate.3sɢ Pedro and  not  the potatoes
   'SPINACH Pedro hates, (not potatoes).'        (Gutiérrez Bravo 2006: 171)

Concerning the syntactic realization of contrastive focus, YS and MS hence exhibit an important, albeit non-categorical difference. Speakers of YS tend to front the focused constituents to the *initial* position of the sentence, whereas speakers of MS prefer to place them in sentence-*final* position.

## 3.2    Pitch accents

As already noted by Barnes and Michnowicz (2013), intonational patterns in YS have neither ever been studied acoustically, nor are there any analyses based on non-introspective empirical data. One interesting exception to this is Barnes & Michnowicz' (2013) analysis of the prenuclear peak alignment in 400 broad-focus declarative sentences out of sociolinguistic interviews with eight speakers from Mérida, Yucatán. The main result of this study is that the speakers of YS produce early peaks, i.e. peaks aligned within the stressed syllable, in 64% of the time, whereas e.g. Face (2003) identifies a rate of only 25% of early peaks for spontaneous Castilian Spanish. However, Barnes & Michnowicz' (2013: 8) conclusion, according to which "the results suggest that the perceived YS "accent" is due, at least in part, to the preference for early peaks", is only confirmed by our investigation if the notion of 'early peak' is understood in a very broad, pre-theoretical way.

More precisely, our data from the two elicitation experiments described in Section 2 suggest that the Spanish-dominant speakers and the monolingual speakers have a general tendency to realize pitch accents by means of falling intonation contours. In fact, the broadly focused utterances of our Spanish-dominant and monolingual speakers mostly exhibit pronounced pitch heights at the left of the stressed syllables, followed by falls to the stressed syllables themselves (Figure 3).[2]
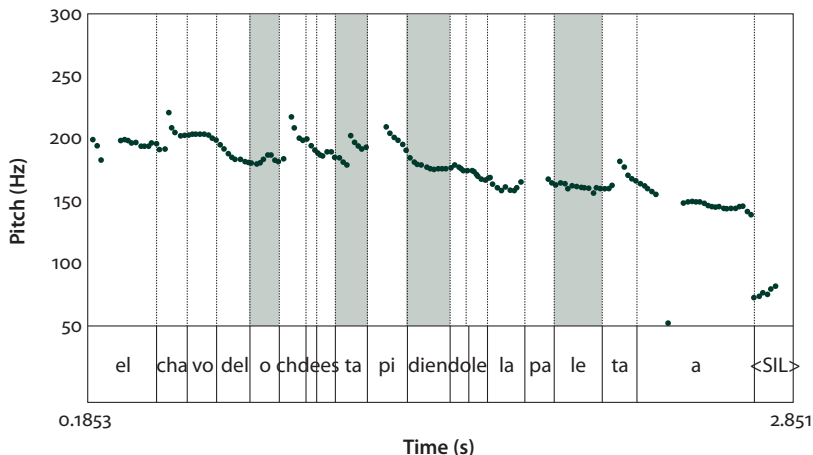


**Figure 3.** F0 contour and orthographic transcription of YS broad focus utterances with falling pitch accents. *[F El Chavo del Ocho está pidiéndole la paleta a ñoño]*. 'El Chavo del Ocho is requesting the lollipop from Noño.' (ELIC01_DMZP_B06)

It is probable that the characteristic falling pitch contours are one of the most important acoustic cues alluded to by the philologists highlighting the alledged jerky intonation of the YS speakers. In this context it is interesting to note that the broad and contrastive focus utterances in our data exhibit a high amount of utterance final breathy or creaky voices, meaning that the sonority and intensity of the speech signal very often decreases dramatically towards the end of the utterances. This sharp decrease of sonority and intensity seems to be tightly related to the falling pitch accents of the variety and might also contribute to the peculiarity of the "Yucatecan accent".

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**2.** The balanced bilingual data is characterized by a considerably higher amount of idiosyncratic variation suggesting that the development of the prosodic system is also a matter of consolidation or strengthening of features (Uth, in press). Since the analysis of the variation according to the individual Language Profiles would exceed the scope of this paper, I will exclusively rely on the YS-dominant or monolingual data in what follows.
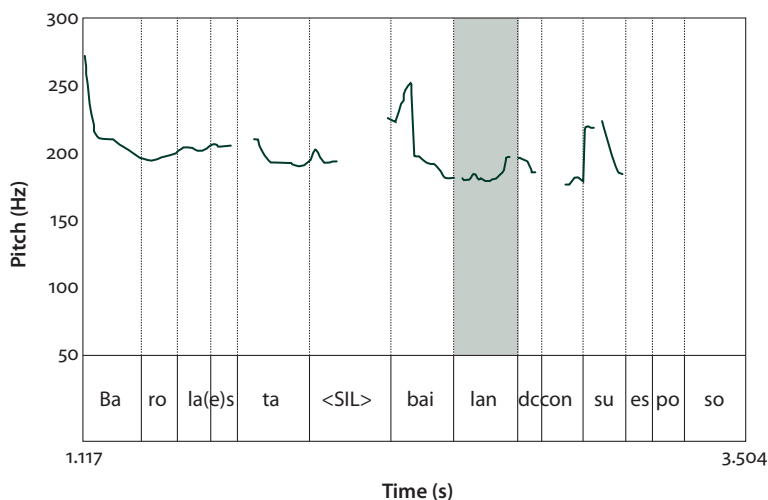
**Figure 4.** F0 contour and orthographic transcription of *Barola está [F bailando] con su esposo*. ('Barola is dancing with her husband', ELIC01_GGSM_V09)

Interestingly, the YS falling pitch accents seem to be especially pronounced in the context of contrastive focalization, where they regularly combine with left-adjacent IP boundaries (i.e. boundaries which are left-adjacent to the contrastive word, Figure 4), post-focal compression (Figure 5) and/or duration (and intensity, Figure 6) in order to signal contrastive focus in our data.

However, the falling pitch movements are not only pertinent in the contexts of in situ focalization displayed by Figures 4–6. The fronting constructions presented above in Section 3 form another set of constructions which are unanimously realized with falling pitch accents (Figure 7). Furthermore, and maybe somewhat more surprising, even sentences and (IP-)final focalized constituents are equally characterized by this type of pitch contour (Figure 8).

Concerning the phonetic analysis of the data, there is one further detail to be added to the intonational description as delineated above, since the analysis mainly relies on the notion of 'falling pitch accents' up to now. However, on closer inspection of the data, it becomes evident that the high tone preceding the low accent tone is not always realized as the leading tone of a falling pitch accent. There are also quite a lot of examples in which the left high tone preceding the low accent tone is realized way before the stressed syllable of the contrasted constituent, as is already exemplified above by Example (8). Another pertinent example out of the AJ02 corpus of semi-spontaneous fronting constructions is displayed by Figure 9.

**a.** *Condorito está [$_F$ leyendo] el periódico* 'Condorito is reading the newspaper.' (ELIC01_GGSM_V01)
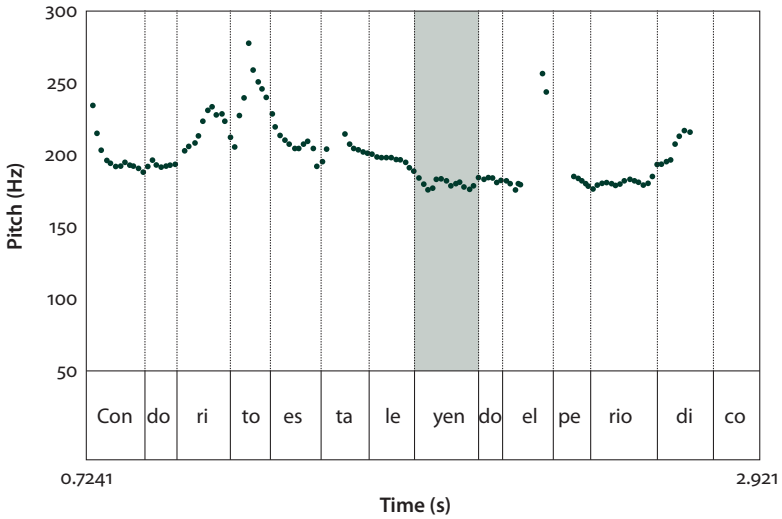


**b.** *'No, está [$_F$ saliendo] de la casa.* 'No, she/he is leaving the house.' (ELIC02_DMZP_V13)
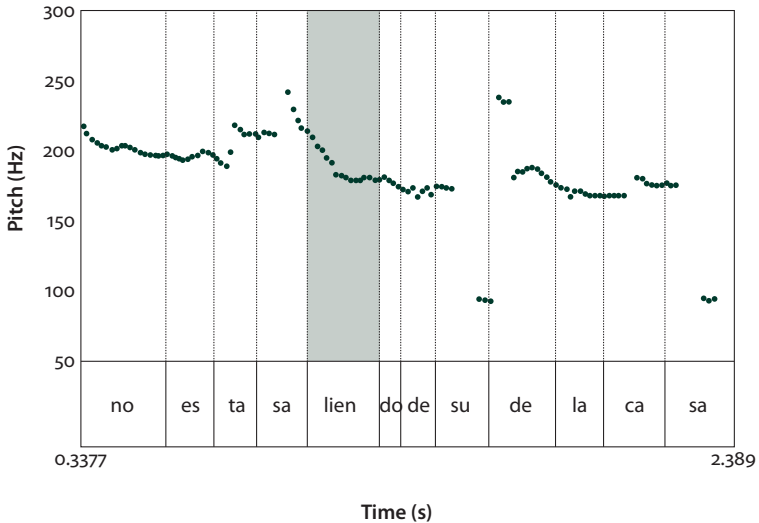


**Figure 5.** F0 contour and orthographic transcription of (S)AuxV(O) utterances with sentence medial contrasted main verb in YS
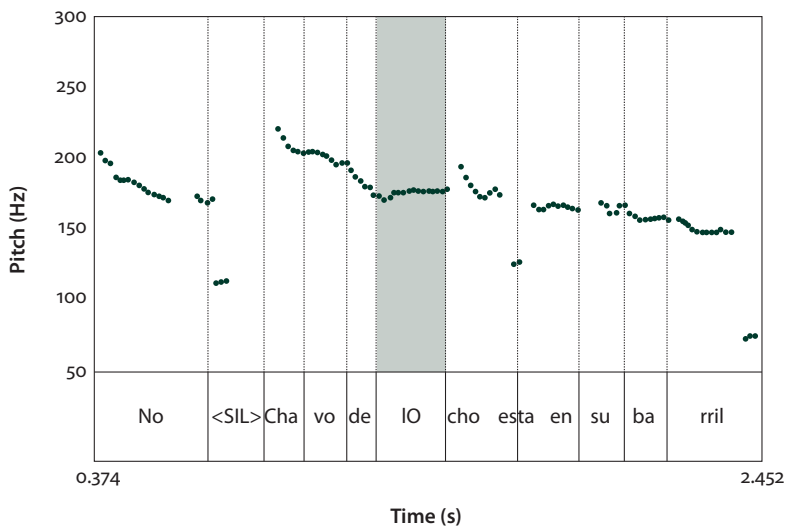
**Figure 6.** F0 contour and orthographic transcription of the utterance *No [$_F$ Chavo del Ocho] está en su barril.* ('No, Chavo del Ocho is in his barrel', ELIC01, S16_DMZP)

**a.** *[$_F$ Sólo urdir hamaca] hace la señora.* 'The only thing the woman does is weaving hammocks.' (GJ02_CRA2)

**b.**  *[<sub>F</sub> No él] los convenció.* 'It was not him who convinced them.' (GJ02_STE2)



**Figure 7.**  F0 contour and orthographic transcription of typical YS fronting constructions; (a.) = verb fronting construction, (b.) = negated preverbal contrastive subject

**a.**  *No, es el [<sub>F</sub> Chapulín Colorado].* 'No, (this) is Chapulín Colorado.' (ELIC01_HNZP_S04)
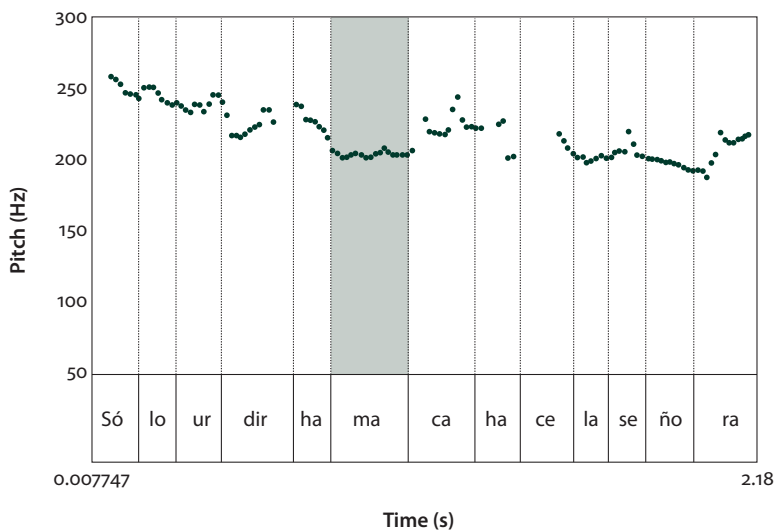
**b.** *No, me lo dio [*<sub>F</sub> *Aruma].* 'No, Aruma gave it to me.' (ELIC02_SCN_KFS1)



**Figure 8.** F0 contour and orthographic transcription of utterances with sentence final contrastive words
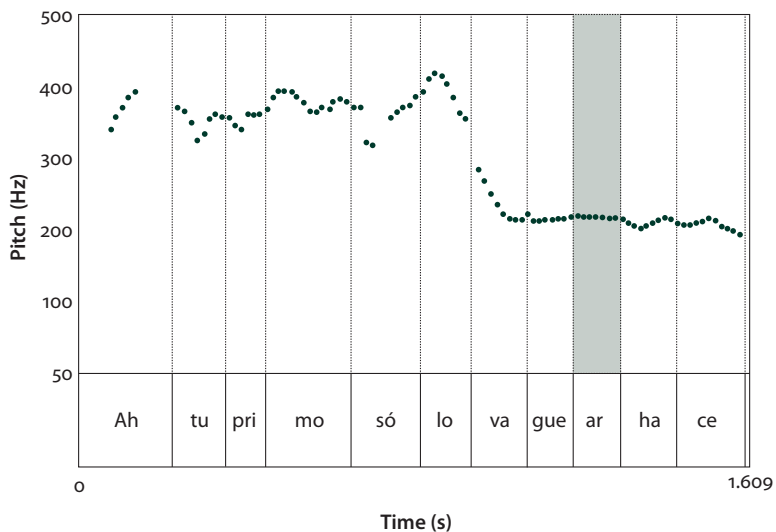


**Figure 9.** F0 contour and orthographic transcription of the utterance *Ah tu primo, solo vaguear hace.* ('Oh, your cousin, the only thing he does is strolling'; AJ02_CRC2)

These data would rather suggest that the left high tone is generally associated with the left boundary of the IP which contains the contrasted constituent, acting, in this position, as an attention seeking device preparing the listener for the upcoming important information (Grice & Uth 2015).[3] However, a comprehensive analysis evidently has to account for both the utterances with a high left boundary tone and the utterances in which the left high tone figures as the leading tone of a falling pitch accent. One convenient way to account for the variance related to the realization of the YS left high tone is to analyze this intonational unit as a kind of floating tones in the sense of Grice et al. (2009), which is phonologically represented as a mere left high tone (i.e. a high tone at the left of low pitch accents), and which may be realized in different ways at the concrete level of phonetic realization. The detailed phonological description of YS is beyond the scope of the present paper and has to be left to future research. However, whatever analysis will finally result to be most coherent in phonological terms, YS still stands out from the rest of the Spanish varieties due to the preponderance of falling pitch contours.

In this respect, YS again differs importantly from standard MS, which is generally known to be characterized by a prevalence of rising pitch accents. According to the literature, it is fairly uncontroversial that broad focus sentences in standard MS are characterized by L+>H* or H* pitch accents in the pre-nuclear domain, and by L+H* pitch accents in the nuclear domain (cf. e.g. de-la-Mota et al. 2010; Kim & Avelino 2003, concerning the typically Mexican circumflex interpretation cf. Martín Butragueño 2004 as well as Sosa 1999). In utterances containing contrastive constituents, the stressed syllable of the contrasted word is unanimously said to associate with an L+H* pitch accent (ibid.). These generalizations are largely confirmed by the data from our control speaker of MS who generally realizes pronounced L+H* pitch accents in contrastive contexts (cf. e.g. Figures 10–11).

Hence, our data largely confirm the analyses of the prosody of standard MS put forward by de-la-Mota et al. (2010) and others, suggesting that MS and YS fundamentally differ with respect to the realization of the F0 pitch contour: Whereas MS is known to be characterized by rising pitch contours, speakers of YS show a preference for falling pitch accents.

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**3.**   Note that this analysis would equally cover the frequent (S)AuxV(XP) utterances in which the (sentence medial) contrastive main verb is separated from the preceding (S)Aux sequence by a major IP boundary, since all the corresponding IPs are characterized by a pronounced high peak at their very left edge followed by a sharp fall to the stressed syllable of the contrasted verb (Figure 4).

**a.** *El hijo está más bien [$_F$ bailando] con el perrito.* ('The son is rather dancing with the dog.', AHFX_ELIC02_V19)



**b.** *'No, Caperucita está [$_F$ saliendo] de su casa.* ('Caperucita is leaving her house.', AHFX_ELIC02_V13)
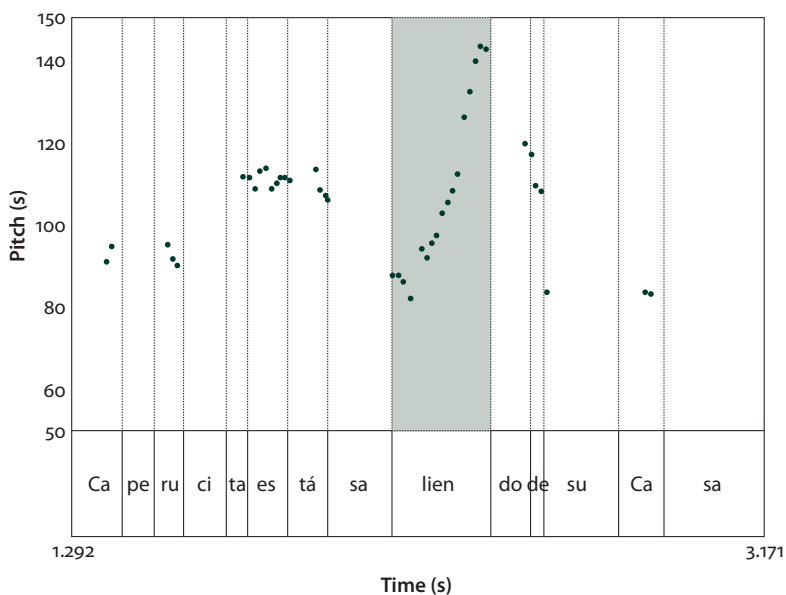


**Figure 10.** F0 contour and orthographic transcription of two MS (S)AuxV(XP) sentences with contrasted main verb

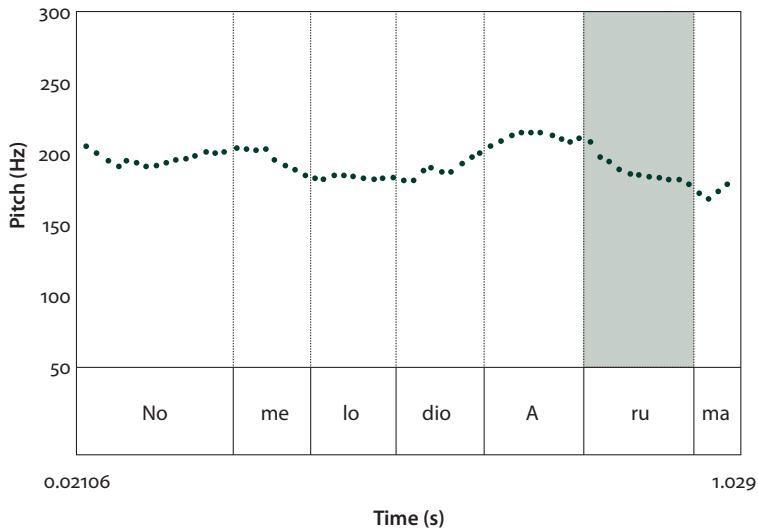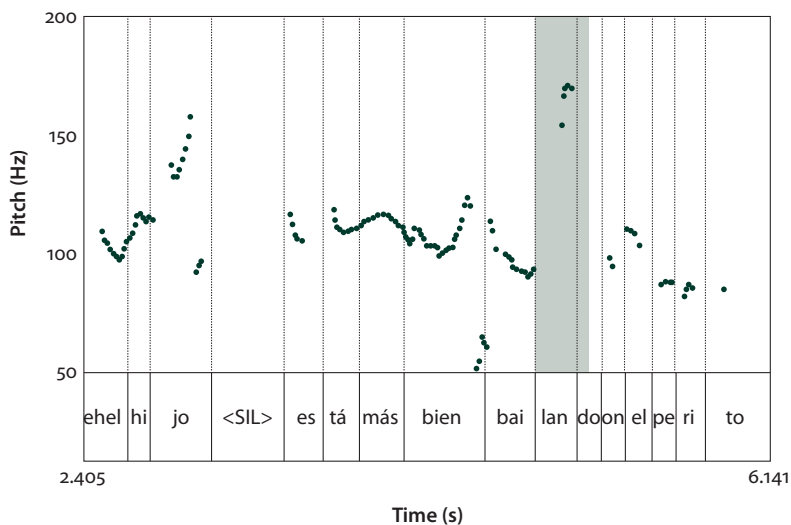**a.** *[F Don Regino] es quien corre.* ('It is Don Regino who is running.', ELIC01_AHFX_ELIC01_S12)
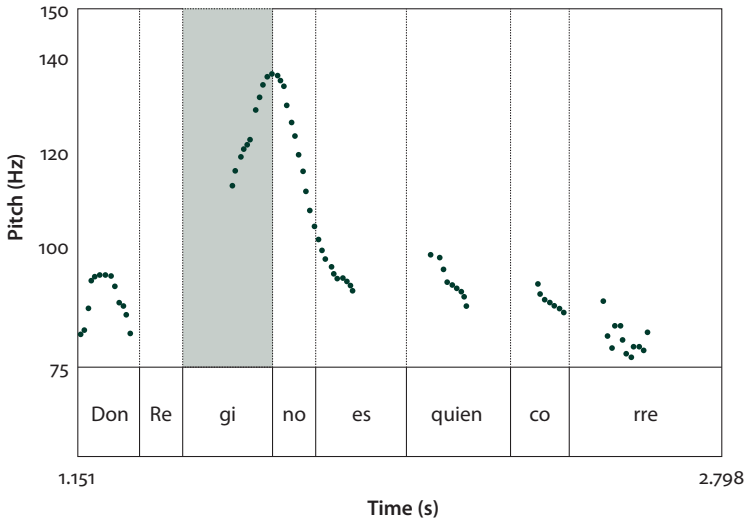


**b.** *Es [F Cantínflas] el que baila con su sombrero.* ('It is Cantínflas who is dancing with his hat.', AHFX_ELIC01_S02)
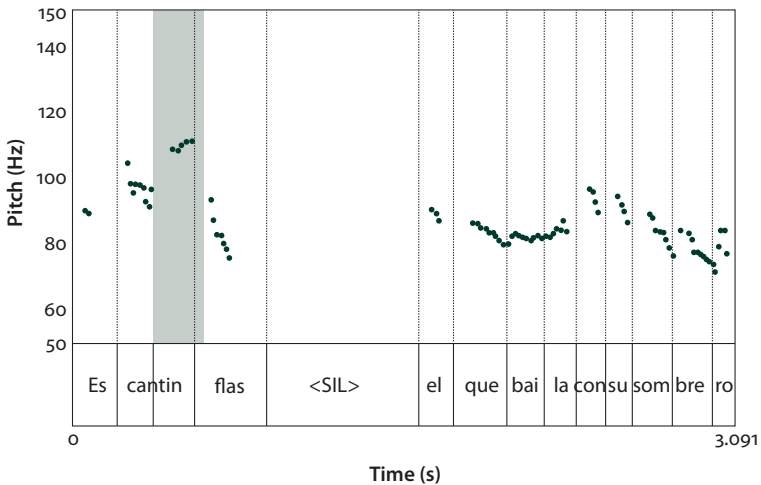


**Figure 11.** F0 contour and orthographic transcription of two MS *esSque* sentences with contrasted subject

## 4.  Syntax-prosody interface

As delineated in Section 3, YS is diametrically opposed to standard MS regarding the syntactic and prosodic realization of Information Structure: The YS speakers exhibit an evident affinity for focus *fronting* and overwhelmingly realize contrastive (as well as non-contrastive) pitch accents by means of *falling* pitch contours. Contrary to that, MS speakers prefer to place focused constituents in sentence-*final* position and mostly make use of (different kinds of) *rising* pitch accents in narrow and broad focus utterances.

Against the background of this dichotomy, I would like to argue that this twofold opposition does not co-occur coincidentally but that the different word order properties of the two varieties depend on the fundamental difference of their prosodic systems. In order to follow this line of argumentation, it is first of all at order to consider the numerous cases in which the YS left high tone is realized as a left (IP) boundary tone. In these cases, the low accent tone associated with the contrastive word evidently needs to be realized at the beginning of the sentence, too, in order to obtain the falling pitch contour which is so characteristic for the YS variety (cf. again Figure 9). As argued in Section 3, it is indeed true that the YS left high tone is best to be analyzed as a floating tone oscillating between the realization as a boundary tone or as a leading tone of a falling pitch accent. Nevertheless, by virtue of (i) its affinity to the left IP boundary and (ii) its location at the left of accent tones, it has the general tendency to be realized at the left edge of Intonation Phrases, meaning that constituents which are to be marked by this prosodic prominence, are best to be fronted to the beginning of the sentence in order to be able to be aligned with the corresponding falling pitch accent or pitch contour, respectively (Figure 12).

Moreover, in functional terms, the YS left high tone preceding the contrastive low tones seems to be exploited by the speakers of YS as an attention-orienting device signaling the upcoming important information (Grice & Uth 2015). The pitch rise and/or peak create a suspense which is only dissolved by the low tone of the contrastive pitch accent. Bearing in mind that the corresponding IPs generally constitute domains of regular downstep, in which the F0 contour steadily lowers down towards the end of the IP, it is very likely that the marking of contrastivity by means of *falling* accents is considerably easier to be achieved at the left edge of the corresponding IPs, where the unmarked pitch contour regularly is at its highest level. According to this analysis, the left edge of the YS IP lends itself to the realization of falling contrastive pitch accents due to articulatory reasons, meaning that the falling nature of the YS pitch accents ultimately proliferates the fronting of contrastive constituents to the initial part of the sentence. That is to say, our analysis suggests for YS that the most expressive part of a YS utterance is best to be

located at the leftmost part of the corresponding IP, and that YS focus fronting is to be conceived of as an instance of prosodically motivated constituent displacement (i.e. 'p-movement', Zubizarreta 1999, 1998) to the left.

**a.** *[$_F$ No tenemos supermercado].* 'We do not have a supermarket.' (ELIC02_LCR03)
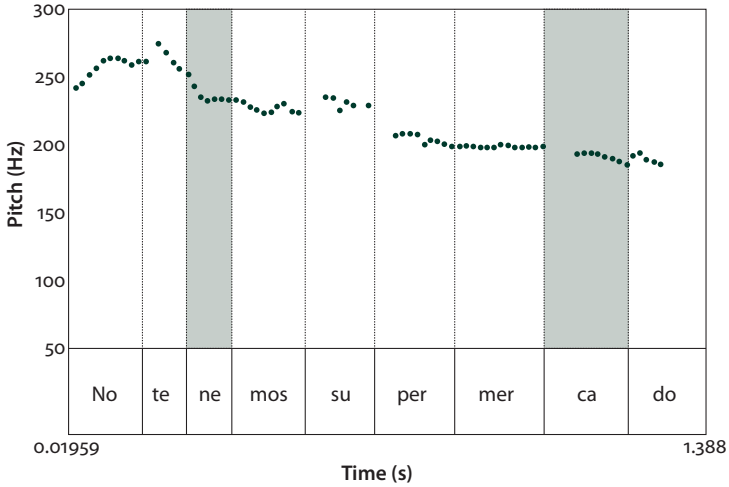


**b.** *[$_F$ En una tienda] lo compró.* '(She) bought it in a kiosk.' (ELIC02_LCR03)
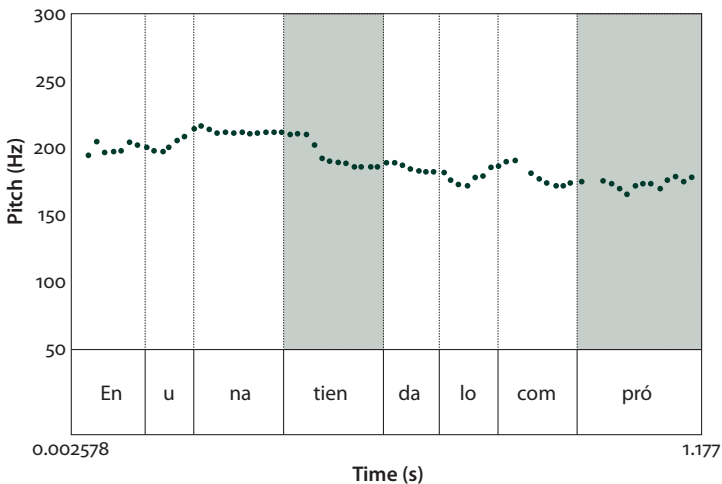


**Figure 12.** F0 contour and orthographic transcription of an utterance with non-local contrastivity (a.) and a subsequent utterance with contrastive locative PP (b.)

This having said, it immediately needs to be added that there is no absolute necessity for focus fronting in YS. On the contrary, there are numerous cases of contrastive focalization without syntactic fronting in our data (cf. e.g. again Figures 4–6 as well as 8b). Nevertheless, our analysis still suggests for YS that the non-fronted realization of contrastive constituents is less optimal than focus fronting to the sentence-initial position, due to reasons of F0 articulation.

Comparing the prosody-syntax interface of YS to the one of standard MS, it becomes immediately evident that the MS strategies of focus realization are by tendency diametrically opposed to the ones used by the YS speakers. Interestingly, the rightward 'movement' of focused constituents in standard varieties of (M) S is generally analyzed as an instance of prosodically motivated displacement ('p-movement') to the right by most of the corresponding syntactic analyses (cf. Gutiérrez Bravo 2006, cf. also Zubizarreta 1999, 1998, or European Spanish). Against the background of the comparison between YS and MS, I would like to put forward the hypothesis that the prosodic marking of contrastive constituents by means of *rising* pitch accents is ideally done at the end of the IP, where the un-marked F0 contour is already considerably lowered due to the regular downstep towards the end of utterances. More precisely, I argue that the comparison of the varieties suggests that, just as the falling contours proliferate focus fronting in YS due to articulatory reasons, the rising contours of MS (contrastive) pitch accents proliferate 'p-movement' of focused constituents to the right due to the fact that the pitch rise has its most considerable effect towards the end of the downstep domain corresponding to the relevant IP.

From the above it is evident that, at least in the realm of focus realization, YS exploits a different kind of interplay between prosody and syntax than MS. Due to the very general nature of this difference, I would like to argue that YS is best to be considered as instantiating a of language compared to MS. In the following section, it is suggested that this 'typological' particularity of YS very probably traces back to the variety's long standing and intensive contact with Yucatec Maya.


## 5.   Language contact

A further argument in favor of the 'typological hypothesis' delineated above comes from the language contact of YS with YM. In order to underpin the reliability of the various hypotheses concerning the mutual linguistic influence between these two languages, it is important to note that the Yucatecan peninsula is characterized by a considerably strong and close contact between YM and Spanish: According to the

2005' census of the Mexican National Institute of Indigenous Languages (INALI), the population of Mexico speaking Yucatec Maya as their first or second language currently amounts to approximately 760.000 persons. The great majority of them (758.000 persons) lives at the Yucatecan peninsula, which includes the federal states of Yucatán, Campeche and Quintana Roo (Figure 13).



**Figure 13.** The federal states at the Yucatan peninsula <http://www.yucatan.gob.mx>

According to the counts of the last population census of the National Institute of Statistics and Geography (INEGI) in 2010, the percentage of the Mayan speaking population living at the Yucatecan peninsula still amounts to 8% in Campeche, 12% in Quintana Roo and 27% in Yucatán, with an average of 18% of Maya speaking population at the Yucatecan peninsula. In 1970, the Maya speaking population at the Yucatecan peninsula even amounted to 55% (Lope Blanch 1987: 9f). During the 19th and 20th centuries, the contact between Spanish and Maya increased considerably, as more and more Maya speakers migrated to urban areas to work as domestic help, vendors, manual laborers, and nannies to Spanish-speaking families (Barnes & Michnowicz 2013; Lipski 2004: 99; Michnowicz 2011, 2009). According to Lope Blanch (1987), the Yucatecan peninsula clearly outranges all other regions of language contact in Mexico with respect to both, the considerable standing of the indigenous contact language as well as the rate of bilingual speakers (Lope Blanch 1987: 22).

On the level of phonetics, the standard works treating the peculiarities of the YS 'accent' likewise generally point to the variety's resemblance to YM, both at the segmental and at the suprasegmental level. This is especially true for occlusive consonants (cf. e.g. Barrera Vásquez 1977: 71 a.o.), glottalization (e.g. Lope Blanch 1987: 107), and intonation (Suárez Molina 1996: 63; Mediz Bolio 1951: 19).

> El acento yucateco, tan profundamente señalado, no es sino una consecuencia del acento maya original. ('The Yucatecan accent … is nothing else than a continuation of the Mayan accent.' Mediz Bolio 1951: 19)

> … lo primero que llama la atención del forastero … es la entonación fraseal lenta y pausada, fenómenos que no son sino reflejos de la fonética maya. ('… the first thing that attracts the attention of the foreigner … is the unhurried and deliberate pronunciation, which is nothing else than the mirror image of the Mayan phonetics.' Suárez Molina 1996: 63)

As already mentioned in Section 3, the above cited work generally amounts to rough generalizations based on personal introspective estimations, meaning that the way YM might have influenced the prosodic system of YS is still to be figured out in all its (phonetic) respects. Albeit this endeavor would largely exceed the scope of the present paper, there are two recent analysis of certain aspects of YM prosody which strongly corroborate both (i) the analysis of the YS prosodic system in terms of left high tones and falling pitch accents and (ii) the hypothesis of a considerable influence on the YS prosody on the part of the YM adstrat. Besides this, the recently accomplished research and data collection for the first time allow us to draw more concrete conclusions concerning the prosodic contact of the two languages.

Concerning the prosodic system of YM, it is first of all important to note that YM is a tone language with two tones, a high tone and a low tone. The exact phonetic realization of the high tone seems to depend on the position of the tone bearing syllable in the corresponding IP (cf. Gussenhoven & Teeuw 2008; Kügler & Skopeteas 2006). According to Gussenhoven & Teeuw (2008: 50), "only long syllables and short word-initial syllables acquire tone, suggesting that the stressed syllable is the domain for tone association" in YM. Moreover, the language does not seem to make use of any prosodic means in order to signal the information structural content of syntactic constituents. On the contrary, various investigations testing YM in this respect revealed that Information Structure is realized by syntactic means alone in YM (Gussenhoven & Teeuw 2008; Kügler & Skopeteas 2006). One of the crucial contributions for the present purposes is the study of the prosodic integration of Spanish loanwords in YM pursued by Frazier (2012). The main result of this study is that the stressed syllables of Spanish loans are generally produced with a long vowel bearing a low (lexical) tone in Yucatec Maya. More concretely, Frazier plausibly argues that first of all, the long vowel is triggered by the (original) Spanish stress pattern of the loans, or else by a 'default stress pattern' (Frazier 2012: 5). Finally, since YM long vowels are generally realized with high or low tone, and since the low tone is the less marked tone in YM, speakers end up with producing the long vowels corresponding to the formerly stressed syllables in the Spanish loanwords with a low tone. Most interestingly for our present purposes, these low toned vowels are generally preceded by a high tone which is mostly located two syllables to the *left* of the low tone corresponding to the vowel of the (formerly) stressed syllable. The evidence concerning the tonal integration of Spanish loanwords in YM strongly corroborates both the analysis of YS in terms of left high tones preceding low accent

tones and the hypothesis that this particular intonation pattern traces back to the close contact with YM. Against the background of Frazier's (2012) study we may even draw the much more concrete (albeit preliminary) conclusion that both the YS left high tone and the falling/low accent tones result from a reanalysis of the YM lexical tone contours as YS boundary and (pitch) accent tones.

Interesting insights concerning the YM left high tone, which is acknowledged but largely left unexplained in Frazier's (2012) work, are furnished by Verhoeven and Skopeteas (2015). Verhoeven and Skopeteas reveal that YM, despite of differing considerably from intonation languages, does nevertheless seem to have developed a characteristic post-lexical intonation contour which mainly consists of a pronounced pitch peak at the left edge of supra-segmental prosodic constituents and which seems to define downstep domains while being largely independent from the lexical tones (Figure 14).
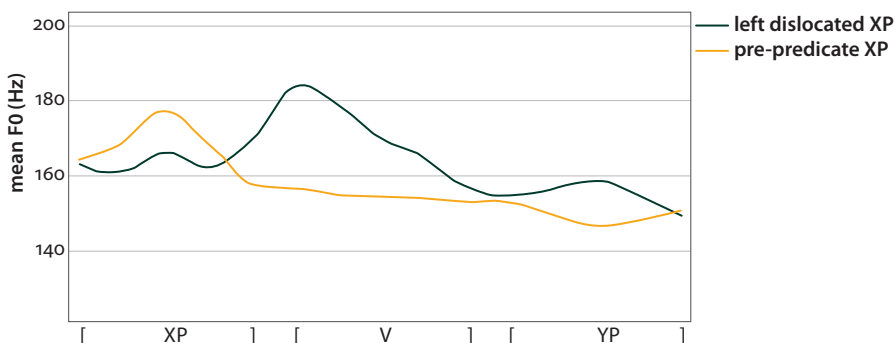


**Figure 14.**  Average tonal contour of $[_{FOC}XP]$ -V-XP (yellow) and $[_{TOP}XP]$ -V-$[_{FOC}XP]$ (black) in YM according to Verhoeven & Skopeteas (2015: 34)

More concretely, Verhoeven & Skopeteas show that YM disposes of a very peculiar supra-lexical intonation pattern, without having pitch accents and without (directly) assigning any functional load to it, as it would be typical in intonation languages. Furthermore, the authors suggest that the left pitch peaks correspond to the most prominent part of the YM utterances, and that it is due to this post-lexical intonational characteristic that YM developed obligatory syntactic focus fronting. That is to say that Verhoeven & Skopeteas (2015) conceive of YM as a (left) edge language in which focused constituents are generally fronted to the left of the main verb in order to be aligned with the main prosodic prominence of the utterance.

The syntactic proximity between YS and YM has already been hinted at in Section 3.1, when I contrasted the fronting affinity of YS with the displacement of focused constituents to the right that is typical for standard MS. The prosodic research concerning YM presented above leads us to assume that the YS left high

tone and the falling pitch accents do equally trace back to the strong Mayan influence on the YS variety. If this hypothesis turns out to be true, we are faced with an intriguing scenario of prosodic contact in which a largely 'inoperable' post-lexical pitch pattern of a tone language has been transferred into an intonation language where it is exploited either as a left boundary tone or as the leading tone of a falling pitch accent, according to the prosodic system of the latter and depending on the respective intonational contexts. Within the limits of the present paper, we may neither determine the exact prosodic analogies and differences between the two contact languages, nor may we account for the phonetic or cognitive details of this kind of presumed prosodic transfer. Nevertheless, the strong evidence in favor of left edge prominences and low tones being reanalyzed as (lexical) stress strongly suggests that our preliminary analysis of the syntax-prosody interface of YS compared to standard MS is on the right track.

## 6.　Conclusions

In this article, the syntactic and prosodic realization of broad and contrastive focus in YS has been compared to standard MS. Based on data from two elicitation experiments and one acceptability judgment test, it is suggested that YS is diametrically opposed to standard Mexican Spanish as concerns the syntactic-prosodic realization of contrastive focus: The YS speakers exhibit an evident affinity for focus fronting and overwhelmingly realize contrastive (as well as non-contrastive) pitch accents by means of *falling* pitch contours. Contrary to that, standard MS is generally held to disallow focus fronting altogether, and to be characterized by different kinds of *rising* pitch accents in the context of narrow and broad focus. Due to the interrelatedness and the very general nature of these differences, YS is conceived of as instantiating a different type of language compared to standard (M)S. Finally, it is argued that this 'typological' particularity of YS is probably to be traced back to the variety's long standing and intensive contact with Yucatec Maya.

## Acknowledgements

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# Acceptability and frequency in Spanish focus marking

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In this paper, we analyze the status and relevance of three syntactic positions for focus marking in Spanish: sentence-initial, sentence-internal, and sentence-final position (as we will only consider constituents with an unmarked linear position that is postverbal and non-final, initial position is the result of fronting and final position is the result of *p*-movement). Although all three positions are options for both information and contrastive focus, we will show that the positions do not have the same status. Based on frequency and acceptability data from several experimental studies, we will argue that final and internal position are the preferred positions for information focus and that internal position is the preferred position for contrastive focus. Concerning the relation between frequency and acceptability, we will demonstrate that the two sources of data generally show a matching pattern: Options that are more acceptable are also more frequent (and vice versa). Nevertheless, acceptability does not imply frequency, as contrastive focus in initial position is an option that is acceptable but very rare in frequency data. Hence, acceptability is a necessary but not a sufficient condition for usage.

## 1. Introduction

In Spanish, constituents that have their unmarked position after the sentence's main verb show considerable variation with respect to their actual syntactic position in the linear order of a sentence. For example, a direct object (in the context of locative adjunct) can appear in its unmarked sentence-internal position, in sentence-final position, or it can be fronted to the sentence-initial position (cf. (1)).

(1) a. S-V-dO-LOC
*Juan compró <u>el diario</u>    en el   kiosco*.
John  bought  the newspaper  at  the  kiosk
'Juan bought the newspaper at the kiosk.'

    b.   S-V-LOC-dO
       *Juan compró en el kiosco <u>el diario</u>.*
    c.   dO-V-S-LOC
       *<u>El diario</u> compró Juan en el kiosco.*

Although Spanish constituent order is relatively free, it is influenced to a large degree by information structure (cf. Bolinger 1954; Contreras 1983; Bossong 1984a, 1984b; Hernanz Carbó & Brucart 1987; Gutiérrez Ordóñez 1997; Zubizarreta 1998, 1999; Rodríguez Ramalle 2005; Gabriel 2007, 2010; Gutiérrez-Bravo 2007; Bosque & Gutiérrez-Rexach 2009; Kubarth 2009; Adli 2011a; Leonetti 2011). One factor that has considerable impact on the syntactic position of postverbal constituents is the focus–background partition of the respective sentence. However, a specific focus–background partition does not imply a single constituent order. For example, a contrastively focused direct object may appear in sentence-internal, -final, or -initial position (cf. (1); and the detailed description in Section 2).

    The question that arises is whether the options for the expression of a specific focus–background partition all have the same status. This is a highly debated question in recent experimental research on focus marking in Spanish (cf. Gabriel 2007, 2010; Adli 2011a; Hoot 2012, 2014, Heidinger 2013, 2014a, 2014b, 2015; Muntendam 2013; Feldhausen & Vanrell 2014; Uth 2014). In the present paper we analyze the status of three syntactic positions (initial, internal, and final) for expressing information focus and contrastive focus in Spanish.[1] To do so, we will look at two types of data: frequency data (from several production experiments) and acceptability data (from two acceptability judgment experiments). Besides a comprehensive description of the status, considering both types of data also allows us to analyze the relation between frequency and acceptability in this domain.

    A recent overview of studies on the relation between acceptability and frequency and the research questions treated in these studies is given in Adli (2015); the state of research in this domain is described as follows: "The relation between acceptability and frequency is an under-studied issue. We have only few empirical studies thus far" (Adli 2015: 174). There seems to be a complete lack of studies on the relation between acceptability and frequency in the domain of information structure.

    Adli (2011b) analyzes the relation between acceptability and frequency based on data for Spanish *wh*-questions. He compares data from a corpus of spontaneous speech and a gradient acceptability judgment experiment; both types of evidence were collected from the same subjects. His main findings on the relation between

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1.   In this paper, we consider syntactic positions only as positions in the linear order of constituents. This, however, does not mean that we assume syntax to be linear in nature, only that for the present purpose it is not necessary to take into account hierarchical syntactic structure (which is externalized as linear order).

acceptability and frequency are: "[…] whenever a construction is judged suboptimal […] it is basically absent in language use. All constructions occurring in the spontaneous speech data are judged acceptable. However, constructions can receive high acceptability scores but hardly occur in spontaneous speech […]" (Adli 2011b: 397). To simplify matters, in this representation we use two binary features (*acceptability*: *acceptable* vs. *suboptimal* and *frequency*: *frequent* vs. *rare*) and indicate how these features may combine. The expected and unexpected relations between frequency and acceptability can be represented as in (2):

(2)   acceptable×frequent, suboptimal×rare, acceptable×rare, suboptimal×frequent

Crucially, only the combination where a suboptimal candidate appears frequently is excluded by Adli (2011b: 397).

The first aim of this paper is to verify which of the combinations in (2) can be observed in the domain of Spanish focus marking, which specific focus configuration (e.g., narrow information focus on a direct object) exhibits which combination, and whether the combination *suboptimal×frequent* is indeed absent. The second aim of this paper is to establish ranks between the various options in Spanish focus marking and to verify whether the ranks for acceptability and frequency align. The working hypothesis is that the ranks do align, as illustrated in (3). If option $O_1$ is more acceptable than option $O_2$, then option $O_1$ is also more frequent than option $O_2$.

(3)   a.   acceptability: $O_1 > O_2 > O_3$
       b.   frequency: $O_1 > O_2 > O_3$

Note that neither the combinations in (2) nor the ranking in (3) make a claim about the causal relation between acceptability and frequency (or frequency and acceptability).

When we analyze the frequency and acceptability of constituents in the three positions, we must bear in mind that the positions do not have the same status for all constituents. For example, for a subject initial position is the unmarked position, but for a direct object initial position requires fronting.[2] Further, a given syntactic function does not have any of the three positions *per se* since the position also depends on other elements in the sentence. For example, a direct object has an internal unmarked position if the respective sentence includes an indirect object (cf. (4a)), but it has a final unmarked position in a sentence without an indirect object (or other postverbal constituents) (cf. (4b)).

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**2.**   Spanish is an SVO language (cf. Hernanz Carbó & Brucart (1987: 75); Gutiérrez-Bravo (2008: 369–371)). Gutiérrez-Bravo (2007: 236) stresses that the unmarked word order also depends on the semantic verb class: (i) with certain psych verbs (e.g., *gustar* 'like') the unmarked order of V, S, and iO is iO-V-S; (ii) with unaccusative verbs the unmarked order of V and S is *V-S*.

(4)  a.  S-V-dO-iO
     b.  S-V-dO

To control for these factors, in the empirical part of this paper we will consider only those constituents that have their unmarked position in a postverbal sentence-internal position, such as the direct object in (2a). Note that in the case of postverbal constituents the assumption of an unmarked order is not unproblematic since we find variation in constituent order even in neutral contexts such as sentence focus (cf. Heidinger 2015).

The remainder of the paper is structured as follows. In Section 2 we will introduce contrastive focus and information focus and give a brief overview of the literature on the relation between these types of focus and three positions: initial, internal, final. Section 3 is dedicated to the results of several empirical studies on the basis of which we will describe the relation between frequency and acceptability in Spanish focus marking.

## 2.  Two types of focus and three syntactic positions

### 2.1  Two types of focus

Following Rooth (1985, 1992), Krifka (2007: 18) defines *focus* as follows: "Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions". Thus, in example (5) *a new car* is the focus because, for this part of the sentence, alternatives that are relevant for the interpretation of the sentence exist: the focus *a new car* specifies that among all the things that John might have bought, he actually bought a new car.[3]

(5)  (Context: What did John buy?)
     John bought [a new car]$_{IF}$.

Several types of focus can be distinguished with respect to various parameters. Concerning the size of the focus, one can distinguish between *sentence focus* vs. *VP focus* vs. *narrow focus*, as in (6).

(6)  a.  (Context: What happened?)                      sentence focus
         [John bought a new car]$_{IF}$.
     b.  (Context: What did John do yesterday?)          VP focus
         He [bought a new car]$_{IF}$.

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**3.**  Where necessary we use the abbreviations *IF* and *CF* to distinguish between information focus and contrastive focus.

    c.   (Context: What did John buy?)           narrow (argument) focus
        He bought [a new car]$_{\text{IF}}$.

One can further distinguish different types of focus based on the relation that the focused constituent has to its context. *A new car* in (7a) clearly has a different relation to the context than *a new car* has in (7b). While the focus in (7b) contrasts with an element of the preceding context, no such relation holds in (7a): the focus just contributes new information to the discourse (in this case it is information that is explicitly requested in the preceding question). Based on these distinct relations with the preceding context, *information focus* as in (7a) and *contrastive focus* as in (7b) are distinguished.

(7)  a.   (Context: What did John buy?)             information focus
        He bought [a new car]$_{\text{IF}}$.
    b.   (Context: John bought a house, right?)         contrastive focus
        No, he bought [a new car]$_{\text{CF}}$.

In Rooth's (1985, 1992) *Alternative Semantics,* the distinction between information and contrastive focus can be stated in terms of the size of the alternative set, i.e., the set of alternatives to the focused constituent. In the case of the contrastive focus in (7b), the set of alternatives for the focus *a new car* consists of one element only, namely *a house.*[4] In the case of the information focus in (7a), however, the set of alternatives is an open set, which may contain *a house*, *a dog*, *a bike*, etc.

## 2.2    Initial position

In Spanish, the sentence-initial position can be occupied by various constituents. In the present context, however, we are only interested in constituents that are fronted to this position. *Fronting* refers to when a constituent ends up in sentence-initial position although this is not its unmarked position in linear order. In (8), *manzanas* 'apples' is the direct object in the sentence. However, it does not appear in its canonical postverbal position, but in preverbal and sentence-initial position.[5]

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4.  Cf. Repp (2010: 1335) on the relation between different types of focus and the alternative set.

5.  In the following we will only consider cases where the fronted constituent bears the sentence's main stress. Besides such cases, Spanish also allows the fronting of constituents which do not bear the main stress. The latter case will not be considered in the empirical part of this paper because it is not a means of marking a given constituent as focus. Leonetti and Escandell-Vidal (2009: 179) consider instances of fronting where the fronted constituent does not bear the nuclear stress to be expressions of verum focus. This means that the focus in such examples is not the fronted element, but the positive polarity of the assertion.

(8)   Fronting to initial position                    (Zubizarreta 1999: 4239)
       [*Manzanas*]$_{CF}$ *compró Pedro* (*y   no   peras*).
       apples               bought Pedro and  not  pears
       'Pedro bought apples and not pears.'

Fronting must be distinguished from other types of movement to the left sentence
periphery such as *left-dislocation*.

(9)   Left-dislocation
       *Las manzanas, Pedro las      compró ayer.*
       the  apples      Pedro CL.ACC bought yesterday
       'The apples, Pedro bought them yesterday.'

Left-dislocation as in (9) differs from fronting in that it does not trigger subject-verb
inversion and that it requires a resumptive clitic pronoun if the dislocated element
is an argument (of the verb) for which Spanish provides such a clitic pronoun.[6]
This difference in the syntactic surface structure can be accounted for by assuming
that the two types of movement involve different landing sites; only in the case of
fronting does the moved constituent end up in a position that is still part of the
core sentence.

### 2.2.1   *Contrastive focus and initial position*

The example in (8) shows that fronting is a formal means of encoding contrastive
focus in Spanish. However, in the literature one rarely finds statements on how tight
the relation between initial position and contrastive focus actually is. For example,
Bosque and Gutiérrez-Rexach (2009: 692ff.) discuss fronting as one way to encode
contrastive focus. But one does not find any hint as to whether the authors assume
that contrastive focus can only be expressed through fronting, nor whether fronting
is restricted in any way. Real Academia Española & Asociación de Academias de la
Lengua Española (2009: 2986ff.) gives examples of contrastive foci which are not
fronted in addition to examples where the contrastive focus is fronted; yet no state-
ment is made about the currency of fronted foci. In Rodríguez Ramalle (2005: 558),
the relevant section is entitled: *El foco contrastivo o antepuesto* 'The contrastive or
fronted focus'; although this would suggest a close tie between fronting and con-
trastive focus, the author does not comment on such a tie in the section itself. A
restriction in the literature consulted is Gutiérrez-Bravo's (2008: 377) statement that
clefting is the typical way to encode contrastive focus in Spanish, but this does not
imply that fronting is not used at all. Further, Gutiérrez-Bravo (2006) states that
focus fronting is dispreferred in Mexican Spanish.

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**6.**   For the prosodic properties of left-dislocated constituents in Spanish, see Feldhausen (2016).

### 2.2.2 *Information focus and initial position*

Many authors hold that, in Spanish, fronted constituents that bear the main stress necessarily need to be interpreted as contrastive focus (cf. amongst others Zubizarreta (1999: 4239); Revert Sanz (2001: 27); Martín Butragueño (2005: 135)). There are, however, hints that such a statement does not hold categorically and needs to be relativized.

Brunetti (2009) presents data where the fronted foci are not contrastive in the above sense. Based on data from corpora of spoken Spanish and Italian, Brunetti (2009: 48) distinguishes three subtypes of fronted foci: (i) the fronted element overtly contrasts with an element of the context (as in (8)); (ii) the fronted element presents unexpected information or information that contrasts with an implicitly assumed belief; (iii) the fronted element expresses information that answers a question that is not present in the immediately preceding context. Note that only the first, possibly also the second, but by no means the third type corresponds to contrastive focus as described above.

Further, it has been stated in the literature that foci in initial position can be interpreted as information focus. In the example in (10), the subject is in its canonical preverbal position and focused. But as the context, i.e., the preceding question, shows, the subject is an information focus and not a contrastive focus. Although this example does not involve the movement from postverbal to preverbal position, it illustrates nevertheless that initial position is not limited to contrastive foci (cf. also Uth (2014) and Hoot (2012, 2014) on focused subjects in preverbal position).

(10) (Context: Who is playing the piano?)
  [*Juan*]$_{IF}$ *toca   el   piano*.
  Juan     plays the piano
  'Juan is playing the piano.'                    (Gutiérrez Ordóñez 1997: 35)

Similarly, Gabriel (2007: 287) reports data from a judgment experiment where 18 participants had to state their preference between two possible orderings. In the case of a focused direct object, the vast majority preferred the stimulus with the focus in sentence-final position (as in (11a)) over the stimulus with the focus in initial position (as in (11b)). Nevertheless, some participants preferred the version with the fronted information focus, and further, only three of the 16 other participants judged the fronted information focus as inappropriate.

(11) (Context: What is María buying at the kiosk?)
  a. *María   compra en el   kiosco* [*el diario*]$_{IF}$.
     María   buys    at the kiosk   the newspaper
     'María is buying at the kiosk the newspaper.'

> b.  [*El diario*]$_{IF}$  *compra María en el kiosco.*
>     The newspaper buys  María at the kiosk
>     'Mary is buying the newspaper at the kiosk.'          (Gabriel 2007: 287)

Real Academia Española & Asociación de Academias de la Lengua Española (2009: 2987) states that fronting is a means of focusing constituents, but that focus fronting is not limited to contrastive contexts. Muntendam (2013: 125f.) reports for Andean Spanish that fronted objects can be frequently found in the context of *wh*-questions, and that dO-V-S with information focus on the direct object is judged acceptable by the majority of speakers in her sample of Andean Spanish.

Given these data and statements from the literature, the view that fronted foci in Spanish are limited to contrastive contexts needs to be relativized at least to the extent that it does not hold as a categorical statement.

## 2.3  Final position

With regard to sentence-final position, two cases need to be distinguished. Constituents in this position can have it as their unmarked position (cf. (12a)) or as a position in which they end up due to focus-induced (or weight-induced) constituent order variation (cf. (12b)).

> (12) a.  (Context: What did Juan buy?)
>          *Juan compró* [*una casa*]$_{IF}$.                              S-V-dO
>          Juan bought  a house
>          'Juan bought a house.'
>      b.  (Context: Who bought a house?)
>          *Compró una casa* [*Juan*]$_{IF}$.                              V-dO-S
>          bought  a house  Juan
>          'Juan bought a house.'

Above we defined fronting as a construction in which a constituent is moved into sentence-initial position. This indicates that initial position is not the unmarked linear position of the respective constituent. Similarly, we will consider in the empirical part of this paper only constituents in final position that have a non-final unmarked linear position. These constituents end up in final position due to deviations from unmarked linear order (on the hierarchical level this corresponds to the leftward movement of non-focal material (cf. Zubizarreta 1998, 1999; Gabriel 2007, 2010)).

### 2.3.1  *Information focus and final position*

Concerning the syntactic position of narrow information focus in Spanish, two basic views can be identified in the literature: (i) narrow information foci always appear in sentence-final position (cf. Zubizarreta 1998, 1999; Revert Sanz 2001; Martín Butragueño 2005; Rodríguez Ramalle 2005); (ii) narrow information foci do not always appear in sentence-final position in Spanish (cf. Gabriel 2007, 2010; Heidinger 2013, 2014a, 2015; Hoot 2012, 2014; Muntendam 2013; Uth 2014). The first view rules out cases such as (13) where the narrow information focus is not in final position.

(13)  (Context: Who bought a house?)
      [*Juan*]$_{IF}$ *compró  una  casa*.
      Juan       bought  a      house
      'Juan bought a house.'

A prominent exponent of the first view is Zubizarreta (1998, 1999), who distinguishes between two types of nuclear accents in Spanish: a neutral and an emphatic accent (1999: 4228ff.). The first is used in the case of information focus, the latter in the case of contrastive focus. Crucially, according to Zubizarreta the neutral nuclear accent needs to be in sentence-final position, and all non-final nuclear accents are thus emphatic.[7] Since the nuclear accent must lie within the focus domain, the sentence-final position of the neutral nuclear accent implies that the information focus includes the constituent which is in sentence-final position. From the final position the focus may or may not expand to the left (cf. (14)).

(14)  a.  (Context: What did Juan buy?)
          *Juan  compró  [una  CAsa*]$_{IF}$.
          Juan  bought  a house
          'Juan bought a house.'
      b.  (Context: What did Juan do?)
          *Juan  [compró  una  CAsa*]$_{IF}$.
          Juan  bought   a house
          'Juan bought a house.'

Since for Zubizarreta (1998, 1999) non-final foci must be interpreted as contrastive, they are pragmatically inappropriate in a non-contrastive context such as a simple *wh*-question (cf. (15a)), but appropriate in a contrastive context such as (15b).

(15)  a.  (Context: What did Juan buy?)
          #[*Una casa*]$_{IF}$ *compró Juan*.

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7.  Note that this does not exclude the possibility of a sentence-final emphatic accent.

b.  (Context: Juan bought a car, right?)
[*Una casa*]_CF *compró Juan.*
a house        bought  Juan
'Juan bought a house.'

It follows from Zubizarreta's (1998, 1999) view that narrow information focus on constituents causes deviations from unmarked linear order if the focused constituent's unmarked position is not sentence-final position. Let us consider the order between the postverbal constituents direct object and locative adjunct. The unmarked order between the constituents is that the direct object appears before the locative adjunct (as in (16a)). If both postverbal constituents are expressed, the focalization of the direct object may result in an order where the locative adjunct precedes the direct object (cf. (16b)).

(16)  S-V-dO-LOC to S-V-LOC-dO
a.  (Context: What did María do?)
*María* [*compró el    diario      en el   kiosco*]_IF.
María  bought  the newspaper  at  the kiosk
b.  (Context: What did María buy at the kiosk?)
*María  compró en el   kiosco* [*el  diario*]_IF.
María  bought  at  the kiosk  the  newspaper
'María bought the newspaper at the kiosk.'

According to authors such as Zubizarreta, changes in constituent order as in (16) are obligatory, since the focused constituent must end up in sentence-final position (even if this is not its unmarked position).

**2.3.2**  *Contrastive focus and final position*
According to Zubizarreta (1998, 1999), the neutral nuclear accent, which is realized in the case of information focus, is limited to sentence-final position. The emphatic neutral accent, which is realized in the case of contrastive focus, is not subject to such a positional restriction. Nevertheless, contrastive foci may appear in final position even if it is not their unmarked position (cf. Gabriel 2007, 2010). In (17), the contrastively focused direct object *un diario* 'a newspaper' appears after the indirect object, which is a deviation from the unmarked ordering dO-iO.

(17)  (Context: Mary is giving a magazine to her brother, isn't she?)
*María le      da     a  su   hermano* [*un diario*]_CF.
María  CL.DAT gives  to  her  brother  a    newspaper
'María is giving a newspaper to her brother.'                    (Gabriel 2010: 206)

## 2.4 Internal position

The sentence-internal position may or may not be the unmarked linear position of a constituent. In the empirical part of this paper, we will consider the sentence-internal position only if it is the unmarked position of the respective constituent (e.g., the direct object in a sequence *S-V-dO-iO*).

### 2.4.1 *Information focus and internal position*

According to Zubizarreta (1998, 1999), the internal position is not available for Spanish information foci, since they must appear in sentence-final position (cf. Section 2.3.1). However, not all researchers share this view. In a recent line of experimental research, several authors have presented evidence from semi-spontaneous production experiments which show that narrow information foci can also appear in non-final positions in Spanish (cf. Gabriel 2007, 2010; Heidinger 2013, 2014a, 2015; Hoot 2012, 2014; Muntendam 2013; Uth 2014). The main finding is that prefinal narrow information foci as in (18) are in fact possible in Spanish.

> (18)  (Context: What did María buy at the kiosk?)
> *María  compró  [el diario]$_{IF}$     en el   kiosco.*          S-V-[dO]$_{IF}$-LOC
> María  bought  the newspaper  at  the kiosk
> 'María bought the newspaper at the kiosk.'          (Gabriel 2010: 211)

### 2.4.2 *Contrastive focus and internal position*

Contrastively focused constituents may remain in their unmarked position even if it is a sentence-internal one (cf. Gutiérrez Ordóñez 1997; Gabriel 2007, 2010; Heidinger 2014b). Example (19) shows a contrastively focused direct object in the context of an indirect object. The focused direct object is in sentence-internal position which is also the unmarked linear position if a direct object appears together with an indirect object.

> (19)  (Context: Mary is giving a magazine to her brother, isn't she?)
> *Le       da     [un diario]$_{CF}$ a   su   hermano.*          V-[dO]$_{CF}$-iO
> CL.DAT  gives  a newspaper   to  her  brother
> 'She is giving a newspaper to her brother.'          (Gabriel 2010: 217f.)

## 2.5    Interim conclusion

All three positions (initial, internal, final) seem to be compatible with both narrow information focus and contrastive focus. This conclusion contradicts the view of individual authors who claim that a certain combination of type and position may not be available (e.g., fronted information focus is not an option in Spanish according to Zubizarreta (1998, 1999)). The overall impression is that Spanish constituent order is indeed free and that focused constituents can appear in various positions, irrespective of the type of focus (contrastive or informational).

Although all three positions appear as options to express both types of focus, we must bear in mind that the general availability of several options does not mean that these options have the same status. Hence, we will go a step further and verify whether the three positions are indeed equal options for expressing the two types of focus. In order to do this, we will look at their frequency of use and their gradient acceptability. As stated in Section 1, we are interested in (i) the rank of these options with respect to both frequency and acceptability, (ii) whether the ranks on the two levels align, and (iii) the general relation between acceptability and frequency in Spanish focus marking.

## 3.    Data

### 3.1    Data sources

In the empirical part of this paper, we will only consider constituents that have their unmarked linear position after the sentence's main verb and appear in the context of a second constituent that has its unmarked linear position after the respective constituent. An example of such a relevant constituent is a direct object in the context of an indirect object, as in (20). The unmarked order in this case would be *subject – verb – direct object – indirect object*.

(20)   dO (& iO)
    a.    initial: <u>dO</u>-V-S-iO
    b.    final: S-V-iO-<u>dO</u>
    c.    internal: S-V-<u>dO</u>-iO

We will analyze the status of the three positions *initial*, *internal*, and *final* for contrastive and information focus based on two types of empirical evidence: data on frequency and data on acceptability.

The data on acceptability come from Adli (2011a) and an unpublished experiment conducted by the author in Cáceres, Spain in November 2015. In both

experiments, participants had to rate the acceptability of a given stimulus on a scale (a continuous scale from 0 to 100 in Adli (2011a) and a 10-point scale in our own acceptability experiment). In both experiments, the stimuli were presented in audio format. The specifics of Adli's experiment are given in Adli (2011a); the method and setup of our own acceptability experiment are described in the appendix.

The data on frequency come from Gabriel's (2007, 2010) and Heidinger's (2014a, 2014b) semi-spontaneous production experiments.[8] Here, participants had to answer questions in relation to a visual stimulus. The experiments were carried out individually with each participant. The stimuli were presented to the participants on slides on a computer screen. When showing the picture for the first time, additional information on the situation was given in written form. The purpose of the written information is to introduce the acting character, to evoke the elements of the picture that are relevant for the questions, and to minimize the participants' effort in searching for the suitable lexical items when answering the questions. To avoid priming of a certain word order, in Heidinger (2014a, 2014b) the written information was not presented in sentence form, but loosely distributed over the picture. In all cited production experiments, participants were free to produce whatever constituent order or construction they felt was most natural in each context. But they were asked to use all the lexical material that was presented as additional information when the visual stimuli was shown for the first time. The aim of this request was to minimize reduced and one-word answers, which are not instructive with respect to constituent order.

With respect to the production experiments, it is necessary to note the type of frequency data collected in these experiments. The results of the experiments do not show corpus or text frequencies. Hence, we cannot tell from the production experiments how often certain configurations (e.g., $V\text{-}[dO]_{CF}\text{-}iO$ as in (19)) occur in texts. But the results from the production experiments reflect how often speakers choose different options in a given context (e.g., narrow contrastive focus on a direct object in a sentence which also includes an indirect object). The frequencies thus represent the proportions between the three positions in production. The reason why we do not consider text or corpus frequencies lies in the difficulty in obtaining such data: (i) it is hard to find a sufficient number of corpus examples where the respective constituents are combined; (ii) it is very difficult to annotate corpus data with respect to the focus–background partition. Production experiments have the advantage that stimuli can be constructed according to the constituents one

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**8.**   We are not using the frequencies from Gabriel (2007) for the combination of $[dO]_{CF}$ (& iO) since the total absolute frequency for the three positions initial, internal, and final is very low ($n = 4$). Furthermore, we are not using the data from Heidinger's (2013) forced choice experiment in order to keep the methodology for the frequency data consistent.

wishes to combine and that the focus–background partition can be controlled for by the type of context or questions asked.

Table 1 provides an overview of the data sources stating the published source itself, the data type, the method of data collection, some information on the participants, and – in the last column – the constituents involved (the first constituent is the focused constituent, the one in parentheses is the second postverbal constituent). While in most cases the details of the data collection and the experimental set-up can be retrieved from the sources cited above, the unpublished acceptability judgment experiment needs some further description and is given in the appendix.

**Table 1.**  Data sources

| Source | Data type | Data collection | Subjects | Constituents |
| --- | --- | --- | --- | --- |
| Adli 2011a | acceptability | perception experiment with gradient acceptability judgments on auditory stimuli | 54 bilingual native speakers of the variety of Spanish spoken in Catalonia (second language: Catalan) | dO (& LOC) |
| unpublished experiment by author | acceptability | perception experiment with gradient acceptability judgments on auditory stimuli | 26 monolingual native speakers of Iberian Spanish | dO (& SP) SP (& LOC) |
| Gabriel 2007 | frequency | semi-spontaneous production experiment with visual stimuli | 18 native speakers of Iberian Spanish (14) and various American varieties (4) | dO (& iO) |
| Gabriel 2010 | frequency | semi-spontaneous production experiment with visual stimuli | 50 native speakers of Argentinian Spanish | dO (& iO) dO (& LOC) |
| Heidinger 2014a Heidinger 2014b | frequency | semi-spontaneous production experiment with visual stimuli | 36 monolingual native speakers of Iberian Spanish | dO (& SP) SP (& LOC) |

## 3.2    Positions for contrastive focus

### 3.2.1    *Frequency*

The data on the frequency of contrastive focus in initial, internal, and final position involve the following constituents: a contrastively focused direct object in the context of a locative adjunct (Gabriel 2010), a contrastively focused direct object in the context of an indirect object (Gabriel 2010), a contrastively focused secondary predicate in the context of a locative adjunct (Heidinger 2014b), and a contrastively focused direct object in the context of a secondary predicate (Heidinger 2014b).

In all four cases we assume an unmarked linear order where the contrastively focused constituent has an internal postverbal position (cf. (21)). As a consequence, both initial and final position would result in a deviation from the unmarked order.

(21)    unmarked order
    a.    $[dO]_{CF}$ (& iO):     S-V-dO-iO
    b.    $[dO]_{CF}$ (& LOC): S-V-dO-LOC
    c.    $[SP]_{CF}$ (& LOC): S-V-SP-LOC
    d.    $[dO]_{CF}$ (& SP):     S-V-dO-SP

As the data come from production experiments, the subjects were free to produce whatever constituent order or construction they felt was most natural in each context. This includes constructions which lie outside the scope of the present study (e.g., clefts or one-word answers). Data that is irrelevant for the present purpose is ignored and not represented in the following tables (for this reason, we had to make our own calculations based on the frequencies given in Gabriel (2007, 2010) and Heidinger (2014a, 2014b)). The total absolute frequencies (indicated as $n =$ in the tables) represent the total for the internal, initial, and final positions.

The results presented in Table 2 show that the three positions strongly differ with respect to frequency. First of all, contrastive foci that are fronted to initial position are very rare in the data. Given that fronting is frequently described as a means of encoding contrastive focus (cf. also Section 2), its rarity in the production experiments is surprising. With respect to the remaining two positions, the data shows that both positions are used frequently for contrastively focused constituents. Nevertheless, there is a clear preference for expressing the contrastive focus in internal position over expressing it in final position.[9]

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9.    Feldhausen and Vanrell (2014) report results from a production experiment with a similar methodology to those used by Gabriel (2007, 2010) and Heidinger (2014a, 2014b). However, since the number of participants in the experiment is rather low (four participants), the data is not taken into account in the following analyses. Nevertheless, it should be noted that their results depart from those in Gabriel (2007, 2010) and Heidinger (2014a, 2014b) in that initial position is more frequent than internal and final position (tested for a focused direct object in the context of an indirect object or an adjunct).

**Table 2.** Frequency of contrastive focus in three positions

|  | initial | internal | final | frequency ranking |
|---|---|---|---|---|
| [dO]$_{CF}$ (& iO) (Gabriel 2010) ($n = 26$) | 7.69% | 69.23% | 23.08% | internal > final > initial |
| [dO]$_{CF}$ (& LOC) (Gabriel 2010) ($n = 26$) | 0% | 96.15% | 3.85% | internal > final > initial |
| [SP]$_{CF}$ (& LOC) (Heidinger 2014b) ($n = 65$) | 0% | 67.69% | 32.31% | internal > final > initial |
| [dO]$_{CF}$ (& SP) (Heidinger 2014b) ($n = 68$) | 0% | 69.12% | 30.88% | internal > final > initial |

Examples of some of the options are given in (22) to (24).

(22)  [dO]$_{CF}$ in initial position
  a.  (Context: Mary is giving a magazine to her brother, isn't she?)
  b.  *No.* [*Un diario*]$_{CF}$ *le          da.*
      NEG  a newspaper   CL.DAT  gives
      'No, she is giving him a newspaper.'                    (Gabriel 2010: 205)

(23)  [dO]$_{CF}$ in internal position
  a.  (Context: Pepito is opening the window drunk, right?)
  b.  *No,   abre   * [*la puerta*]$_{CF}$ *borracho.*
      NEG  opens  the door        drunk
      'No, he is opening the door drunk.'                    (Heidinger 2014b: 141)

(24)  [dO]$_{CF}$ in final position
  a.  (Context: Juanita is painting the floor barefoot, right?)
  b.  *No,   pinta   descalza* [*el armario*]$_{CF}$.
      NEG  paints  barefoot  the wardrobe
      'No, she is painting the wardrobe barefoot.'          (Heidinger 2014b: 140)

The overall frequency ranking of the three positions for the encoding of contrastive focus is given in (25).

(25)  frequency ranking for contrastive focus:
      internal > final > initial

**3.2.2    *Acceptability***

In his gradient acceptability experiment on contrastive focus, Adli (2011a) tests a total of eight experimental conditions. For the present purpose we are only interested in the acceptability judgments for the three conditions given in (26). In all three conditions, a contrastively focused direct object appears in the context of an overtly expressed subject, a verb, and a locative adjunct.

(26)  a.  initial: $[dO]_{CF}$-V-S-LOC
 [*El móvil*]$_{CF}$ *perdió  Martín   por   casa.*
 the cell       lost    Martín   at    home
 'It's the cell phone that Martin lost at home.'

  b.  internal: S-V-$[dO]_{CF}$-LOC
 *Martín perdió* [*el móvil*]$_{CF}$ *por casa.*

  c.  final: S-V-LOC-$[dO]_{CF}$
 *Martín perdió por casa* [*el móvil*]$_{CF}$.         (Adli 2011a: 126; adapted)

The mean acceptability scores (together with the standard deviation) for the three conditions, which correspond to the positions *initial*, *internal,* and *final*, are given in Table 3. The scale ranges from 0 to 100 (with 100 representing the highest degree of acceptability). Although all three positions receive rather high acceptability scores, there is a clear ranking between them. Contrastive focus in unmarked internal position receives the best score, followed by final position, then initial position (cf. also the ranking in (27)).[10]

**Table 3.**  Mean acceptability scores for contrastively focused direct objects in three positions (Adli 2011a: 133; footnote 14)

|  | initial | internal | final |
|---|---|---|---|
| mean score | 61.8 | 74.6 | 69.8 |
| standard deviation | 18.3 | 21.0 | 20.0 |

(27)   acceptability ranking for contrastive focus:
   internal > final > initial

**3.2.3    *Frequency and acceptability***

In this section, we compare the rankings of the three positions for contrastive focus with respect to frequency and acceptability, and we look at how frequency and acceptability combine in the data.

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**10.**  With regard to the statistical significance of these differences, Adli (2011a: 137) reports that the position of the focused constituent has a statistically significant ($p < 0.001$) impact on the acceptability score. Note, however, that this calculation also includes conditions other than those illustrated in (26).

Concerning the rankings of the three positions, (28) shows that we find the same rankings on both levels. The unmarked internal position is most frequent and also receives the highest acceptability score, followed by final position, and then initial position.

(28)   rankings for contrastive focus
     a.   frequency: internal > final > initial
     b.   acceptability: internal > final > initial

In order to describe how acceptability and frequency combine, we will simplify the continuous variables *frequency* and *acceptability* and distinguish between *frequent* (20% or more) and *rare* (less than 20%) on the level of frequency and between *acceptable* (upper half of the scale) and *suboptimal* (lower half of the scale) on the level of acceptability.

Table 4 shows the possible combinations of these two binary features and indicates whether a given combination is represented in our data. The lack of suboptimal acceptability for any of the three positions already excludes two logically possible combinations, namely *suboptimal×rare* and *suboptimal×frequent*. Among the acceptable positions, initial position is rare and internal and final position are frequent.

**Table 4.**  Frequency and acceptability of positions for contrastive focus

|              | **frequent**    | **rare** |
| ------------ | --------------- | -------- |
| acceptable   | internal, final | initial  |
| suboptimal   | –               | –        |

How do these combinations fit the working hypothesis (stated in Section 1, based on Adli 2011b)? All observed combinations can in fact be captured by the working hypothesis which only excludes the combination *suboptimal×frequent*. The fact that not all possible combinations represented in the working hypothesis are found in the data does not contradict the working hypothesis.

## 3.3   Positions for information focus

### 3.3.1   *Frequency*

The data on the frequency of information focus in initial, internal, and final position involves the following constituents (which are the same ones as in the case of contrastive focus; cf. Section 3.2.1): a focused direct object in the context of a locative adjunct (Gabriel 2010), a focused direct object in the context of an indirect object (Gabriel 2007, 2010), a focused secondary predicate in the context of a locative adjunct (Heidinger 2014a), and a focused direct object in the context of a secondary

predicate (Heidinger 2014a). The unmarked order of the constituents has already been given in Section 3.2.1 and is repeated in (29).

(29) unmarked order
  a. $[dO]_F$ (& iO):    S-V-dO-iO
  b. $[dO]_F$ (& LOC):  S-V-dO-LOC
  c. $[SP]_F$ (& LOC):   S-V-SP-LOC
  d. $[dO]_F$ (& SP):    S-V-dO-SP

As in the case of contrastive focus, we only consider the frequency of focused constituents in initial, internal, or final position; the results are given in Table 5. The least frequent position for information focus is initial position. Nevertheless, we find some instances of such fronted foci (cf. Gabriel 2010). With regard to internal and final position, the results from the experiments show a mixed picture. While the results from Heidinger (2014a) and Gabriel (2007) indicate that information focus appears more frequently in final than in unmarked internal position, the results from Gabriel (2010) show a preference for internal over final position. As in the case of contrastive focus, we find a clear preference for expressing the information focus postverbally. However, the preference for one of the two postverbal positions is not as obvious as in the case of contrastive focus. The solution would be either to assume a tie between the two positions (i.e., *final | internal*) or to take the fact that in three out of five sources final position is preferred over internal position as the decisive hint to assume a *final > internal* ranking. In the present case, we choose the more cautious interpretation of the data and assume a tie between final and internal position.

**Table 5.** Frequency of information focus in three positions

|  | initial | internal | final | frequency ranking |
|---|---|---|---|---|
| $[dO]_F$ & iO Gabriel 2007 $n = 14$ | 0% | 35.71% | 64.29% | final > internal > initial |
| $[dO]_F$ & iO Gabriel 2010 $n = 29$ | 6.90% | 72.41% | 20.69% | internal > final > initial |
| $[dO]_F$ & LOC Gabriel 2010 $n = 28$ | 7.14% | 67.86% | 25.00% | internal > final > initial |
| $[SP]_F$ & LOC Heidinger 2014a $n = 69$ | 0% | 44.93% | 55.07% | final > internal > initial |
| $[dO]_F$ & SP Heidinger 2014a $n = 72$ | 0% | 36.11% | 63.89% | final > internal > initial |

Examples of some of the options are given in (31) to (33).

(30)  $[dO]_F$ in initial position
 a.   (Context: What is Mary buying at the kiosk?)
 b.   [*Un diario*]$_{IF}$  *compra*  *María*.
      a newspaper   buys    María
      'María is buying a newspaper.'                    (Gabriel 2010: 217)

(31)  $[dO]_F$ in internal position
 a.   (Context: What is Juanita painting barefoot?)
 b.   *Juanita   pinta*   [*el armario*]$_F$   *descalza*.
      Juanita   paints   the wardrobe   barefoot
      'Juanita is painting the wardrobe barefoot.'
                                    (Heidinger 2014a: 67; adapted)

(32)  $[SP]_F$ in final position
 a.   (Context: What is Juanita painting barefoot?)
 b.   *Juanita   pinta   descalza*   [*el armario*]$_F$.
      Juanita   paints   barefoot   the wardrobe
      'Juanita is painting the wardrobe barefoot.'
                                    (Heidinger 2014a: 67; adapted)

The overall frequency ranking of the three positions for the encoding of information focus is given in (33).[11]

(33)   frequency ranking for information focus:
       final | internal > initial

### 3.3.2   *Acceptability*

Data on the acceptability of information focus in different positions comes from an unpublished experiment conducted by the author in Cáceres, Spain in 2015 (cf. appendix for details). Two of the configurations that were tested in the experiment are of relevance here: $[SP]_{IF}$ (& LOC) and $[dO]_{IF}$ (& SP). The mean acceptability scores and the standard deviations for the focused constituents in the three positions are given in Table 6.

For both configurations we see that final position receives the highest score, followed by internal position and finally initial position. We also observe for both configurations that all three positions receive rather high scores, and consequently all three positions must be considered acceptable based on these results.

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**11.** In Feldhausen and Vanrell (2014), final position is more frequent than internal and initial position (tested for a focused direct object in the context of an indirect object or an adjunct). Heidinger's (2013) forced choice experiment also shows a preference for final over internal position (initial position was not tested).

**Table 6.**  Acceptability scores

|  |  | initial | internal | final |
|---|---|---|---|---|
| $[SP]_{IF}$ (& LOC) | mean score | 7.88 | 9.17 | 9.35 |
|  | standard deviation | 1.95 | .76 | .89 |
| $[dO]_{IF}$ (& SP) | mean score | 7.52 | 8.87 | 9.27 |
|  | standard deviation | 1.83 | 1.38 | 1.05 |

The differences between the three positions are rather small. In order to verify whether the differences are statistically significant, a one-factorial variance analysis (with three levels – *initial*, *internal*, *final* – and the acceptability score as a dependent variable) has been conducted with a pairwise comparison of the three positions. Table 7 gives the respective significance levels for the pairwise comparisons and shows that the difference between final and internal position is not statistically significant (at the .05 level).

**Table 7.**  Significance levels for pairwise comparisons

|  | initial vs. final | initial vs. internal | final vs. internal |
|---|---|---|---|
| $[SP]_{IF}$ (& LOC) | $p = .002$ | $p = .004$ | $p = 1.000$ |
| $[dO]_{IF}$ (& SP) | $p = .001$ | $p = .022$ | $p = .714$ |

Our conclusion with respect to the acceptability ranking of the three positions for information focus is thus the following: As in the case of the frequency data, we assume a tie between final and internal position, and both final and internal position are ranked higher than initial position (cf. (34)).

(34)   acceptability ranking for information focus:
        final | internal > initial

This tie between the two positions final and internal is further corroborated by Hoot's (2012, 2014) results on Mexican Spanish. He conducted an acceptability judgment experiment (using a 5-point Likert scale) of narrow information focus on a direct object in the context of an indirect object. Although he did not test the initial position, two out of three conditions that were tested are relevant for us: (i) S-V-$[dO]_F$-iO (which corresponds to internal position) and (ii) S-V-iO-$[dO]_F$ (which corresponds to final position). The mean scores for both positions is very high, and internal position scores slightly higher than final position (4.16 vs. 4.02) (cf. Hoot 2012: 196). However, this difference is not statically significant (Hoot 2012: 198), and thus the results support the tie in the ranking in (34).

    It needs to be stressed that the differences we find for the three positions are rather small, and stimuli with the focus in internal and initial position also receive very high acceptability judgments. This suggests that constructions with a narrow

information focus in non-final position are not ungrammatical (contra Zubizarreta 1998, 1999; Revert Sanz 2001; Martín Butragueño 2005; Rodríguez Ramalle 2005).

### 3.3.3 *Frequency and acceptability*

With respect to the rankings of the three linear positions, (36) shows that the levels of frequency and acceptability again align. We find the same rankings on both levels. Final and internal position are more frequent than initial position and also receive a higher acceptability score than initial position.

(35) rankings for information focus
a. frequency: final | internal > initial
b. acceptability: final | internal > initial

Two combinations of acceptability and frequency are attested: *acceptable×frequent* (for final and internal position) and *acceptable×rare* (for initial position).

Table 8 shows the possible combinations of the two binary features of frequency and acceptability and indicates whether a given combination is represented in our data on information focus. The lack of suboptimal acceptability for any of the three positions already excludes two logically possible combinations, namely *suboptimal×rare* and *suboptimal×frequent*. Among the acceptable positions, initial position is rare and internal and final position are frequent.

**Table 8.** Frequency and acceptability of positions for information focus

|  | frequent | rare |
|---|---|---|
| acceptable | internal, final | initial |
| suboptimal | – | – |

Again, these combinations fit the working hypothesis (stated in Section 1, based on Adli 2011b). All observed combinations can in fact be captured by the working hypothesis which only excludes the combination *suboptimal×frequent*.

### 3.4 Discussion

In this section we wish to address two issues related to the data presented in Sections 3.2 and 3.3. The first of these is the existence of structures which are acceptable, but nonetheless show very low frequency. The second issue is that the status of focus positions is rather specific in the sense that it is highly dependent upon the syntactic function of the focused constituent.

The assessment of the empirical data presented in 3.2 and 3.3 has revealed the following relation between frequency and acceptability in Spanish focus marking: Rankings on the level of frequency and the level of acceptability align (both in the

case of contrastive focus and information focus). Structures that are produced more often receive higher acceptability scores than structures that are produced less often, and structures that receive higher acceptability scores are produced more often than structures that receive lower acceptability scores (cf. (36) and (37)).

(36)  rankings for contrastive focus
    a.  frequency:    internal > final > initial
    b.  acceptability:  internal > final > initial

(37)  rankings for information focus
    a.  frequency:    final | internal > initial
    b.  acceptability:  final | internal > initial

With regard to the attested combinations of frequency and acceptability as binary features (acceptable vs. suboptimal; frequent vs. rare), two out of four logically possible combinations are attested (*acceptable×frequent*, *acceptable×rare*), and two are not attested (*suboptimal×frequent*, *suboptimal×rare*) (cf. Table 9).

**Table 9.**  Attested and unattested combinations

|  | frequent | rare |
|---|---|---|
| acceptable | final IF, internal IF, final CF, internal CF | initial IF, initial CF |
| suboptimal | – | – |

The existence of the combination *acceptable×rare* is especially interesting because it bears on our interpretation of the rankings in (36) and (37).[12] Crucially, this combination shows that the alignment between the two levels in the rankings is not "proportional". A proportional alignment would be one where structures with similar degrees of acceptability exhibit similar degrees of frequency. This is not the case since all six structures in Table 9 are acceptable, but two of them show very low frequency. A proportional relation between acceptability and frequency, however, would predict that the frequencies of the structures with similar acceptability would be more alike.

The combination *acceptable×rare* further shows that acceptability is not a sufficient condition for frequent usage, and that structures with low frequency are not necessarily unacceptable. *Acceptable×rare* thus hints at a certain degree of independence between frequency and acceptability. One way to account for this independence (or mismatch) between acceptability and frequency is *entrenchment*: the usage and frequency-based strengthening of memory traces which in turn lead to an increase in frequency (Langacker 1987; Diessel 2007; Blumenthal-Dramé 2012). The assumed starting point would be a situation in which the structures have similar frequencies due to similar acceptability. But because of small differences

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12.  This particular combination is also mentioned in Adli (2011c) and Bermel and Knittl (2012).

in acceptability, there are already small differences in frequency at this stage; more acceptable structures are used more frequently than less acceptable ones. Entrenchment would then function as a catalyst and amplify the small differences in frequency, thereby causing a successive increase in the differences in frequency. If acceptability remains stable, entrenchment could lead to a situation where structures with similar acceptability scores exhibit different frequencies.

The second aspect we wish to address in this discussion is that the relation between frequency and acceptability of focus positions is sensitive to the constituents involved. As we have seen, sentence-initial position is hardly used for focused constituents which have their unmarked linear position after the main verb. Focused subjects, however, often appear in sentence-initial position, both in the case of information focus and contrastive focus (Gabriel 2007, 2010; Uth 2014). Further, Hoot (2012: 188) reports that sentence-initial subjects with information focus (as in $[S]_{IF}$-V-DO) receive high acceptability scores, namely 4.53 on a 5-point Likert scale. Hence, while initial position is acceptable and frequent for subjects, it is acceptable but infrequent for postverbal constituents such as direct objects of secondary predicates. Clearly, initial position does not have the same status for constituents that need to be fronted to this position, such as postverbal constituents, as it does for constituents for which it is the unmarked linear position, such as the subject. Differences in the status can also be detected with respect to acceptability. As we have seen, final position receives high acceptability scores for focused postverbal constituents such as objects or secondary predicates (both in the case of information focus and contrastive focus). Hoot (2012: 188), however, shows that focused subjects in final position receive rather low acceptability scores, namely 3.04 on a 5-point Likert scale. The status of a given linear position as a focus position is thus sensitive to whether it is a deviation of the unmarked linear order or not.

## 4.  Summary and conclusion

In this paper we have analyzed the relevance of three syntactic positions (initial, internal, and final) for expressing information focus and contrastive focus in Spanish. Based on frequency and acceptability data, we have shown that the three positions do not have the same status. Regarding information focus, final and internal position are preferred over initial position. In the case of contrastive focus, internal position is preferred over final position, and initial position again is least preferred. Although final position is both frequent and acceptable in the case of information focus, it needs to be stressed that internal position is frequent and acceptable as well. In light of the data presented in the paper, certain claims from the literature

that the information focus needs to be expressed in final position in Spanish (cf. Section 2) need to put into perspective.

Concerning the relation between frequency and acceptability, we have seen that the rankings align with respect to frequency and acceptability: If an option $O_1$ is more acceptable than an option $O_2$, then option $O_1$ is also more frequent than option $O_2$. For example, contrastively focused constituents appear more frequently in their unmarked internal position than in final position, and thus also receive a higher acceptability score in internal than in final position. An especially interesting case is where structures which receive high acceptability scores have a very low frequency. In the data presented in Sections 3.2 and 3.3, focused objects and secondary predicates in initial position show this combination *acceptable×rare*; Adli (2011b: 398) uses the term *latent construction* for such acceptable but rare or absent constructions. In Section 3.4 we have discussed entrenchment as a possible cause for this particular combination between frequency and acceptability. Small differences in frequency would be amplified through entrenchment, while the acceptability of the structures remains stable, resulting in a mismatch between frequency and acceptability.

## Acknowledgments

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## Appendix.  Description of acceptability judgment experiment conducted by the author

The experiment was carried out by the author in Cáceres, Spain in November 2015. 26 persons participated in the experiment (all monolingual speakers of Iberian Spanish and students at the Universidad de Extremadura / Cáceres; Age: 19–26, average: 19.7; Sex: 17 female, 9 male). The overall duration of the experiment was about 25 minutes (including an explanation and practice phase and the experiment itself). The experiment was conducted in two turns in a computer lab at the Universidad de Extremadura / Cáceres. The individual participants did not receive money for their participation; however, money prizes of EUR 20 and EUR 10 were drawn among the participants after both turns.

In the experiment, participants were presented mini-dialogues as in (38). The participants' task was to indicate the grammatical acceptability of the answer in the context of the question. To listen to the dialogue, the participants had to click on an embedded player on the computer screen (cf. Figure 1). The scale is a 10-point scale on which only the extremes of the scale were labeled (as *perfectamente aceptable* 'perfectly acceptable' and *para nada aceptable* 'absolutely unacceptable').

(38)   a.   ¿Cómo pintó María el armario?
       b.   María pintó el armario [descalza]$_F$.



**Figure 1.**  Presentation of stimuli and rating scale

In the stimuli, the following variables were controlled for:

- syntactic function of postverbal constituents: a secondary predicate was combined either with a direct object or with a locative adjunct
- type of focus: narrow information focus on one constituent
- position of focus: initial, internal, final
- focused constituent: SP, dO or LOC.

This amounts to the 12 experimental conditions given in Table 10. In this paper, we only consider the results for the conditions 4 to 9 because only the combinations $[dO]_F$ & SP and $[SP]_F$ & LOC fulfill the requirements stated in Section 3.1; that is, we only consider constituents that have their unmarked linear position after the sentence's main verb and that appear in the context of a second constituent that has its unmarked linear position after the respective constituent.

**Table 10.**  Experimental conditions

| condition | structure of answer |
|---|---|
| 1 | $[SP]_F$-V-S-dO |
| 2 | S-V-$[SP]_F$-dO |
| 3 | S-V-dO-$[SP]_F$ |
| 4 | $[dO]_F$-V-S-SP |
| 5 | S-V-$[dO]_F$-SP |
| 6 | S-V-SP-$[dO]_F$ |
| 7 | $[SP]_F$-V-S-LOC |
| 8 | S-V-$[SP]_F$-LOC |
| 9 | S-V-LOC-$[SP]_F$ |
| 10 | $[LOC]_F$-V-S-SP |
| 11 | S-V-$[LOC]_F$-SP |
| 12 | S-V-SP-$[LOC]_F$ |

Each condition was lexicalized in two ways. Each participant saw all conditions in both lexicalizations and thus had to give 24 acceptability judgments. The lexicalizations for SP & dO and SP & LOC are given in (39) and (40).

(39)  SP & dO

    lexicalization 1:    María – pintar – descalza – el armario

                        'María – paint – barefoot – the wardrobe'

    lexicalization 2:    Juan – arbir – borracho – la puerta

                        'Juan – open – drunk – the door'

(40)  SP & LOC

    lexicalization 1:    Juan – bailar – disfrazado – en su casa

                        'Juan – dance – disguised – in his house'

    lexicalization 2:    María – trabajar – empapada – en el jardín

                        'María – work – soaked – in the garden'

We used the online tool *Limesurvey* for the presentation of the stimuli. Each mini-dialogue was presented to the participants in a single audio file. To listen to the dialogue, participants had to click on a player embedded in Limesurvey (cf. Figure 1). We first explained the experiment to the participants, introducing the participants' task in the experiment and concepts such as gradual acceptability (as opposed to binary or categorical acceptability) and isolated acceptability (i.e., acceptability which is independent of aspects such as the plausibility of the situation depicted in the stimulus). Participants were then shown how to maneuver through the experiment. In Limesurvey only one stimulus (i.e., mini-dialogue) was presented at a time. The order of the stimuli in the experiment was semi-randomized. After judging one stimulus by clicking on the respective point on the scale, the participants could go on to judge the next stimulus. Each participant was sitting at an individual desktop PC and could regulate the pace of the experiment. All participants had to judge all 24 stimuli of the experiment and they could not go back to stimuli they had already judged.

# Prosody, focus, and related pragmatic functions

# Prosodic nuclear patterns in narrow and broad focus utterances

## Pragmatic and social factors in Central Mexican Spanish

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The main goal of this chapter is to discuss some of the nuclear pitch accents in the domain of broad and narrow foci in Central Mexican Spanish (CMS). Starting with a reconsideration of previous descriptions, the aim is to offer a unified vision of some of the main findings. It is hypothesized that focus marking is a phenomenon of variable and not categorical nature. Moreover, it is shown that focus marking competes with other pragmatic goals also using prosody as a relevant cue; and that focus marking is differentiated according to certain social, identity-related and stylistic factors. In this regard, we illustrate the variation of focus marking in different datasets, as well as the role of the expressive and the communicative functions of the foci. Intonational, pragmatic and sociolinguistic factor groups have been examined via up & down logistic regression models. Moreover, we show that the different tendencies of the observed intonational structures correlate with three speech styles and with some aspects of social stratification in CMS. Finally, the discussion presents a preliminary constraint model on focus domain marking in CMS that synthesizes some of the generalizations derived from the data.

## 1. Introduction

The prosodic overview of Central Mexican Spanish (CMS) by de-la-Mota et al. (2010) establishes an inventory with two possible nuclear pitch accents: L* (broad focus statements or BF) and L+H* (broad and also narrow focus statements or NF). However, subsequent works on rural and urban settings in Central Mexico (Aguilar Ruiz 2012 and Olivar 2014 in Puebla; Mendoza 2014 in Tlaxcala; Martín

Butragueño 2015a, forthcoming a in Mexico City) have shown that this matter is more complex.[1]

The latest findings suggest that: (a) L* is not necessarily the most common form in BF statements; (b) the BF and NF inventories are larger, including !H*, L+¡H* and L+<H*; (c) it is likely that there are additional pragmatic values (emotion, irony, involvement) working together in the context of the Effort Code (Gussenhoven 2004; Vanrell et al. 2013; Feldhausen & Vanrell 2014; Borràs-Comes et al. 2014; Martín Butragueño 2015a), and that those values have a significant role on prosodic goals; (d) boundary tones have a meaningful role (besides L% and M%, complex boundary tones must be considered, especially LH% and HL%); (e) the different forms of prosodic focus marking have sociolinguistic correlates and some of them reflect an ongoing linguistic change (Mendoza 2014; Martín Butragueño 2015a); (f) there are systematic differences linked to speech styles.

This paper provides a unified overview of these issues, as presented in a series of different articles that studied foci as a secondary object rather than the main one. The vast majority of our data was collected through a prosody-in-use approach (in the general theoretical sense of Bybee 2001, 2008, 2010, 2015; Bybee & Hopper 2001; Tomasello 2003, among others). A specific prosodic proposal is found in Martín Butragueño & Velásquez (2014) and in Martín Butragueño (2015a, forthcoming b: Chapter 1), i.e., a corpus-based approach, face-to-face interviews, a representative sampling of speech in different communities, data analyzed in context, a constructive view of processes, an emergent linguistic structure, etc. Data-in-use are central to our current issue, considering the variable distribution of pitch accents and the significant effects of a number of linguistic and social factors.

Our research questions are:

(1) a. How is the nuclear pitch accent inventory for foci distributed in CMS?
    b. Is the focus function associated with other pragmatic values in the prosodic use?
    c. Are the focus pitch patterns linked to sociolinguistic correlates?

The paper is organized in the following sections: Firstly, three hypotheses are established based on the research questions in (1). Subsequently, the methodology is described (origin of data, qualitative and quantitative criteria, etc.). Secondly,

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three sections are devoted to pitch accent distribution for BF and NF in CSM, the pitch reflex of interaction between foci and other pragmatic values, and the sociolinguistic correlates of focal pitch patterns. Finally, the chapter offers a brief discussion about the consequences of these facts regarding the hypotheses and the necessity of studying prosodic data in naturalistic speech contexts, and it ends with some basic conclusions.

## 2.   Hypotheses

Our general hypothesis is that the association of focal nuclear pitch accents to their tone bearing units is derived from a dynamic and multivariate process; it is not a mechanic or static endeavor. Speakers create complex meanings in which the presence of alternatives (see Krifka 2007 for the definition of focus) is only one of the components in the ultimate realization.

The specific hypotheses in (2) correspond roughly to the research questions in (1):

(2)   a.   The pitch realization of foci is a variable and not a categorical phenomenon (cf. Paolillo 2002, Tagliamonte 2012, etc.).
      b.   In prosodic use, focus marking frequently competes with other pragmatic-marking functions, the latter ones occasionally being more decisive with respect to pitch realization.
      c.   In CMS, the pitch realization of foci is linked to certain social and identity values.

## 3.   Methodology

Our main data sources were collected in the context of the *Corpus sociolingüístico de la Ciudad de México*, CSCM (Martín Butragueño & Lastra 2011, 2012, 2015); the *Corpus oral del español de México*, COEM (Martín Butragueño, Mendoza & Orozco in progress); and from an elicited speech sample recorded at the semi-rural community of Cuapiaxtla, in the Mexican state of Tlaxcala (Mendoza 2014). More specifically, we reanalyzed four data bases (among other secondary cases): (1) data from 54 speakers born in Mexico City (Martín Butragueño 2004, 2006, 2011); (2) data from 30 speakers included in five immigrant social networks (Martín Butragueño forthcoming a); (3) data from 36 speakers recorded in the CSCM (Martin Butragueño 2016); (4) data from 20 speakers living in Cuapiaxtla (Mendoza 2014).

Overall, the re-analyses in this paper are based on about two thousand tokens. All of them have been analyzed in detail with regard to the following features: movements in semitones (st), syllable duration in milliseconds (ms), alignments, and a complete labelling in Sp_ToBI (cf. especially Prieto & Roseano 2010, but also Hualde & Prieto 2015, 2016); see the Appendix for a complete description of the specific features of our notation. It is important to observe that our labelling is phonetically consistent, i.e., bi-tones are selected when differences are higher than 1.5 st (cf. Murrieta 2016), upsteps are associated with rises higher than 3 st, and so on. In addition to this, some calculi are based directly on pitch and duration measures.

The vast majority of our data was collected from sociolinguistic interviews, though we also gathered some data from discourse completion tasks (DCTs), and neutral declarative utterance readings (URs) (see Table 6). In sociolinguistic interviews, we usually selected a number of declarative utterances after the first fifteen minutes of recording, in linear order, and later the informative structure of every utterance was analyzed. The number of utterances selected per speaker is not the same across all the studies we are reanalyzing now, but it is, at least, 10 and frequently more (between 20 and 50) utterances. The rate of BF and NF is approximately the same across all speakers. The basic set of variables considered in our research are age, educational level and gender of the subjects. Nevertheless, in some of our studies additional social and network variables were examined. Foci are understood as a set of alternatives (Krifka 2007); all the cases analyzed are in final position in the utterance. In the case of NF, in this work, narrow informative foci and contrastive foci (CF) are considered jointly, in part due to the way in which data was collected in some of our previous studies; it is possible that the distinction would have had some additional interesting prosodic consequences, and we hope to analyze this issue in a later paper.

The treatment of high variability in data requires a stochastic multivariate approach (Paolillo 2002; Serrano 2014; Martín Butragueño 2014a). Most of the problems were examined by up & down logistic regression models, which provide a wide and detailed view of the significance and ranking of independent factor groups (calculated as per Goldvarb Lion; see Sankoff, Tagliamonte & Smith 2012). A probabilistic weight near 1 supports the importance of a factor for the application dependent value; a weight near 0 indicates the importance for the non-application value; and a weight near to .50 suggests that a factor is unimportant. If a probabilistic weight (w) is specified, its significance is always < .05.

## 4. Pitch accent distribution for BF and NF in CMS

In one of the first works about focus in Mexican Spanish, Kim & Avelino (2003) found that there was no significant correlation between focus type (BF, NF, and contrastive focus or CF) and pitch accent type in Mexico City data.[2] However, a number of further surveys reveal some steady trends (see Table 1 and Table 2).

**Table 1.** Nuclear non-rising pitch accents for BF and NF

|  | de-la-Mota et al. (2010) | Martín Butragueño (2004, 2006, 2011) | Martín Butragueño (forthcoming a) | Mendoza (2014) |
|---|---|---|---|---|
| BF | L* | 2004/2006, L*, !H*: 24% | L*, !H*: 29% ($w = .61$) L*: 4% ($w =$ **n.s.**) !H*: 25% ($w = .63$) | L*: 5% ($w =$ **n.s.**) !H*: 33% ($w = .59$) |
| NF | – | 2004/2006, L*, !H*: 7% | L*, !H*: 16% ($w = .31$) L*: 6% ($w =$ **n.s.**) !H*: 10% ($w = .28$) | !H*: 13% ($w = .29$) |

In the sphere of non-rising nuclear pitch accents, de-la-Mota et al. (2010), a qualitative study based on a DCT, only considers L* for BF. The authors do not register non-rising cases for NF. Nevertheless, some quantitative studies find not only non-rising pitch accents in BF, but also some non-rising pitch accents in NF. Martín Butragueño (2004, 2006) finds that 24% of BF are L* or !H*, and that even 7% of NF are also L* or !H*. The pitch accent !H* indicates a relatively high pitch association, above the pitch floor. Martín Butragueño (forthcoming a), based on interviews with immigrants from Central Mexico, finds a significant difference between BF and NF, and also between L* and !H*. We can observe that such data show a variable (and not a categorical) pattern: non-rising forms are preferred for BF ($w = .61$, vs. .31 for NF). However, when L* and !H* data are split, L* is not significant regarding BF or NF (in fact, its role is marginal). The true significant solution is !H*, with $w = .63$ in the case of BF, and .28 for NF. In Mendoza (2014), a study performed with rural

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2. "Duration is the most consistent cue in distinguishing contrastive and narrow focus types from broad focus. Although a correlation between pitch accent and focus type could not be confirmed by our data, we still were able to observe a number of interesting correlations between pitch accent type and word order. One of the most robust results is that shifting of high pitch (H*> and H*=) was not observed when a focused constituent occurred in non-canonical word order, that is, when the focused constituent is in sentence final position […] our data provided additional evidence that these pitch accent types aligned to the stressed syllable (H* and ^H*) can occur in pre-final positions as well" (Kim & Avelino 2003: 372–373).

data, a new component is added to the problem: the preferred non-rising form for BF is also !H*, in contrast to a slightly lower tonal solution, but the reason is linked to the fact that in Cuapiaxtla, many BF utterances are developed through a complete flat pattern, relatively high and without inflections. Conversely, NF solutions present a previous brief fall and a slight rise in the nuclear pitch accent. The falling pattern with the nuclear accent L* in BF is not significant in these rural speech data. Furthermore, the nuclear accent !H* is significant depending on the focus type. It is favored by BF ($w = .59$), contrast to NF ($w = .29$).

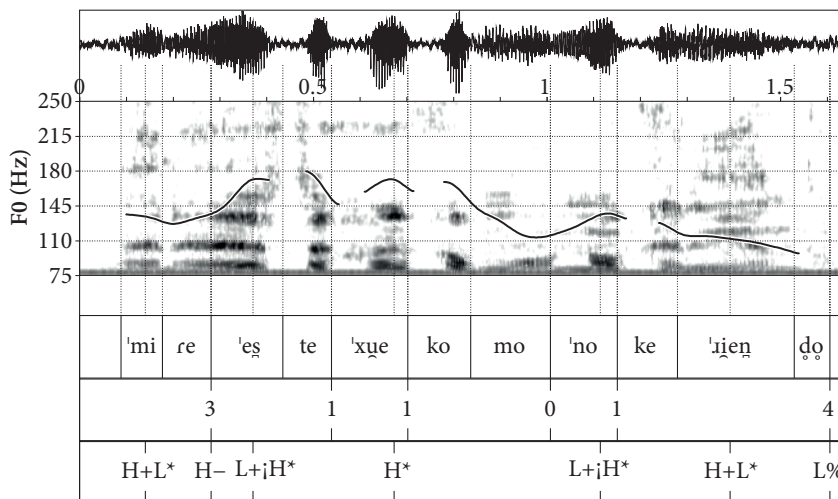Figures 1 to 3 show some cases of BF and NF with non-rising solutions in nuclear position.[3]



**Figure 1.** *Mire, este fue como no queriendo* ['Look, this was done unintentionally'] (Rigoberto Á, masonry network) [H+L*, BF]. Source: Adapted from Martín Butragueño (forthcoming a, Figure 3)

The utterance in Figure 1 offers a falling nuclear movement in a BF domain, with a bitonal pitch accent H+L* (see Hualde & Prieto 2015: 365 for cases with "H target on the pretonic"). Even though L* is a very common choice in Spanish statements, it is far from being the most frequent variant for people with lower levels of education in CMS (Martín Butragueño forthcoming a). In fact, the patterns in Figures 2 and 3 are typical of both urban and rural CMS.

While nuclear pitch accent presents a slightly lower $F_0$ than the previous peak in Figure 2, the intonational curve is still relatively high and flat. This suggests an

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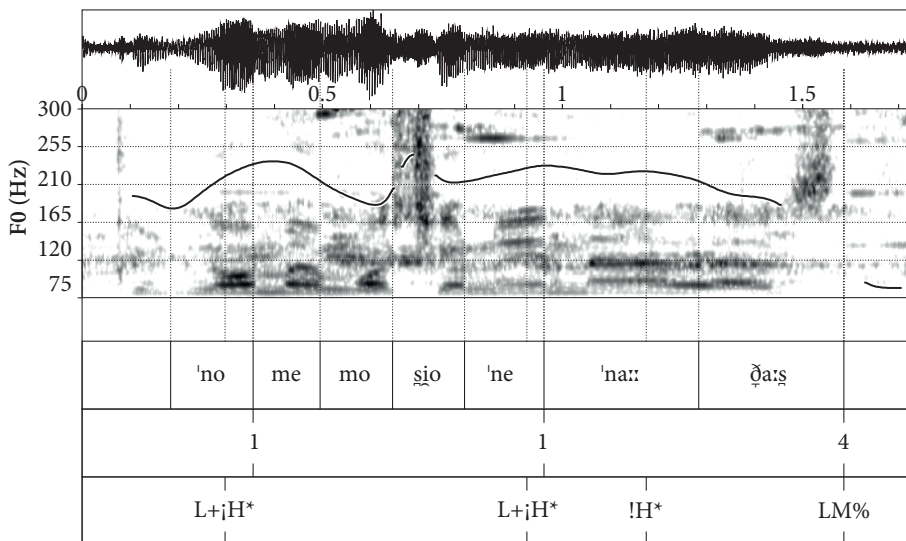3. Figures were made by Welby's script (2003, modified in 2009).

**Figure 2.** *No me emocioné nadas* (sic) ['I didn't get excited at all'] (Arturo M., Ecatepec network) [!H*, BF]. Source: Adapted from Martín Butragueño (forthcoming a, Figure 5)

association with an !H* accent.[4] Besides, there is a clear lengthening of the two final syllables, the nuclear and the post-nuclear ones: *na.das*. This lengthening allows for the maintenance of a relatively high tonal line in the nuclear material and the development of a complex boundary tone aligned to the utterance, LM%.[5] The high register and the complex boundaries are also linked to a combined expressivity embedded in the speech act (Martín Butragueño forthcoming a).

Figure 3 shows an NF with a non-rising pitch accent associated with the nucleus. In this case, the intonational curve is maintained exactly at the same level reached in the previous peak. The crucial fact is its NF (and not BF) character; in fact, it is a contrasting NF, but in the absence of a rising movement in nuclear position (Martín Butragueño forthcoming a). Table 2 shows the distribution of rising forms in the same studies.

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**4.** In our notation, !H* indicates an only relatively high pitch association, above the pitch floor, but below (approx. 0.5 to 1.5 st). It is basically a variant of L* (the pitch floor), and in that sense we could have used the canonical "L*". Nevertheless, the point here is that there are some interesting (and significant) differences between the cases with !H* and the cases with L*, as Table 1 shows.

**5.** As an anonymous reader observes, a boundary tone LM% is not obvious in this case, and L% could be an easier option. However, a low alignment would match the example with clearer cases of L%. As seen in Figure 2, $F_0$ does not decrease completely, only partially, and this fact has a clear perceptual correlate (see Appendix).
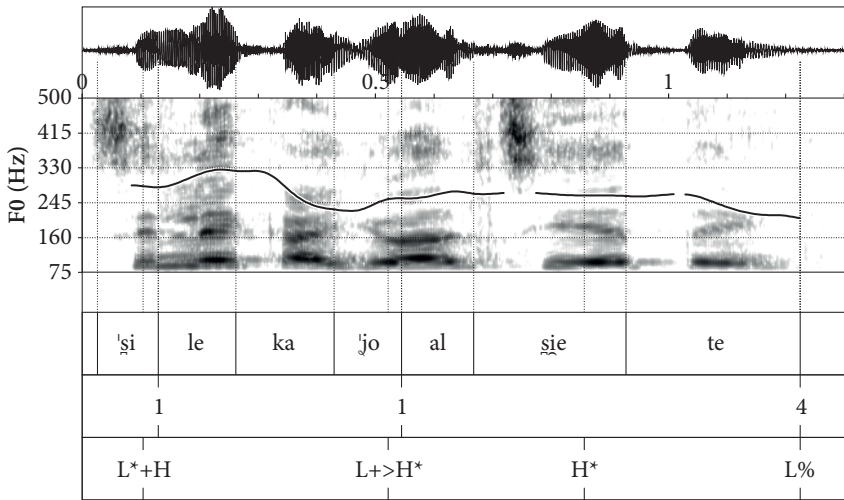
**Figure 3.** *Sí le cayó al siete* ['Yes, he was lucky with number seven'] (Zoila H., Ecatepec network) [H*, NF]. Source: Adapted from Martín Butragueño (forthcoming a, Figure 4)

**Table 2.** Nuclear rising pitch accents for BF and NF

|  | de-la-Mota et al. (2010) | Martín Butragueño (2004, 2006, 2011) | Martín Butragueño (forthcoming a) | Mendoza (2014) |
|---|---|---|---|---|
|  |  | L+H* |  |  |
| BF | L+H* | 2004/2006, 55% | 33% (*w* = **n.s.**) | 41% (*w* = **n.s.**) |
| NF | L+H* | 2004/2006, 24% | 32% (*w* = **n.s.**) | 38% (*w* = **n.s.**) |
|  |  | L+¡H* |  |  |
| BF | – | 2004/2006, 21% (*w* = **.23**) | 38% (*w* = **.42**) | 21% (*w* = **.39**) |
| NF | – | 2004/2006, 68% (*w* = **.72**) | 52% (*w* = **.65**) | 50% (*w* = **.76**) |

In de-la-Mota et al. (2010), the authors establish that L+H* can occupy the nuclear position with BF and with NF. While Martín Butragueño (2004, 2006, 2011) agrees with that point, his percentages (55% for BF and 24% for NF) suggest a significant difference. Unfortunately, the probabilistic weights are unavailable. Perhaps more decisively, recent works do not find significant changes between BF and NF for L+H*: Martín Butragueño (forthcoming a) calculates 33% and 32%, respectively, and a *w* = n.s.; meanwhile, in her data collected in Cuapiaxtla, Mendoza (2014) encounters a minimal distance, 41% vs. 38%. In this variety of speech, statistical analysis shows that the nuclear accent L+H* is not significant in relation to the type of focus.

A more interesting finding, however, is the need to include L+¡H* in the model; this is a pitch accent notoriously rising especially in its own syllable (more than 3 st in our works). The significance of L+H* is not clear, whereas L+¡H* tends to be

ascribed to NF in all research that considers this distinction: Martín Butragueño (2004, 2006) finds *w* = .23 (BF) and .72 (NF); Martín Butragueño (forthcoming a) measures .42 and .65; Mendoza (2014) calculates an even bigger difference of .39 for BF and .76 for NF.

Figures 4, 5, and 6 offer three examples of rising nuclear movements; the case in Figure 4 shows an NF domain, while Figures 5 and 6 present a BF domain. Figure 5 is linked to an additional pragmatic value; Figure 6 is a case of vernacular speech.
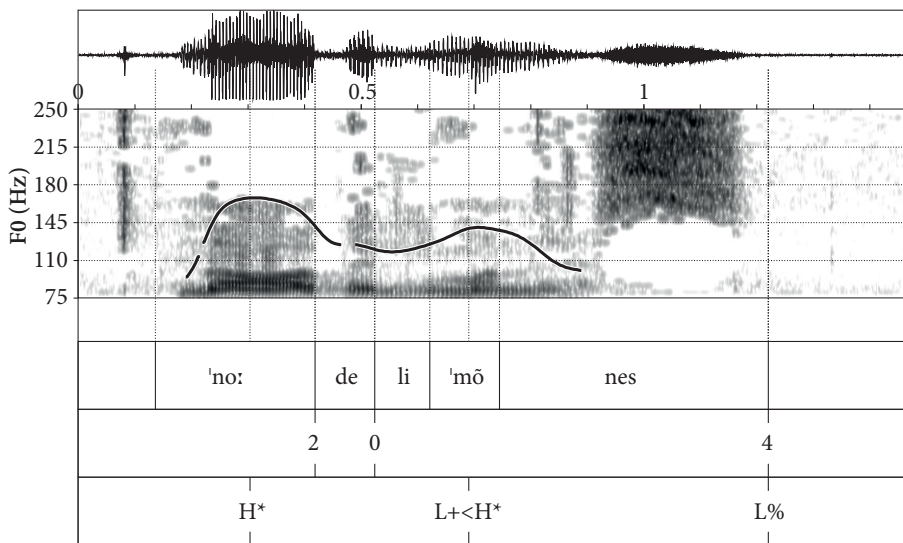


**Figure 4.** *No, de limones* ['No, of lemons'] (rural CMS) [L+<H*, NF]. Source: Adapted from Mendoza (2014, Figure 3.25)

Example in Figure 4 has been collected from a DCT, and it is an obvious case of NF focus (i.e., *de limones, no de naranjas*) ['of lemons, not oranges']. The choice of a rising LH pitch accent is quite common in Spanish; however, it is important to observe the presence of an advanced tonal peak (a *very early peak* or VEP), represented by the symbol "<".[6] These VEPs seem to be linked to a pragmatic factor (expressivity) and also (in an independent way) to a vernacular identity. Both issues will be explored in the next sections.

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**6.** O'Rourke (2005) writes "early peaks" and Michnowicz & Barnes (2013) write "early-peak alignment" in reference to some similar cases. We employ "very early peaks" (VEP) to differentiate cases like L+<H* from early peaks like L+H* (and vs. late peaks like L+>H*).
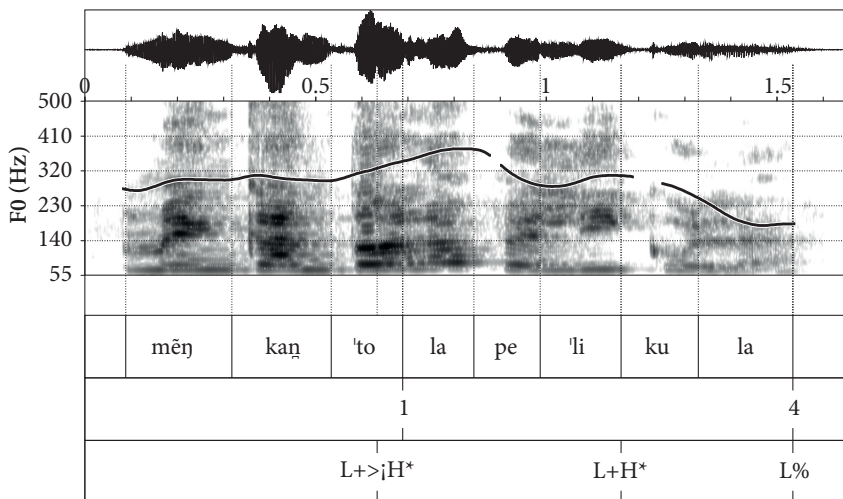
**Figure 5.** *Me encantó la película* ['I loved the movie'] (urban high educational level CMS) [L+H*, BF]. Source: Adapted from Martín Butragueño (2015b: 272, Figure 3)
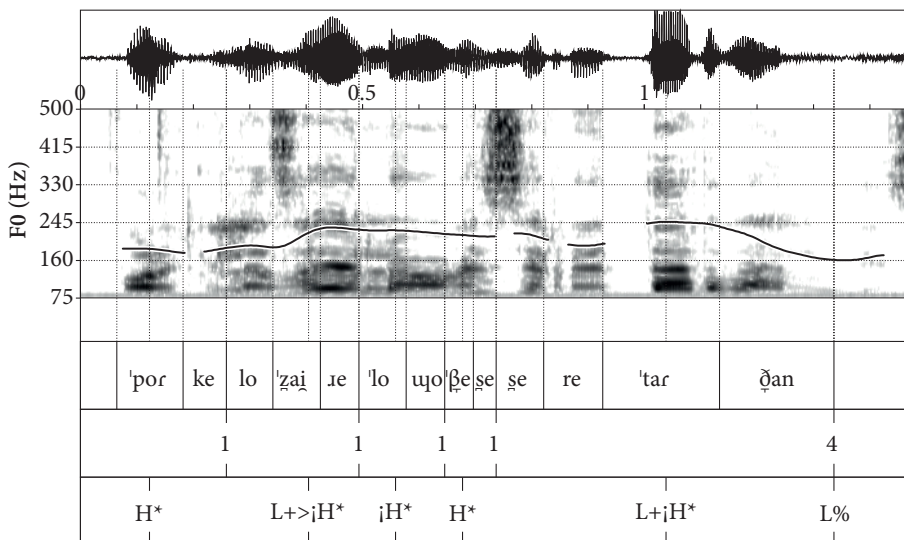


**Figure 6.** [*¿Por qué?*] *Porque los aires luego a veces se retardan* ['Why?'] [Because winds then sometimes get delayed'] (Andrés F., masonry network) [L+¡H*, BF]

The example in Figure 5 was also obtained from a DCT. It shows a common case of nuclear L+H* in a BF domain, but at the same time in an expressive speech act (Martín Butragueño 2015b: 271). As established in Table 2, L+H* appears in BF and NF cases in CMS. It is interesting to note that not only L+H*, but L+¡H*, may appear

for BF as well, with or without some level of expressivity, especially in vernacular speech (urban people with lower levels of education and rural CMS); see Figure 6.

The utterance *Porque los aires luego a veces se retardan* is a case of BF domain, in the context of a sociolinguistic interview. Actually, the same speaker asks himself a general *¿Por qué?* 'why?', and he immediately answers himself (literally) 'because then sometimes the winds get delayed'. Thus, the nuclear L+¡H* is associated with a rise of +4.3 st, and then followed by a fall of −7.4 st (L%); the whole utterance is pronounced at a fast rhythm, with many reduced vowels (with the exception of the nuclear and postnuclear material, *-tar-* and *-dan*, pronounced at a normal speed) (Martín Butragueño forthcoming a). In all cases, when the example is heard by urban, educated people, the speaker is immediately perceived as a member of some type of vernacular speech community.
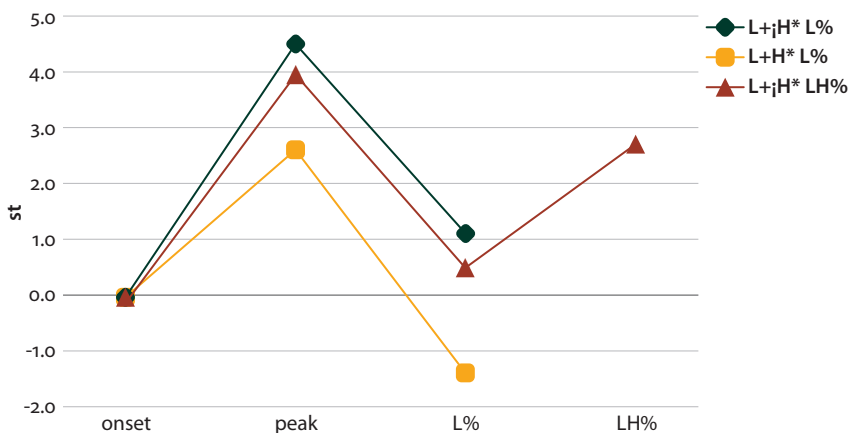


**Figure 7.**  Nuclear pitch accent and boundary tone in three CMS patterns. Source: Adapted from Martín Butragueño (2004: 365, Figure 13)

Figure 7 offers a scheme of three relevant nuclear configurations, L+¡H* L%, L+H* L%, and L+¡H* LH%. The rising means are 4.5 st for L+¡H* L%, only 2.6 st for L+H*, and 4.0 st in the case of L+¡H* LH%. In the same order, the falling semitonal means are 3.4, 4.0 and 3.5. Finally, the third pattern shows a new rising section (H%), with a mean of +2.2 st. In fact, L+¡H* LH% is very similar to L+¡H* L% in the movements associated/aligned with LH and L. Syllable duration is revealing as well. Nuclear syllables associated with [L+¡H*] LH% measure 200 ms and 199 ms in the case of [L+¡H*] L%, but the nuclear syllable is clearly shorter in the case of [L+H*] L% (174 ms). In the post-tonic syllable, differences are even clearer: 264 ms in L+¡H* [LH%] > 211 ms in L+¡H* [L%] > 173 ms in L+H* [L%]. These results are expected, considering the complexity of movements in each case. Indeed, the same pattern emerges if both syllables are considered: 465 ms for [L+¡H* LH%] > 410 ms for [L+¡H* L%] > 347 for [L+H* L%] (Martín Butragueño 2004).

In conclusion, the association of a pitch accent with the nuclear syllable in a focus domain is a variable fact and not a categorical one. Non-rising pitch accents tend to be associated with BF, and L+¡H* with NF, while L+H* has a neutral behavior. These tendencies are linked to probabilistic weights; however, it is important to take into consideration that any pitch accent can appear in any focus domain. Nevertheless, the distribution is not a matter of random behavior. It is highly ordered (in the classical sense of Weinreich, Labov & Herzog 1968). At least, some of the reasons for this order, besides informative structure, are studied in the following two sections, focused on the role of pragmatic and social factors.

## 5.    Interaction between foci and other pragmatic and discursive values in prosodic use

Expressivity, irony, communicative function of foci, and type of oral data are some of the pragmatic (and discursive) factors that influence focus marking when a speaker produces a concrete utterance. Some of these factors are related to the Effort Code (EC). The EC (de Jong 1995; Gussenhoven 2002, 2004), based on energy level, correlates a stronger effort with a wider excursion:

> Increases in the effort expended on speech production will lead to greater articulatory precision (de Jong 1995), including a wider excursion of the pitch movement. Speakers exploit this fact by using pitch-span variation to signal meanings that can be derived from the expenditure of effort.                    (Gussenhoven 2004: 85)

In this way, a wide pitch excursion can be interpreted not only as a notorius informative salience but also as surprise and even a politeness strategy (in the affective dimension, similar to the Dutch %H for 'obligingness', see Gussenhoven 2004: 94; for focus marking see Vanrell, Stella, Gili Fivela & Prieto 2013 about contrastive focus in Catalan, Italian, and Spanish; see also Martín Butragueño 2015a: 101–104 for additional comments about the EC). The data from CMS show the combined action of several pragmatic forces linked to the EC: expressivity (Tables 3 and 4) and communicative functions of foci as corrections and answers (Table 5), besides proper (semantic) focus marking. A unified pragmatic explanation like an EC perspective, is certainly a more refined explanation, and more coherent with the idea of the speaker packaging pragmatic and discursive objectives. Thus, two statements can be established in relation to the EC: (a) there are different types of packaging, in addition to the informative one; (b) we can formulate some predictions in light of EC, as in (3).

(3)   a.    The neutral forms (i.e., broad focus, non-expressive utterances, non-ironic statements, interactions that are not especially engaged, etc.) will receive a smaller tonal excursion and, in general, will use unmarked linguistic resources (i.e., mean duration, mean intensity, simple boundary tones, etc.).

b.   The non-neutral forms (some types of foci, expressive utterances, ironic statements, engaged interactions, etc.) will receive a greater tonal excursion and, in general, will use marked linguistic resources (i.e., longer duration, higher intensity, complex boundary tones, etc.).

Despite the fact that the packaged pragmatic and discursive targets are diverse (information, expressivity, irony, etc.), the speakers employ some or all of the same prosodic devices in order to achieve their goals, and they do so because of the EC. It is important, however, to rank the relative weight of each factor in a general model.

Table 3 offers some figures with respect to the tonal realization of the 'nuclear syllable' depending on the factor groups 'expressivity' and 'focus'. Martín Butragueño (forthcoming a) considers expressive and non-expressive statements, while Martín Butragueño (2016) analyzes only expressive utterances. In both cases, statistical models including the focus domain are based on data collected in sociolinguistic interviews.

**Table 3.**  Pitch accents in nuclear syllables: expressivity and focus

|  | Martín Butragueño (forthcoming a) | Martín Butragueño (2016) |
|---|---|---|
| L* (and !H*) | Expressivity & focus, **n.s.** | Expressivity & focus, **n.s.** |
| H* | Expressivity, range[7] = 40 | Expressivity, range = 28 |
|  | Without expr. (28%, $w$ = **.68**) | Global (18%, $w$ = **.61**) |
|  | Global[8] (15%, $w$ = **.36**) | Local (6%, $w$ = **.33**) |
|  | Local (11%, $w$ = **.29**) |  |
|  | Focus, range = 35 | Focus, **n.s.** |
|  | Broad focus (25%, $w$ = **.63**) |  |
|  | Narrow focus (10%, $w$ = **.28**) |  |
| L+(<)H* | Expressivity, range = 24 | Expressivity, range = 15 |
|  | Without expr. (35%, $w$ = **.56**) | Global (29%, $w$ = **.56**) |
|  | Global (29%, $w$ = **.55**) | Local (19%, $w$ = **.41**) |
|  | Local (23%, $w$ = **.32**) |  |
|  | Focus, **n.s.** | Focus, **n.s.** |
| L+(<)¡H* | Expressivity, range = 51 | Expressivity, range = 26 |
|  | Local (67%, $w$ = **.81**) | Local (74%, $w$ = **.66**) |
|  | Global (48%, $w$ = **.58**) | Global (48%, $w$ = **.40**) |
|  | Without expr. (29%, $w$ = **.30**) |  |
|  | Focus, range = 23 | Focus, **n.s.** |
|  | Narrow focus (52%, $w$ = **.65**) |  |
|  | Broad focus (38%, $w$ = **.42**) |  |

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7.   Range is the difference between the higher weight and the lower weight. It is considered an indicator of the relevance of a factor group in Goldvarb (cf. Tagliamonte 2012: 122–124).

8.   The constituent size is considered for expressivity. It is "global" if the whole utterance is affected by expressivity, and "local" if only a part of the utterance is affected.

In the first case (forthcoming a), both factor groups, expressivity and focus domain, are sometimes significant. Expressivity is significant for H*, L+(<)H* and L+(<)¡H*, but the focus domain is significant only for H* and L+(<)¡H*. Thus, H* is favored by BF ($w = .63$), but it is not favored by NF (.28); the opposite pattern emerges in the case of L+(<)¡H*, .65 for NF, and .42 for BF. What is more, the range reached by expressivity is always higher than the range reached by the focus domain (40 > 35 for H*, and 51 > 23 for L+(<)¡H*), which is at least a preliminary evidence of the importance of expressivity.

By contrast, expressivity is significant in Martín Butragueño (2016) with the same three pitch accents, but the focus domain is never significant for the choice of pitch accent.[9]
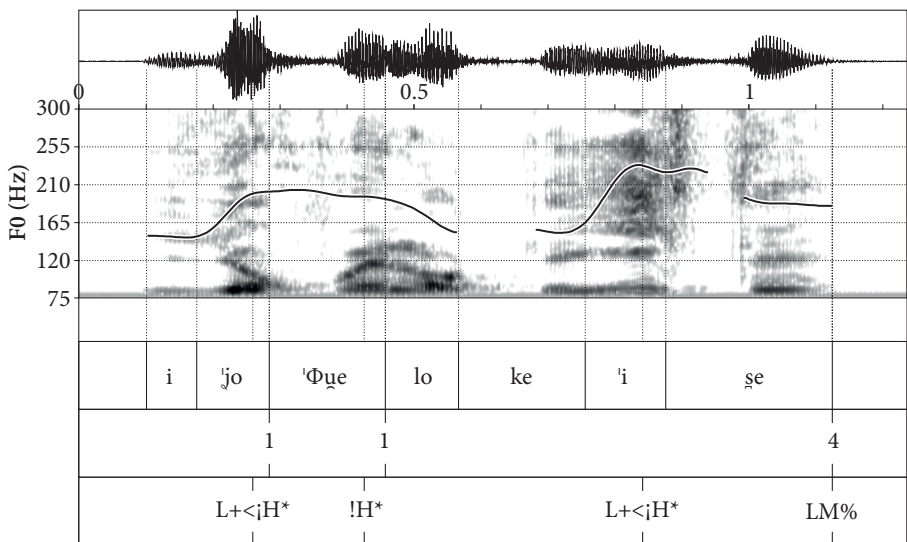


**Figure 8.** *Y yo fue lo que hice* ['And that was what I did'] (CSCM, 13H, int. 310). Source: Martín Butragueño (2016: 80, Figure 1)

The example in Figure 8 shows the strong role of expressivity in the nuclear syllable (Martín Butragueño 2016). Apparently, the expected focused material has been deleted (i.e., *Y yo ESO fue lo que hice* ['and this is what I did']). the string of words However, the nuclear syllable hi- is associated with an especially prominent rising

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9.   In other words, the expressive dimension of the speech act is more relevant than the focus marking. When expressive and neutral utterances are considered (Martín Butragueño forthcoming a), both factor groups are still significant, but when only expressive utterances are analyzed (Martín Butragueño 2016), expressivity is so dominant that focus marking is no longer significant.

pitch accent and the boundary is realized with a complex tone LM%, both of which are consistent with expressivity and with a focal pattern (see Figure 9).[10]

Table 3 includes a new pitch variant, L+<(¡)H*, in reference to the cases where the peak is reached about 20% (or more) before the end of the nuclear syllable (VEPs). This distinction has pragmatic consequences worthy of consideration (see Table 4).

**Table 4.**  VEPs (L+<(¡)H*) and focus

| Martín Butragueño (forthcoming a) | Martín Butragueño (2016) | Mendoza (2014) |
|---|---|---|
| Expressivity, range = 27 | Nuc. syl. duration mean (ms): | BF: |
| Local (47%, *w* = **.66**) | L+¡H* (242) > L+H* (232) | L+<(¡)H*, 31% |
| Global (37%, *w* = **.56**) | Pre-peak duration mean (ms): | (*w* = **.30**) |
| Without expr. (26%, *w* = **.39**) | L+¡H* (191) > L+H* (168) | (L+<H*, 47%, |
| Focus, range = 16 | Pre-peak duration mean (%): | L+<¡H*, 53%) |
| Narrow focus (39%, *w* = **.60**) | L+¡H* (80%) > L+H* (73%) | NF: |
| Broad focus (31%, *w* = **.44**) | Expressive speech acts: <H* → | L+<(¡)H*, 69% |
|  | $\text{TBU}(\sigma_N{}^*)$ | (*w* = **.83**) |
|  | Focus, **n.s.** | (L+<H*, 37%, |
|  |  | L+<¡H*, 63%) |

The very early peaks are conditioned by the expressivity domain and the focus domain.[11] In Table 4, it can be seen that in Martín Butragueño (forthcoming a) the focus range is 16. This is supposed to be less significant than expressivity (range = 27). The VEP is linked to NF (*w* = .60), and it is not favored by BF (.44), although it is important to keep in mind that it is, again, a variable phenomenon. A similar pattern emerges in Mendoza (2014), where NF comprises 69% of early peak tokens (*w* = .83), vs. BF, with only 31% (*w* = .30); moreover, her data show the predominance of up-steps and VEPs in NF. Phonetically, the duration mean of the part of the syllable previous to peak ranges from 168 to 191 ms, which is 73% to 80% of the nuclear syllable. Phonologically, a pitch association with the form <H* → $\text{TBU}(\sigma_N{}^*)$ could

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**10.** The complex LM% boundary tone is a recurrent pattern in our data. It is characteristic of vernacular CMS, and it is clearly different from the M% boundary tone present in Northern Mexican Spanish (Martín Butragueño forthcoming a; Martín Butragueño, Mendoza & Orozco in progress). As seen in Figure 8, the falling process begins before the nuclear tone ends; later, the $F_0$ is first deflected and then interrupted by /s/; and finally, the utterance tonal line finishes in a sustained way. Both movements, falling and maintenance, are clearly perceptible in the recording.

**11.** As one of the evaluators observes, the peak alignment also depends on the space that the pitch accents have to be developed, conditioned by situations like tonal clash contexts (cf. Prieto 2002).

be proposed (Martín Butragueño 2016: 90); see Table 12 below and the discussion about the viability of a set of stochastic constraints.

The VEP pitch accent is not included in previous inventories for CMS, as in de-la-Mota et al. (2010). The fact that this VEP is also documented in Puebla (Olivar 2014) and Cuapiaxtla (Mendoza 2014) suggests that it could be a vernacular feature as well, linked to specific speakers. In the social sense and judging by the migratory networks, the VEP may be a relevant difference between standard CMS and substandard and rural CMS (Mendoza 2014; Martín Butragueño forthcoming a).
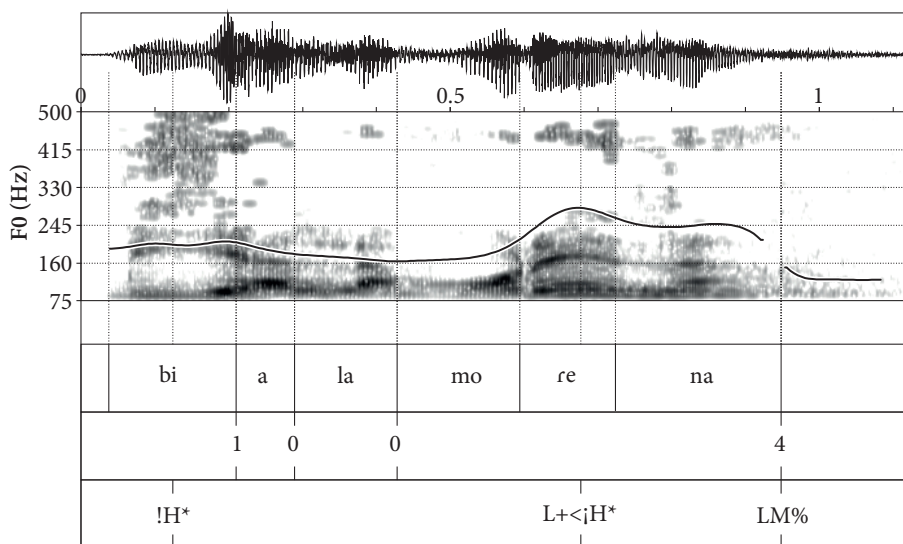


**Figure 9.** *Vi a la morena* ['I saw the brown-haired girl'] (rural CMS) [L+<¡H*, NF]. Source: Adapted from Mendoza (2014, Figure 3.23)

Figure 9 shows a VEP form. The example is part of a DCT, where the nuclear syllable is located in a NF domain. In fact, it presents exactly the same nuclear pattern as the example in Figure 8: L+<¡H* LM%. The difference lies in the fact that in Figure 8, the results show the predominance of an expressive speech act, while in Figure 9 we see the predominance of the NF marking.

Ironic speech acts can also interfere with focus marking, especially in relation to the presence of upsteps and VEPs. Following Olivar (2014), prenuclear accent L+(¡)H* appears in 44% of the tokens in ironic exclamation statements, with two variants: L+(¡)H* and L+(<¡)H* (p. 132), as in (4a). In nuclear position, the ironic exclamation statements are of the type L+¡H*, many of them VEPs (Olivar 2014: 137), as in (4b). The same author documents ironic directive statements, in prenuclear pitch accents (L+(¡)H* and variants reaches 24.6%, p. 148), as in

(4c), and in nuclear pitch accents (L+(¡)H* and variants sum 56.7%, p. 152), as in
(4d). It is important to observe that the VEP appears in exclamative (4a, 4b) and
non-exclamative statements (4c, 4d), in prenuclear (4a, 4c) and more frequently in
nuclear positions (4b, 4d), and in BF (4a, 4b) and NF statements (4c, 4d).

(4)  a.  *¡Qué buen* [*gus*]$_{L+<H*}$*to tienes!*
         'You have such good taste!'                           (Olivar 2014: 133)

     b.  *¡Huy, cuánta* [*gen*]$_{L+<¡H*}$*te!*
         'Whew! What a lot of people!'                         (Olivar 2014: 141)

     c.  *No tra*[*ba*]$_{L+<H*}$*jen tanto.*
         'Don't work so much.'                                 (Olivar 2014: 149)

     d.  *No te pongas tan* [*trist*]$_{L+<¡H*}$*te.*
         'Don't feel so sad.'                                  (Olivar 2014: 155)

The communicative functions of foci are another source of variation in their pitch
realization. Table 5 shows some of the relevant functions in relation to the especially
prominent variant, L+¡H*.

**Table 5.**  L+¡H* and focal functions

| Martín Butragueño (2006) | | |
|---|---|---|
| Focus communicative function, range = 24 Corrections, *w* = **.61** Answers, *w* = **.61** Parallel contrasts, *w* = **.48** Completion tasks, *w* = **.37** | Information and L+¡H* in nuclear position, range = 15 New, *w* = **.66** Inferable, *w* = **.51** Given, *w* = **.41** | Involvement and L+¡H* in nuclear position: 2nd person, topical collaboration, corrective focus, answers and quotations seem to favor this choice |
| **Martín Butragueño (forthcoming a)** | | |
| The informative NF, or informative BF as L+¡H* + complex boundary tone (typically HL%), promote assertive meanings, engagement and interactive involvement. The complex boundary tones are not expected with the contrast foci. | | |

The communicative function of the foci (in the sense of Dik 1997: 387–401) is sig-
nificant for the distribution of pitch prominence (Martín Butragueño 2006). If the
objective is a correction or an answer, L+¡H* is favored (*w* = .61 in both cases), but
it is not favored in parallel contrasts (.48) or in completion tasks (.37). The degree
of givenness of the referents is also significant for the type of prosodic prominence
(Martín Butragueño 2006). L+¡H* is favored when the information is clearly new
(*w* = .66), but not when the information is clearly given (.41); if the information is
only inferable, then there is a neutral effect on L+¡H* (.51). This relation between
the degree of givenness and prosodic prominence has also been found in other

works (for German, see Röhr 2013). Regarding the involvement between speakers engaged in a conversation, several factors favor L+¡H* in nuclear position: 2nd person in the topic and/or in the nuclear material,[12] topical collaboration, answers, quotations, and corrective focus (Martín Butragueño 2006). Examples in (5) show great variability between L+H* and L+¡H* in the nuclear syllable. Therefore, L+¡H* appears with an answer (5a), a refusal (5b), and an expansion (5d), while L+H* is the choice for a replacement (5c) and a restriction (5e) (following the taxonomy by Dik 1997 for focus communicative value). Let us observe that (5a) is an informative focus, and (5b–e) are corrective foci (Dik 1997; Krifka 2007). This is one of the reasons why we refer to these as trends and not categorical associations.

(5)   a.   –¿cuántos kilos son de maíz? ['how many kilos of corn are there?'] – de maíz son como *unos cincuenta kilos de maíz* ['there are around fifty kilos of corn'] (answer, L+¡H*, Simón R., ME-222-11H-02).
      b.   no lo vean por uno lo vean/ *ni por ustedes* ['don't see it for ourselves, don't see it/ neither for yourselves'] (refusal, L+¡H*, Gregorio P., ME-114-12H-00).
      c.   no es para un rato sino que es *para toda la vida* ['it is not for a moment but for the whole life'] (replacement, L+H*, Gregorio P., ME, 114-12H-00).
      d.   y también ya estaba *muerto* ['and he was already dead too'] (expansion, L+¡H*, Martha S., ME-123-12M-01).
      e.   un gusto que tenga yo que le tome yo *medio vasito* ['it's my pleasure to drink half of a glass'] (restriction, L+H*, Ángela M., ME-175-13M-01).
                     Source: Martín Butragueño (2006, adapted from examples in 29)

Not only does the type of pitch accent in the focus promote communicative differences, but also the type of boundary tone is significant in some cases. In the immigrant social networks studied in Martín Butragueño (forthcoming a), assertive meanings, conversational engagement, and interactive involvement are promoted when a complex boundary tone (typically HL%) is aligned to the right of an informative focus (NF or BF). Furthermore, the complex boundary tones are not expected in the contrast foci. Data in (6) present three informative foci: BF in (6a–b) and NF in (6c). The pragmatic/discursive values are confirmation, conclusion, and uncertainty. These three values, apparently very different from each other, share a similar interactive sense: all offer some information that could be unexpected to the listener.

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**12.**   The fact seems to be related to the probabilities of topichood (Givón 2001: 198 et seq.), in the sense that the 1st person is more topical than the 2nd person, and the 2nd person more topical than the 3rd person. It is also linked to conversational engagement, during which the speaker underlines the references to his or her addressee.

(6)  a.  [Porque lo he visto]<sub>HL%</sub> ['Because I have seen it'] (informative BF, confir-
mation, Iris B., Tepito, 31M).

b.  [¡Y hasta que lo quitaron!]<sub>HL%</sub> ['And finally, they took it away!'] (informative
BF, conclusion, Josefina P., Tepito, 13M).

c.  [Yo creo serán las Martinas]<sub>HL%</sub> ['I think they shall be the Martinas']
(informative NF, uncertainty, Juana C., Milpa Alta, 21M).

Source: Martín Butragueño (forthcoming a)

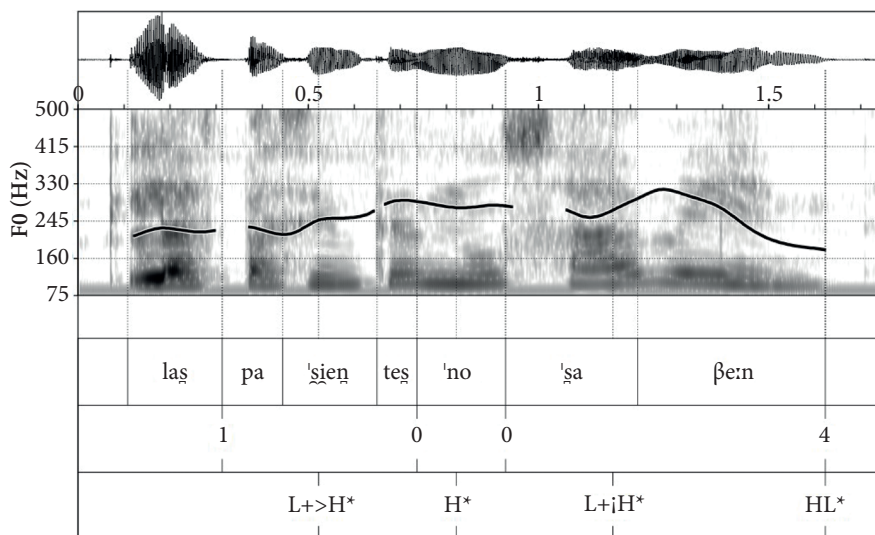In that sense, Figure 10 shows a case of a complex boundary tone.



**Figure 10.** *Las pacientes no saben* ['the patients don't know'] (31M, int. 252). Source:
Martín Butragueño (2016: 83, Figure 2)

The example in Figure 10 was produced by an urban, educated woman during a
sociolinguistic interview (from CSCM). In the example, she is expressing her as-
tonishment about the ignorance of the patients towards a basic fact of their health.
The BF domain has an especially prominent rising pitch accent plus a complex
boundary tone aligned to the right boundary, in a way that the melody first rises
and then falls (HL%) (Martín Butragueño 2016: 81–83).

Finally, there are differences linked to the type of oral data. In CMS data, three
elicitation styles can be documented: sociolinguistic interviews, DCTs, and utter-
ance reading (UR). Interviews are analyzed in Martín Butragueño (2004, 2006,
2011, forthcoming a, b); DCT is the source in de-la-Mota et al. (2010) and in
Mendoza (2014); finally, UR is the technique in Martín Butragueño (2014b) and
in Sagastuy & Fernández Planas (2014). Table 6 shows a comparison between

maximum and minimum percentages obtained interviews from these previous studies (Martín Butragueño 2006, forthcoming a), DCT (de-la-Mota et al. 2010 and Mendoza 2014), and UR (Martín Butragueño 2014b; Mendoza 2014= RCMS) (see also Tables 1 and 2).

**Table 6.** A comparison of three styles

|    |        | Interview | DCT[13] | UR |
|----|--------|-----------|---------|-----|
| BF | L*, H* | ≈24% to 29% | ≈38 to 50% | ≈83% |
|    |        |           |         | ≈39% (RCMS) |
|    | L+H*   | ≈33 to 55% | ≈41 to 50% | ≈17% |
|    |        |           |         | ≈43% (RCMS) |
|    | L+¡H*  | ≈21 to 38% | ≈21% | ≈18% (RCMS) |
| NF | L*, H* | ≈7 to 16% | ≈0 to 13% | – |
|    | L+H*   | ≈24 to 32% | ≈38 to 50% | – |
|    | L+¡H*  | ≈52 to 68% | ≈50% | – |

The differences are clear. The non-rising pitch accents increase considerably for BF in more formal styles (24/29 in interviews, 38/50 in DCT, and 83 in UR), and they are maintained at a low level for NF (7/16 and 0/13). However, the rising pitch accents establish a near opposite pattern: L+H* and L+¡H* tend to decrease for BF in the more formal styles, and increase or maintain for NF. In other words, the reading styles (especially UR) offer a simplified and standardized pattern in relation to more prosody-in-use styles.

It is noteworthy that in rural CMS (RCMS), a great number of rising nuclear pitch accents L+(¡)H* were recorded in UR. In fact, the rising cases predominate, in contrast with downward movement without especially prominent forms. Most cases of L+(¡)H* were observed in data from informants in the male age group 3, who also favored the most prominent rising forms (Mendoza 2014).

Generally, UR style promotes a straightforward interpretation of facts. A series of read BF statements is analyzed in Martín Butragueño (2014b), with tokens collected using the AMPER methodology (*Atlas Multimédia Prosodique de l'Espace Roman; see Martínez Celdrán y Fernández Planas 2003–2016*). As seen in Figures 11a, 11b, 11c and $F_0$, duration and intensity are extremely stable in this type of data, even when assertion and question pairs are compared.

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**13.** In the case of de-la-Mota et al. (2010), 50% and 0% are only reference numbers, considering that paper rests on a qualitative approach.

Actually, tonal (including duration and intensity) variation is so reduced among tokens of a same type that it is possible to generate some numerical models from the physical curves (Figure 12).
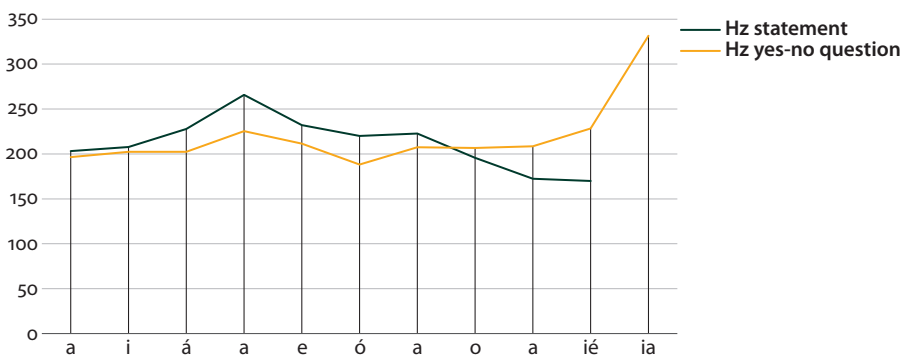


**Figure 11a.** $F_0$ means (in Hz) for *La guitarra se toca con paciencia / ¿La guitarra se toca con paciencia?* ['The guitar is played with patience / Is the guitar played with patience?'] (inf. 2). Source: Martín Butragueño (2014b: 140, Figure 1d)
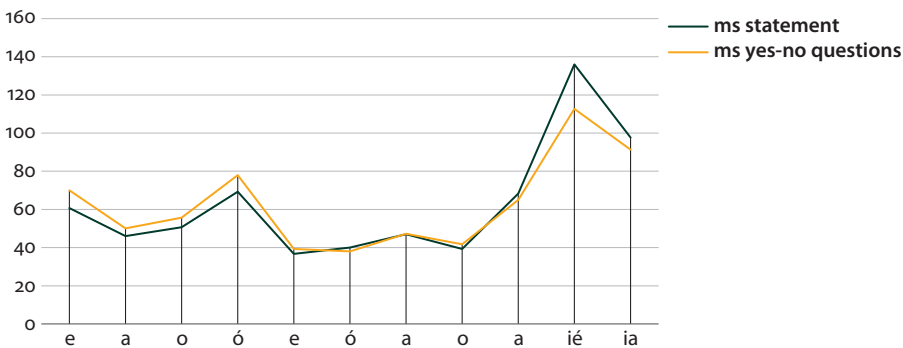


**Figure 11b.** Duration means (in ms) for *El saxofón se toca con paciencia / ¿El saxofón se toca con paciencia?* ['The saxophone is played with patience / Is the saxophone played with patience?'] (inf. 2). Source: Martín Butragueño (2014b: 161, Figure 5b)
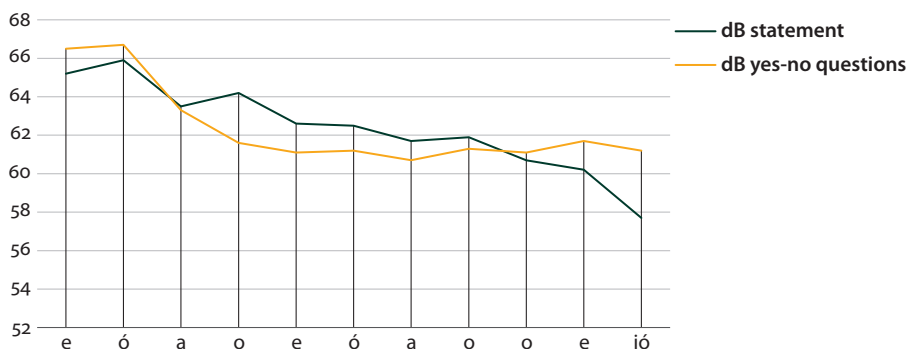
**Figure 11c.**  Intensity means (dB) for *El órgano se toca con obsesión / ¿El órgano se toca con obsesión?* ['The organ is played with obsession / Is the organ played with obsession?'] (inf. 2). Source: Martín Butragueño (2014b: 169, Figure 6c)



**Figure 12.**  Frequency, duration, and intensity means for *El órgano se toca con paciencia*[14] ['The organ is played with patience'] (inf. 1). Source: Martín Butragueño (2014b: 180, Figure 11)

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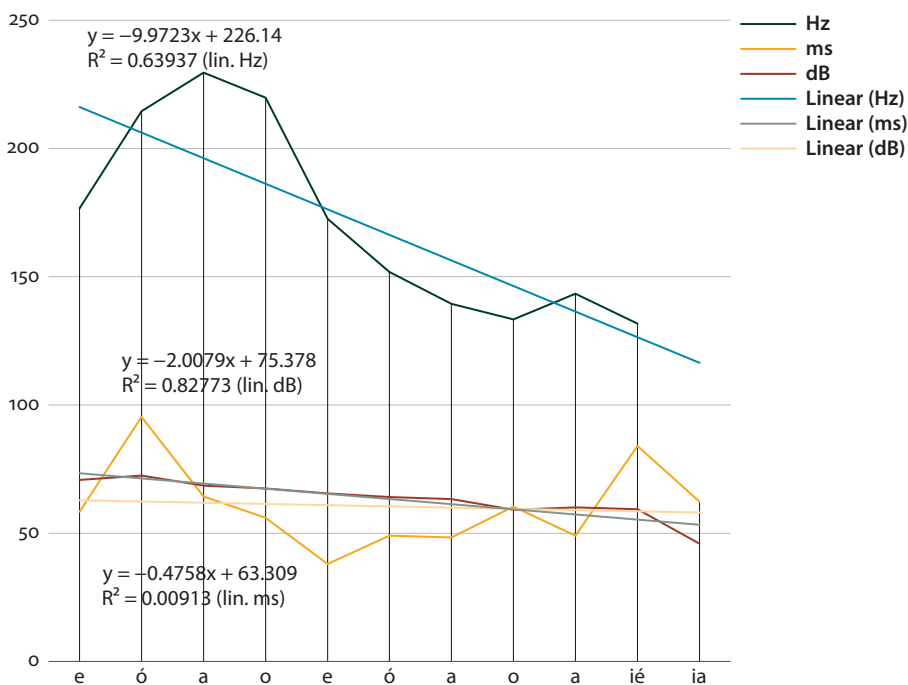**14.**  In the example, the last syllable, *-cia*, is voiceless and not included the $F_0$ calculus.

Figure 12 displays a set of linear and polynomial regression models on frequency, duration, and intensity (i.e., equations of type $y = ax + b$, and of type $y = ax^3 + bx^2 + cx + d$, respectively). The fit degree (measured by $R^2$) is always better in the polynomial equation than in the linear one. However, the fit improvement is large for frequency and duration, but short for intensity when the linear equation is compared to the polynomial one. In other words, the frequency and duration behavior in BF statements is more local than the intensity behavior, and for this reason their polynomial models are much better than the linear ones. The intensity behavior is more global and the fit of their two models is almost the same (Martín Butragueño 2014b).

At the same time, Figure 13 presents a standard case of UR, with a falling pitch accent in nuclear syllable position.
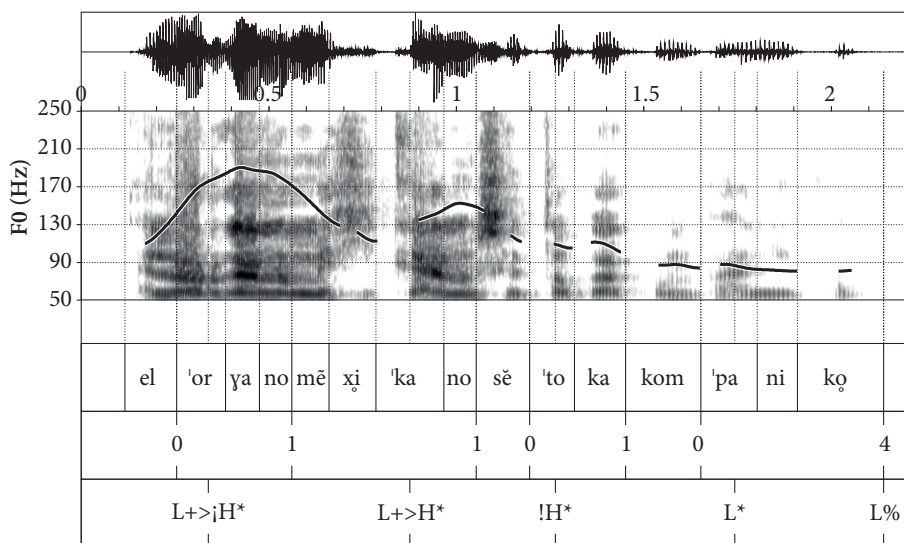


**Figure 13.** *El órgano mexicano se toca con pánico* ['The Mexican organ is played with panic'] (UR, urban CMS)

Certainly, the point in question is that the controlled nature of the data authorizes a detailed phonetic analysis, even in terms of precise mathematical equations. Thus, there is an association between higher intra- and inter-speaker stability of UR style and low levels of tonal variation.

By contrast, interview style can promote a very different data, much more unstable, like many of the exempla with especially prominent nuclear syllables showed in this paper; the extreme cases of BF in Figure 14, contextualized in (7); and NF in Figure 15 and (8).

**Figure 14.** *A veces lloro mis lágrimas* ['Sometimes I cry my tears'] (interview-style example). Source: Martín Butragueño (2016: 91, Figure 4)

As shown in Figure 14, the utterance *A veces lloro mis lágrimas* 'Sometimes I cry my tears' has been realized in creaky voice, with a number of laryngeal and voiceless sounds, and an almost flat melody, because the female speaker 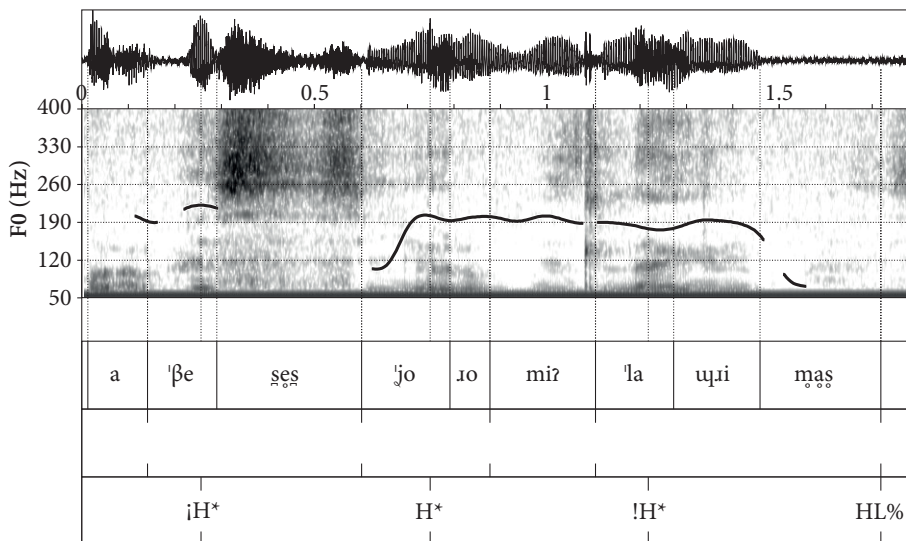is sobbing while she is complaining. Apparently, considering the text in (7), it is a case of BF, with a relatively expected series of tonal associations in each pitch accent (Martín Butragueño 2016).

(7)   *¡sí!/ siempre he estado con él/ hasta ahorita <~orita>/ he estado con mi hijo <~mijo>/ con él este siempre he estado/ que él me brindó su casa y/ pues todo pero/ a veces que/ luego las nueras no son buenas (creaky voice)/ lo tratan a uno mal/ pero/ aquí estoy señorita/ aquí estoy luego **a veces lloro mis lágrimas**/ las lloro porque/ por tantas cosas/ pero/ ¿qué puedo hacer?/ necesito/ salir adelante/ por todo/ por todas/ los malos tratos/ por las malas/ las malas este <~este:>/ cosas que me han pasado//* ['Yes! I have always been with him/ until now/ I have been with my son/ with him I have always been/ that he offered me his house and/ all that but/ sometimes that/ then daughters-in-law are not good (creaky voice)/ they treat you badly/ but/ here I am miss/ I am here then sometimes I cry my tears/ I cry them because/ for many reasons/ but what can I do?/ I need to go on/ for everything/ for all/ mistreatment/ for the bad/ the bad…/ things that have happened to me'] (13M, int. 313, turn 37)

(Martín Butragueño & Lastra 2015,
and Martín Butragueño 2016: 91, example in 10)

If we review Figure (15) and the example in (8), we will also find some creaky sounds, accompanied by lengthened syllables and a clear fall. The nuclear pitch accent is H+!L*, a usual choice for BF domains. It is apparently a case of NF, however, as seen in (8).
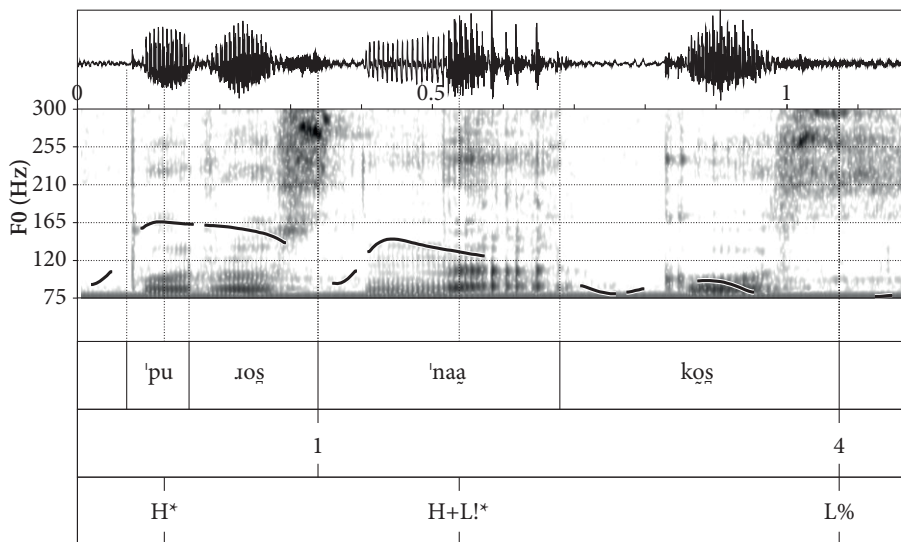


**Figure 15.** *¡Puros nacos!* ['Just the plebs'] (23M, int. 278). Source: Martín Butragueño (2016: 95, Figure 6)

The female speaker of Figure 15 is narrating how the policemen did not help her after some thieves broke into her house (Martín Butragueño 2016: 94). If Figure 14 is a case of a sad complaint, Figure 15 is a case of an angry complaint. Therefore, an expressive difference provokes subtle changes in the expected focus pitch accents: interview style favors a greater level of variability, as the speaker has to navigate very different contexts and expressive necessities (Martín Butragueño 2016).

(8)  *¡ay! también así te digo/ un naco un ig-/ puros nacos hay en/ en las delegaciones/ ¡puros nacos!/ sin conocimientos bueno/ y me dijeron "ah pues déle gracias a Dios que f-/ esas personas que la asaltaron son profesionales"/ ay le dije "y usted ¿por qué dice que son profesionales?"/ dice "porque los que empiezan/ violan/ la hubieran violado a usted y a sus dos hijas"* ['Oh! so I also tell you/ an ordinary person an ig-/ just ordinary persons are in/ in the boroughs' offices/ just the plebs!/ without knowledge… well…/ and they told me "oh so thank God that t-/ those persons who attacked you are professionals"/ oh I told him "and you why do you say they are professionals?"/ he says "because beginners/ rape/ they would have raped you and your two daughters"'] (23M, int. 278, turn 272)

(Martín Butragueño & Lastra 2012,
and Martín Butragueño 2016: 95, example in 11)

## 6. Sociolinguistic correlates of focus pitch accents

Hitherto the distribution of the nuclear pitch accents for focus marking has been exposed, as well as the combined effect of some other pragmatic factors. Nevertheless, the whole set of data does not show identical behavior across the entire speech community. There is considerable variation along some social axes. Furthermore, this variation can be consolidated as vernacular identities, or it can be attributed to possible ongoing linguistic change. The distribution of especially prominent nuclear tonal heights (3 st or more), the VEPs, and the boundary tones show some sociolinguistic correlates in the realization of foci whose examination is essential in order to have a complete picture of the focus marking in CMS. Table 7 presents the first question, linked to L+¡H* distribution.

**Table 7.** Especially prominent heights (L+¡H*) in nuclear syllables, focus and social factors (CMS)

| Martín Butragueño (2004, 2006, 2011) | Martín Butragueño (forthcoming a) | Martín Butragueño (2016) |
|---|---|---|
| **Educational level, range = 17** | **Age, range = 29** | **Gender, range = 8** |
| High (43%, *w* = .57) | 55 and older (50%, *w* = .61) | Male (62%, *w* = .54) |
| Low (39%, *w* = .53) | 35–54 (49%, *w* = .58) | Female (54%, *w* = .46) |
| Medium (28%, *w* = .40) | 20–34 (30%, *w* = .32) | |
| **Age, range = 13** | **Focus, range = 23** | **Focus, n.s.** |
| 55 and older (43%, *w* = .57) | NF (52%, *w* = .65) | |
| 35–54 (36%, *w* = .49) | BF (38%, *w* = .42) | |
| 20–34 (31%, *w* = .44) | | |
| Focus, range = 49 | | |
| NF (68%, *w* = .72) | | |
| BF (21%, *w* = .23) | | |

Age is one of the most recurrent factor groups in the different studies. Martín Butragueño (2006) and Martín Butragueño (forthcoming a) work with logistic models in which age and focus domain are significant for L+¡H*. In fact, NF and medium / older age are the favoring factors in the model. The speakers' age also plays a significant role in Mendoza (2014) for BF and L+¡H*, with the 35–54-year-old group offering the highest percentages, and with the youngest speakers (<34) showing scores near 0%. The speakers' educational level is significant in Martín Butragueño (2006, 2011), with an unexpected distribution pointing to high educational level as the most favoring factor (2011: 105, Table 3). However, a cross-tabulation between age and educational level reveals a moderate decrease in prosodic prominence in the high and low education levels, and a dramatic decrease in the medium educational level (2011: 106, Table 4), perhaps evidence of ongoing linguistic change (discussed in more detail

in Martín Butragueño 2011). Figure 16 shows the intersection between age and educational level, and Figure 17 presents the intersection between age and gender in Martín Butragueño (2011). Gender is the sole social group selected in Martín Butragueño (2016, the study of expressive utterances); the focus domain is not significant, but in general men favor especial prosodic prominences more frequently than women.
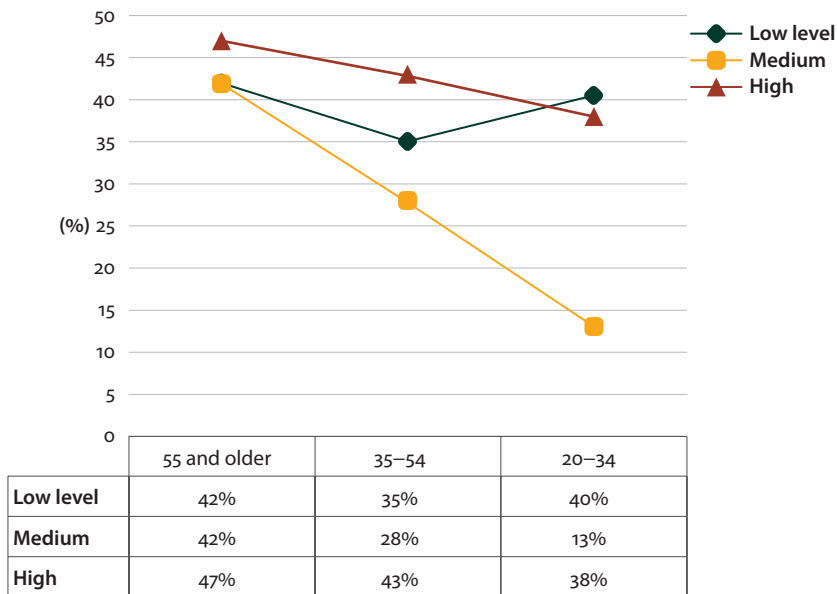


| | 55 and older | 35−54 | 20−34 |
|---|---|---|---|
| **Low level** | 42% | 35% | 40% |
| **Medium** | 42% | 28% | 13% |
| **High** | 47% | 43% | 38% |

**Figure 16.**  Age and educational level for L+¡H* in nuclear syllables; $R^2_{(low\ level)} = 0.077$, $R^2_{(medium\ level)} = 0.999$, $R^2_{(high\ level)} = 0.996$. Source: Adapted from Martín Butragueño (2011: 106−107, Table 4 and Figure 10)

As seen in Figure 16, people with a high level of education show a limited change degree. In fact, high-education speakers decrease along the age axis, reducing their percentage of L+¡H* by 9 points, $R^2_{(high\ level)} = 0.996$ ($R^2$ measures the fit to the linear equation). By contrast, low-education speakers do not show a very definite pattern ($R^2 = 0.077$), with slight rises and falls around a 40% rate. Medium-education level people, however, present the most interesting pattern, with a strong decrease ranging from 42% to 13%, $R^2_{(medium\ level)} = 0.999$; they are conducting the change and promoting a curvilinear pattern (in the sense of Labov 2001).[15] The overview should include the role of gender in the statistic model (Figure 17).

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**15.**  It is important to note that there is no evidence of a differentiated behavior of the focus domain (BF or NF) through this curvilinear pattern. The use of L+¡H* is statistically significant for NF, but the null hypothesis is that the focus domain and the social factor groups are completely independent variables. As a consequence, we assume a general linguistic decrease in the use of the salient pitch accent, as long as the opposite is not proved.
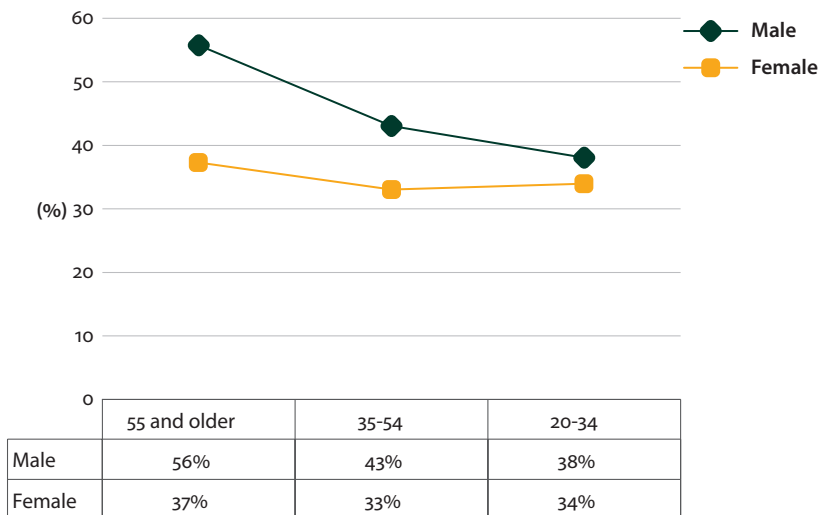
| | 55 and older | 35-54 | 20-34 |
|---|---|---|---|
| Male | 56% | 43% | 38% |
| Female | 37% | 33% | 34% |

**Figure 17.**  Age and gender for the circumflex pattern[16] in nuclear syllables; $R^2_{(male)} = 0.938$, $R^2_{(female)} = 0.519$. Source: Adapted from Martín Butragueño (2011: 117, Table 13 and Figure 13)

Figure 17 presents a male change pattern, with men ranging from 56% to 38% along age axis, $R^2_{(male)} = 0.938$. By contrast, women offer virtually the same rates through apparent time, ranging only in 3 or 4 points, with a lower fit degree, $R^2_{(female)} = 0.519$. Women's age is not an important factor, while men are engaged in the linguistic change process, demonstrating a clear decrease in the use of the salient pitch accent. Nevertheless, the male leadership is relative, because what men are doing is reaching female rates. In other words, the male retraction is simply matching a probable previous female retraction (Martín Butragueño 2011: 117–118). The rural data reveals a state of affairs different from this urban situation.

One of the most interesting facts is the role of the social network for BF in Mendoza (2014). If the network intensity scale (NIS) is low, the especial prominence is scarce. In contrast, if the score is high (3), then the especial prominence reaches 76%. L+¡H* is favored by speakers with less mobility, who live and work in the village. In conclusion, a favoring attitude toward local values and strong integration in the community (3) strongly favor the prosodic especially prominent solutions. There is a clear link between L+¡H* and the vernacular identity.

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**16.**  Figure 17 sums up the 197 L+¡H* cases and a number of solutions L+(¡)H* L (20 cases); i.e., some of these latter cases are L+¡H* L, but some of them are L+H* L, without upstep.

**Table 8.** Especially prominent heights (L+¡H*) in nuclear syllables, focus, and social factors in rural CMS

| Mendoza (2014) (BF) | | | |
|---|---|---|---|
| Age | Social network[17] (NIS) | Mobility[18] | Attitude and integration[19] |
| 55 and more (24%) | 3 = 76% | 0 = 57% | 3 = 85% |
| 35–54 (71%) | 2 = 19% | 1 = 24% | 2 = 10% |
| 20–34 (5%) | 1 = 5% | 2 = 14% | 1 = 5% |
| Youngest people, $w$ = .32 | Inside contacts, $w$ = .44 | 3 = 5% | |
| Oldest people, $w$ = .67 | Outside contacts, $w$ = .40 | | |
| | Both contacts, $w$ = .72 | | |

In rural CMS, age is significant for the nuclear accent L+¡H *, which is favored by the oldest age groups ($w$ = .67), in contrast to the youngest ($w$ = .32). The statistical analysis shows that external contact is also significant. In this case, the individuals were distributed into two main groups, corresponding to those who have contacts only within the community and in nearby communities, in contrast to the ones who have contacts in nearby cities. Group 2, individuals with close ties inside and outside the community (both contacts), was also included. Nuclear pitch accents with strong prominence are particularly favored by oldest people, and network social factors such as the higher number of contacts in and out the village, and the greater integration in the community, as can be seen in Table 8.

In contrast, the VEPs do not show a clear correlation with social factor groups in urban CMS. While the data from immigrants reveal correlations between the frequency of the VEPs, expressivity, and focus domain (Martín Butragueño forthcoming a), there is no significant correlation with social factors such as age, gender, or educational level. The analysis of expressive utterances by Martín Butragueño (2016) includes only weak evidence: it is likely that men produce more cases with VEPs, considering the fact that men favor L+¡H* and this is the most frequent VEP form; however, the focus domain is not significant (Table 9).

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**17.** Kinship, work place, group membership, and territorial loyalty are considered in the codification (Vida Castro 2004; Villena Ponsoda et al. 2003).

**18.** Scale 0 represents the lowest speaker's mobility (the speaker always lives and works in the village); workers returning to the village every day to eat and sleep (1 point); only for sleeping (2 points); people returning home only on weekends (3); people returning home just on vacation (4); people living in the city and returning to the village only once a year (5 points).

**19.** Score 0 in attitude indicates a negative assessment (the individual rejects local values) and 3 represents a positive assessment, i.e., the speaker shares local cultural values.

**Table 9.** Peak alignment, L+<(¡)H*, focus, and social factors

| Martín Butragueño (forthcoming a) | Martín Butragueño (2016) | Mendoza (2014) |
|---|---|---|
| Expressivity, range = 27 Focus, range = 16 (see Table 3) | Only indirect evidence: Men favor L+¡H* (62%, *w* = .54), and this pitch accent is the one with more VEPs (see Table 3) | Mobility (work) Inside, *w* = .71 Outside, *w* = .45 |
| Age, gender, educational level, **n.s.** | (Indirectly) Focus, **n.s.** | Attitude and integration 3, *w* = **.62** 2, *w* = **.60** 1, *w* = **.10** |

In rural CMS (Mendoza 2014), the VEP has been linked with speakers with a low level of education in BF, but it could also be extended up to the middle level, especially in age group 3. Most cases were reported in low- and middle-education level speakers, and statistical analysis proved to be significant ($\chi2 = 0.048$, $p < 0.05$). In contrast, in the NF statements there is no clear predominance of pitch accents with VEP related to educational level; cases of L+<(¡)H* are also observed in the data of the speaker with a higher educational level. However, mobility inside or outside the community is correlated with the VEP and is favored by speakers who conduct their activities within the community or nearby communities ($w = .71$), in contrast to speakers with greater mobility (see Table 8), who do not favor the VEP ($w = .45$). In this respect, attitudes and integration also play an important role. The positive evaluation of local values favors the VEP ($w = .62$), regardless of education level. As the rating score decreases in the rating scale, the probabilistic weight of the VEP decreases as well ($w = .60$ on the scale 2). Therefore, speakers who show no loyalty to local values do not favor the VEP ($w = .10$). These results suggest that the VEP may be a resource used by speakers as an indicator (index) of belonging to the community (in the sense of Eckert 2008, 2012).

First, a set of social factors correlates with some marked boundary tones. L+¡H* LH%, with a complex boundary tone, is clearly more frequent in men with a low level of education (≈75% of all these cases, vs. only 25% among women), in BF and especially in NF domains (Martín Butragueño 2004, 2006, 2011). Second, in data from immigrant networks (Martín Butragueño forthcoming a), long nuclear patterns (> 392 ms) show a logistic distribution in which social network type, boundary tone type (complex, $w = .74$; M%, $w = .50$; L%, $w = .45$), and expressivity are significant, but focus domain is not. Third, the expressive utterances show some special boundary tones, partially linked to the focus domain:

(9)  a.  'Encouragement': NFs are 61% for L+¡H*; gender is significant (range = 8; men, $w = .54$; women, $w = .46$); 72% data align L%, and thus fit the more general pattern.

b.  'Discouragement': NFs are only 5% for L*; gender is also significant (range = 24; women, $w$ = .62; men, $w$ = .38); many cases do not align with the expected M%.

c.  'Astonishment' employs complex boundary tones in BF and NF.

Source: Martín Butragueño (2016)

**Table 10.**  Boundary tones, focus, and social factors

| Martín Butragueño (2004/2006/2011) | Martín Butragueño (forthcoming a) | Martín Butragueño (2016) |
|---|---|---|
| L+¡H* LH% is clearly more frequent in low education men (≈75% cases) | In long nuclear + postnuclear patterns (≥ 392 ms): Social network, range = 32 Boundary tone, range = 29 Complex (76%, $w$ = .74) M% (46%, $w$ = .50) L% (40%, $w$ = .45) Expressivity, range = 25 Focus, **n.s.** | a. 'Encouragement': NFs are 61% for L+¡H* Gender, range = 8 Men (62%, $w$ = **.54**) Women (54%, $w$ = **.46**) 72% data align L% |
| | | b. 'Discouragement': NFs are only 5% for L* Gender, range = 24 Women (4%, $w$ = **.62**) Men (2%, $w$ = **.38**) Many cases do not align M% c. 'Astonishment', complex boundaries |

The expressive meaning of conversational encouragement, in the form of complicity with the listener, can be observed in Figure 18, with a nuclear pitch accent L+H* and a complex boundary tone HL% in a BF domain.[20] The example was produced in a sociolinguistic interview with a mason in Mexico City (Martín Butragueño forthcoming a).

Finally, the boundary tone shows some remarkable features related to focus in rural CMS (Mendoza 2014). The speakers' age is significant for BF ($\chi^2$ = 18.630, $p$ < .000), so that the younger people (groups 1 & 2) favor M%, and the older people (groups 3 & 4) favor L%. Additionally, a boundary tone M% in a BF is favored by those speakers with weak ties to the local networks, reinforcing the idea that the use of this boundary tone is socially distinctive.

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**20.** We have considered in Figure 18 a nuclear pitch accent L+H* and not, for instance, L*, because the $F_0$ rises more than 1.5 st along the nuclear syllable (cf. Murrieta 2016).
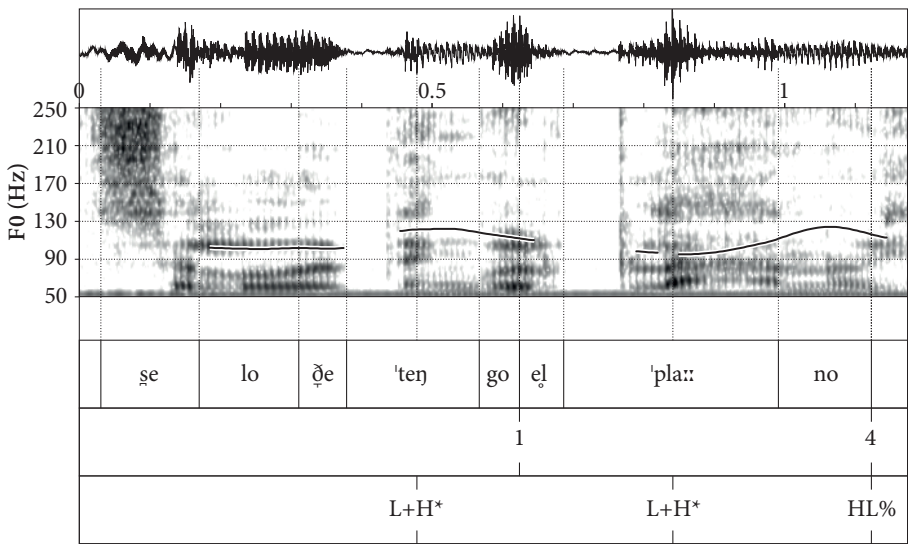
**Figure 18.** *Se lo detengo el plano* ['I hold it, I hold the plan for you'] (Tomás T., masonry network) [HL%, BF]. Source: Adapted from Martín Butragueño (forthcoming a, Figure 2)

**Table 11.** Boundary tones and social factors in rural CMS

| | Mendoza (2014) (BF) | | |
|---|---|---|---|
| | Age | Social network (NIS) | Mobility |
| L% | 55 and older = 39% | 1 = 12.2% | 0 = 61% |
| | 35–54 = 31.7% | 2 = 22% | 1 = 4.9% |
| | 20–34 = 17.1% | 3 = 12.2% | 2 = 4.9% |
| | 15–19 = 12.2% | 4 = 53.7% | 3 = 17.1% |
| | | | 4 = 12.2% |
| M% | 55 and older = 6.8% | 2 = 35.6% | 0 = 59.3% |
| | 35–54 = 28.8% | 3 = 25.4% | 1 = 13.6% |
| | 20–34 = 39% | 4 = 30.5% | 2 = 13.6% |
| | 15–19 = 25.4% | 5 = 8.5% | 3 = 13.6% |

The particularity of the M% cases is the perception of a "flat intonation" through the utterance, and only at the end a relatively especial prominence is recorded with respect to the previous pitch accents. This type of configuration is mainly executed in data from men with a low level of education (Figure 19).

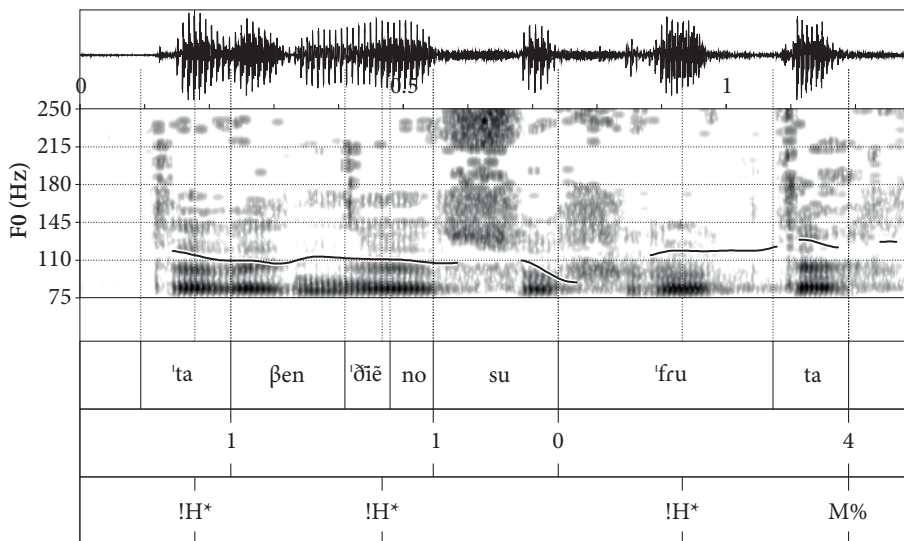**Figure 19.** *Está vendiendo su fruta* ['He/she is selling his/her fruit'] (rural CMS). Source: Adapted from Mendoza (2014, Figure 3.16)

## 7. Discussion

The paper has confirmed the idea that the distribution of focus pitch patterns is variable. However, it is an ordered variation (as in classical sociolinguistics). In that sense, the hypotheses in (2) seem to have been verified, at least in their general aspects. Regarding (2a), Tables 1 and 2 show that the tonal realization of the foci is a variable phenomenon. While probabilistic tendencies exist for BF and NF, it is clear that the pitch accents are not associated with them in a categorical way. As for (2b), focus domain marking competes at least with expressivity, focus communicative function, and text type, working (almost) all together under the rules of the EC. Finally, regarding (2c), there is enough evidence that age groups, gender, educational level, social network type, and sociolinguistic attitudes interact promoting different intonation patterns. Overall, phonological, pragmatic and sociolinguistic data suggest highly dynamic and multivariate behavior, in the sense of our general hypothesis (or perspective) on facts.

Certainly, there are many questions far from being resolved. Thus, it is necessary to analyze in detail the differences between L* and !H* in the nuclear syllable, or the consequences of the different statistical models in relation to L+H* and L+¡H*. It is probable that perceptual research will sharpen our understanding of the role of several pragmatic dimensions. A number of inconsistencies still remain in

the sociolinguistic data; for example, it is difficult to explain entirely why some rural CMS patterns differ from the urban ones in the way they do. The same can be said about how to fit the data as a whole in a single picture, while a systematic view in terms of a stochastic optimal explanation may help to incorporate the several acting forces and to demonstrate the ordered nature of data (Johnson 2002; Díaz Campos & Colina 2006; Pater 2009; Coetzee 2006, 2009a, 2009b, 2009c; Kostakis 2010; Coetzee & Pater 2011; Coetzee & Kawahara 2013; Martín Butragueño 2014a: 89–109; Serrano 2014). As a first step, Table 12 shows a set of prosodic constraints on BF and final NF domains.

**Table 12.** A preliminary constraint model on focus domain in CMS

| | $L+\text{¡}H^{*} \to \text{TBU}(\sigma^{*}_{N})$ | $L+H^{*} \to \text{TBU}(\sigma^{*}_{N})$ | $(!)H^{*} \to \text{TBU}(\sigma^{*}_{N})$ | $L^{*} \to \text{TBU}(\sigma^{*}_{N})$ | $<T^{*} \to \text{TBU}(\sigma^{*}_{N})$ | ALIGN(L/$\iota$, right) | ALIGN(M/$\iota$, right) | ALIGN(H/$\iota$, right) | ALIGN(HL/$\iota$, right) | ALIGN(LH/$\iota$, right) | NO FALL($\sigma^{*}_{N}$) | NO RISE($\sigma^{*}_{N}$) | NO CONTOUR($T_{\iota}$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BF | * | | ✓ | | * | ✓ | (✓) | * | (✓) | (✓) | ✓ | ✓ | (*) |
| NF | ✓ | | * | | ✓ | ✓ | (✓) | * | (✓) | (✓) | ✓ | * | (*) |

Table 12 enumerates thirteen constraints that establish a *prosodic* regulation linked to the focus domain.[21] They are grouped in three families: ASSOCIATION, ALIGNMENT, and MARKEDNESS.[22] The symbols "*" and "✓" express a statistically significant trend toward violating or respecting the constraint; when the symbols appear in parentheses, they apply only to a few data. A pitch accent description is related to the Tone Bearing Unit (TBU) through the five association constraints; specifically, the TBU is always the nuclear syllable ($\sigma^{*}_{N}$) in Table 12. The intonational phrase ($\iota$) is usually the relevant prosodic domain in our data.

In terms of association constraints, $L+\text{¡}H^{*} \to \text{TBU}(\sigma^{*}_{N})$ and $<T^{*} \to \text{TBU}(\sigma^{*}_{N})$ are significantly respected by NF, but violated by BF (Tables 2 and 4); by contrast, the constraint $(!)H^{*} \to \text{TBU}(\sigma^{*}_{N})$ is violated by NF and respected by BF (Table 1). At the same time, $L+H^{*} \to \text{TBU}(\sigma^{*}_{N})$ and $L^{*} \to \text{TBU}(\sigma^{*}_{N})$ seem not to be significantly

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21. As an anonymous reader observes, a more mature analysis should more clearly incorporate the additional *pragmatic* and *social* factor groups. This task, nevertheless, goes beyond the limits of this work.

22. The analysis follows and adapts the synthesis and discussion of prosody and optimality theory in Gussenhoven (2004: Chapter 8), but see also Selkirk (2011) for a revision of the syntax-prosody interface, and Martín Butragueño (forthcoming b) for some constraint analyses of Mexican Spanish, relating to Table 12.

associated with any focus domain (Tables 1 and 2). The expected association ranking for BF is (!)H\* → TBU(σ\*$_N$) » L+¡H\* → TBU(σ\*$_N$), <T\* → TBU(σ\*$_N$), and the expected ranking for NF is L+¡H\* → TBU(σ\*$_N$), <T\* → TBU(σ\*$_N$) » (!)H\* → TBU(σ\*$_N$).[23]

The five alignment constraints do not establish many differences between BF and NF. Both focus domains usually respect ALIGN(L/ɩ, right) and violate ALIGN(H/ɩ, right). Nevertheless, ALIGN(M/ɩ, right), ALIGN(HL/ɩ, right), and ALIGN(LH/ɩ, right) can be respected or violated depending on the circumstances. HL% appears in some L+¡H\* HL% BF and informative NF contours, but does not when the NF marks contrast (Table 5); L+¡H\* LH% is relatively frequent in men with a low level of education (Table 9); and M% is possible in some BF cases (Tables 9 and 10). In any case, the expected alignment ranking for BF and NF is ALIGN(L/ɩ, right) » ALIGN(M/ɩ, right), ALIGN(HL/ɩ, right), ALIGN(LH/ɩ, right) » ALIGN(H/ɩ, right).

There are three markedness constraints in Table 12. Both BF and NF respect NO FALL(σ\*$_N$), considering there is no significant character of nuclear L\* (Table 1). However, only BF respects NO RISE(σ\*$_N$), while the constraint is violated by NF, because of the significant presence of L+¡H\* (Table 2). Besides, NO CONTOUR(T$_ɩ$) is occasionally violated by both focus types (see comments about complex boundary tones).

It is important to keep in mind that Table 12 marks statistical trends across the whole set of data, from a general stochastic optimality theory point of view. Certainly, every token would have a specific constraint ranking. Thus, a NF case like [*No vino Juan, vino Marina*]$_{L+¡H^* L\%}$ ['Juan did not come, Marina did'], would be constrained as L+¡H\* → TBU (σ\*$_N$), ALIGN(L/ɩ, right), NO FALL (σ\*$_N$) » L+H\* → TBU (σ\*$_N$), ALIGN(H/ɩ, right), NO RISE(σ\*$_N$), and so on.

In any case, the previous points have methodological consequences. If only controlled data were considered in work on focus, we would risk simplifying the body of problems in at least three ways. First, we would conceive of a symmetrical relation between focus type and pitch patterns, when the distribution is in fact more complex. Second, we would discard the fact that, in real use, the same resource (i.e., a tonal prominence) can package a number of different pragmatic objectives. Third, controlled data tend to concentrate the research in standard language, disregarding social stratification, ongoing changes, and so forth. In this sense, a prosody-in-use approach can complement experimental designs, DCTs, and other sources of controlled data, providing more realistic materials in terms of their linguistic, pragmatic, discursive, and sociolinguistic features.

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**23.**  Let us observe that L+¡H\* is associated with as a specific pitch accent, considering its behavior in Table 2. However, the VEP ("<") appears only as an additional characteristic. Its pragmatic role (in expressive speech acts) and sociolinguistic correlates (as a rural marker) will have to be explored in more detail.

## 8.   Conclusions

This paper has considered the complexity of focus pitch patterns in CMS. The main argument has been the necessity of working with complex models of structured variation, taking into consideration intonational, pragmatic, and sociolinguistic factor groups. In order to reach this objective, the complementary utility of a prosody-in-use approach has been defended, and three research questions, and the subsequent hypotheses have been established, in reference to: (1) the variable distribution of intonational patterns, (2) the packaging of a number of pragmatic values, and (3) the presence of some sociolinguistic correlates for some tonal solutions.

To sum up, our main findings are the following: (1) non-rising pitch accents are less common solutions in nuclear syllables, although they are more likely with BF; (2) rising pitch accents are always more common as nuclear accents – however, L+H* is not clearly significant regarding focus domain, while L+¡H* is more likely with NF; (3) expressivity marking competes with focus marking in the selection of nuclear pitch accent, and expressivity is in fact more statistically significant than focal domain in samples with any utterance type or with only expressive utterances; (4) the very early (VEP) nuclear peak is conditioned by the expressivity domain and focus domain; (5) some focus communicative functions (corrections, answers), new or inferable information, and assertive senses especially favor notoriously prominent nuclear pitch accents and sometimes complex boundaries; (6) interview style favors variation in pitch accent solutions, but discourse completion task style and especially reading style disfavor variation and promote a simpler distribution; (7) people with a lower level of education, older people, males and tight social networks generally favor higher nuclear prominence and complex boundary tones; (8) especial prominence as well as complex and medium boundary tones indicate (index, in the sense of Eckert 2008, 2012) vernacularity, but they are decreasing in urban CMS and among rural people in contact with urban settings; (9) nuclear VEPs are not clearly conditioned by social factor groups in urban CMS, but they are especially frequent in rural settings.

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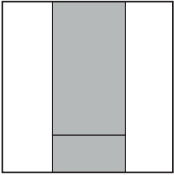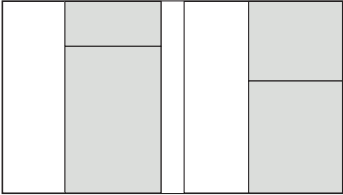
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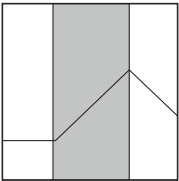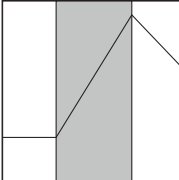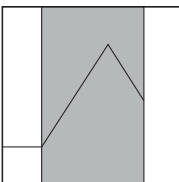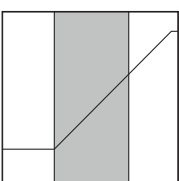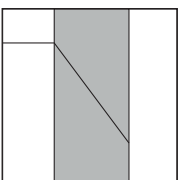
## Appendix

A brief description of the phonetic-phonological transcription of pitch accents and boundary tones (adapted from de-la-Mota et al. 2010: 320–322, with some additional changes; quotations come from the work by de-la-Mota et al., unless otherwise indicated)
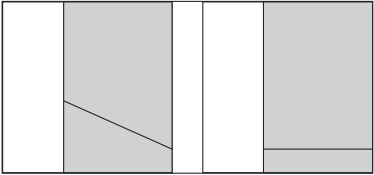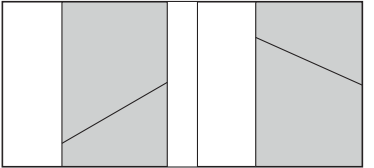
Monotonal pitch accents

| | Transcription | Description |
|---|---|---|
|  | L* | "This accent is phonetically realized as a low plateau at the minimum of the speaker's range". |
|  | H*, !H* | "This accent is phonetically realized as a high plateau with no preceding $F_0$ valley". When it is phonetically realized as a less high plateau, H* is characterized by an alternative form !H* in our paper. |
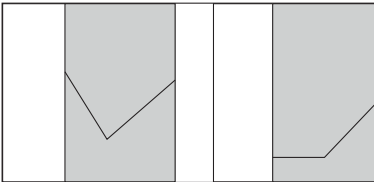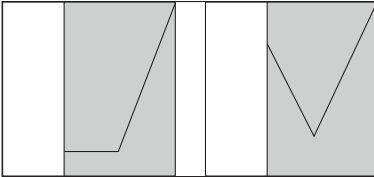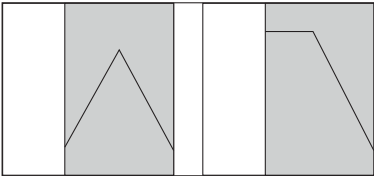
Bitonal pitch accents

| | Transcription | Description |
|---|---|---|
| | L+H* | "This accent is phonetically realized as a rising pitch movement during the accented syllable with the $F_0$ peak located at the end of this syllable". |
| | L+¡H* | If the rising pitch movement is higher than 3 st, then we add a "¡" (L+¡H*). |
| | L+<H* | A *very early peak* or VEP. This alternative form consists of a rising pitch movement with the $F_0$ peak located near the middle point of the accented syllable. |
| | L+>H* | "This accent is phonetically realized as a rising pitch movement on the accented syllable with the $F_0$ peak aligned with the postaccentual syllable" (a *delayed* peak). If the rising pitch movement is higher than 3 st, then we add a "¡" (L+>¡H*). |
| | H+L* | "This accent is phonetically realized as a $F_0$ fall within the accented syllable". |

## Monotonal boundary tones

| | Transcription | Description |
|---|---|---|
| | L% | "L% is phonetically realized as a low sustained tone or a falling tone at the baseline of the speaker". |
| | M% | "M% is phonetically realized as a rising or falling movement to a target mid point". |

## Bitonal boundary tones

| | Transcription | Description |
|---|---|---|
| | LM% | "LM% is phonetically realized as an $F_0$ valley followed by a movement to a target midpoint". We also use LM% in this sense (maybe a variant of LH%): "LM% is manifested as a fall followed by a rise to mid pitch" (Cabrera Abreu & Vizcaíno Ortega 2010: 91). |
| | LH% | "LH% is phonetically realized as an $F_0$ valley followed by a rise". |
| | HL% | "HL% is phonetically realized as an $F_0$ peak followed by a fall". |

CHAPTER 6

# Distinguishing contrast and focus at PF
## A view from Italian

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This paper argues in favor of the hypothesis that contrast and focus are two independent categories of information structure (Neeleman & Vermeulen 2012). After showing that contrast and focus have a different semantics (Torregrossa 2015), I investigate whether they are associated with different prosodic representations. In particular, I will present the results of a production experiment targeting the prosodic realization of *in-situ* contrast and focus constituents in the variety of Italian spoken in Rionero, in the Basilicata region. The data shows that contrast and focus are expressed by different prosodic means, involving the choice of a specific pitch contour or the modulation of phonetic variables (e.g., duration of stressed syllable or alignment of tonal targets).

## 1.  Topic, focus and contrast in Italian sentences

Across the literature on information structure (IS, henceforth), several attempts have been made to understand the semantic and pragmatic contribution of contrast (see, e.g., Molnár 2002 and Repp 2010). While it has been established that topic and focus are theoretically useful categories for describing the structuring of sentences according to informational criteria, the importance of the notion of contrast is still under debate. According to Lambrecht (1994), contrast is not a category of grammar, and the "impression of contrastiveness" only "arises from particular inferences which we draw on the basis of given conversational contexts" (Lambrecht 1994: 290). Likewise, other scholars have proposed reducing the semantic contribution of contrast to the one of focus, given that both categories have the function of evoking alternatives in discourse (see, e.g., Rooth 1992). Accordingly, some scholars are skeptical about the possibility to formulate a unique definition of contrast, and propose that the notion of contrast is only a cover term for "a number of concepts that bear a family resemblance" (Repp 2010: 1335).

The aim of this paper is to elaborate clear-cut semantic criteria to distinguish the category of contrast from the one of focus (see § 2). Furthermore, based on the results of a production experiment, I provide empirical evidence that these two notions correspond to two different phonological representations (see § 4). Before presenting the study, in the rest of this section I will briefly define the informational notions of topic, focus and contrast, and show how they are expressed in Italian sentences.

The term *topic* refers to what the sentence is about (see Reinhart 1981 on the definition of topic in terms of aboutness). For instance, (1) is construed as conveying information about the referent of *Veronica*.

(1)  [Veronica]<sub>TOPIC</sub>,  l'          h-a        invita-ta.
     Veronica              she[ACC.F.SG]  AUX-3SG  invite-PST.PTCP.F.SG.
     'Veronica, he invited her.'

In Italian, topicality is marked by means of clitic left dislocation: the constituent *Veronica* is merged in the left edge of the sentence and resumed by a sentence internal clitic. The literature distinguishes between different types of topics (aboutness/shift, contrastive, given, etc.). Each of them conveys a specific interpretation and is encoded in a particular way at the syntax-prosody interface (see Frascarelli & Hinterhölzl 2007).

In this paper, I define *focus* as the constituent answering a wh-question (see, a.o., Neeleman & Vermeulen 2012). For instance, in (2) *Veronica* corresponds to the wh-operator and is the sentence focus. The literature usually refers to this kind of focus as "new information focus". Italian marks focus by prosodic means, i.e., by means of a specific pitch accent, i.e., H* (see Frascarelli 2004 and the discussion in § 3).

(2)   [context: who did he invite?]
      H-a        invita-to       [Veronica]<sub>FOCUS</sub>.
      AUX-3SG  invite-PST.PTCP   Veronica.
      'He invited Veronica.'

Contrast has the function of indicating alternatives in the discourse context (I refer to § 3 for a detailed account of how alternatives are generated). For example, *Veronica* in (3) evokes a set of alternatives, which is either the set denoted by the expression *the other sisters*, if Veronica is one of Marco's sisters (see the continuation in (3a)) or the set denoted by the expression *the sisters*, if Veronica does not belong to this set (see the continuation in (3b)). A possible scenario for the continuation in (3b) would be one in which Veronica and Marco's sisters do not get along well with each other, so that it is implausible that Marco invited both Veronica and his sisters.

(3)  a.   [Marco ha invitato le sue sorelle alla festa?]
        [Did Marco invite his sisters to the party?]
        *H-a          invita-to           [Veronica]*<sub>CONTRAST</sub>.
        AUX-3SG invite-PST.PTCP   Veronica
        'He invited Veronica.'

     b.  *Non so se abbia invitato anche le altre sorelle.*
        (I do not know whether he invited the other sisters, too).

     c.  *Non penso che abbia invitato anche le sorelle.*
        (I do not think that he invited his sisters, too)

It should be noticed that in both scenarios, the answer in (3a) is associated with
a sense of uncertainty or incompleteness, since the preceding question is left un-
answered (see Tomioka 2009 and Torregrossa 2015). Across the literature on the
expression of IS in Italian, there is no study targeting the linguistic correlates of
contrast occurring in contexts like (3). One of the aims of this paper is to fill in this
gap. On the contrary, there are many investigations concerning the interpretation
and the linguistic correlates of contrast considered in interaction with either focus
or topic, as shown in (4) and (5) respectively. In both examples, the contrastive
constituent evokes an alternative, i.e., the referent denoted by *Gianna*.

(4)  *[VERONICA]*<sub>CF</sub> *h-a          invita-to           (non   Gianna).*
     Veronica          AUX-3SG invite-PST.PTCP   NEG   Gianna
     'VERONICA he invited, not Gianna.'

(5)  *[Veronica]*<sub>CP</sub> *l'          h-a          invita-ta,          ma*
     Veronica          she[ACC.F.SG] AUX-3SG invite-PST.PTCP.F.SG but
     *[Gianna]*<sub>CT</sub> *prefer-isce   non   chiama-r-la.*
     Gianna          prefer-3SG   NEG   call-INF-she[ACC.F.SG]
     'Veronica, he invited her, but Gianna he prefers not to call her.'

In (4), *Veronica* is a contrastive focus (CF), marked by both fronting and a L+H*
pitch accent. Note that (non-contrastive) new information foci (such as (2)) cannot
be fronted (Torregrossa 2012). CF may appear *in-situ*, too. In this case, it is distin-
guished from new information focus by prosodic marking (H* for new information
focus – see Frascarelli 2004 – vs. L+H* or H+H* for CF – see Bocci 2013). From the
interpretive point of view, (4) expresses correction, as also shown by the negative
tag in parentheses (Bianchi 2012).

    In (5), *Veronica* is a contrastive topic (CT). The constituent is clitic left dis-
located, as is the case of its non-contrastive counterpart in (1), and is marked by
intonation, i.e., a specific pitch accent type (H*, see Frascarelli & Hinterhölzl 2007)
and phonetic variables, e.g., higher pitch range and longer syllable duration than
non-contrastive topics (Torregrossa 2013).

When comparing (3) with (4) and (5), one might wonder whether contrastive constituents (such as *Veronica* in (3)) are simply instances of *in-situ* CFs and CTs.[1] The observation that contrast always occurs in association with either focus or topic – and never in isolation – may undermine the hypothesis that contrast is an autonomous informational category. However, (3) shows that contrastive constituents are not *in-situ* CFs, since they are not associated with a corrective interpretation. Furthermore, if contrastive constituents were identical to *in-situ* CTs, it would always be possible for them to be clitic left-dislocated (which is how Italian marks CT, analogously to what happens with CFs – see the discussion following (4)). However, (6) – taken from Torregrossa (2015: 203) shows that this is not the case. The constituent *un professore* (a professor) is an alternative to *his friends* in the question, and is thus contrastive. (6b) shows that its left dislocation results in marginality.

(6)   [context: Will he invite his friends to the party?]

    a.   *Pens-a    di    invita-re    un          professor-e    ma*
        think-3SG  COMP  invite-INF  ART.INDF.M.SG  professor-M.SG  but
        *non  s-o    se    è        un          amic-o.*
        NEG  know- 1SG  COMP  be[PRS.3SG]  ART.INDF.M.SG  friend-M.SG

    b.   ??*Un          professor-e    pens-a    di*
        ART.INDF.M.SG  professor-M.SG  think-3SG  COMP
        *invita-r-lo,        ma  non  s-o    se    è*
        invite-INF-he[ACC.M.SG]  but  NEG  know-1SG  COMP  be[PRS.3SG]
        *un          amic-o*
        ART.INDF.M.SG  friend-M.SG
        'He wants to invite a professor, but I don't know if he is a (real) friend.'

More in general, some authors have questioned the need to include all three notions – topic, focus and contrast – in the inventory of informational categories. In particular, it has been shown that both focus and contrast involve (more or less explicitly) reference to alternatives in the discourse context. Therefore, it has been proposed to reduce one to the other and, accordingly, to elaborate an IS model which relies on the distinction between only two informational categories (i.e., topic and focus). In the next section (§ 2), I discuss two examples of these models. Rooth (1992) proposes considering contrast as a side-effect of the semantics of

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**1.**  As for Italian, the literature on information structure does not deal with *in-situ* CTs, under the widespread assumption that topic can only be marked by clitic left dislocation. However, the studies on information structure in English recognize the existence of *in-situ* CTs. Both *in-situ* and left dislocated CTs are marked by a specific type of pitch accent (i.e., the so-called B-accent, see Büring 2003).

focus. Selkirk (2008) gets rid of the category of (new information) focus and explains IS-related linguistic phenomena only in terms of contrast (contrastive focus in her terminology) and givenness. Given that topic (or givenness) is considered as a necessary component of IS in both models, the rest of this paper deals only with focus and contrast, in order to highlight the explanatory import of both notions. More specifically, after verifying the empirical adequacy of the abovementioned models in explaining the prosodic marking of *in-situ* focus and contrast constituents in Italian sentences, I argue for a three-way distinction between informational categories: topic, focus and contrast.

## 2.  Focus and contrast: Two notions or the same notion?

In § 1 I defined contrast in terms of alternatives. However, according to the "alternative semantic" account of focus (see Rooth 1992 and Krifka 2007 for a review), the interpretation of (2) in § 1 – in which new information focus occurs – involves reference to alternatives, too. Following on Hamblin (1973), the denotation of the question 'Who did he invite?' is the set of propositions of the form *invite (he,x)* – with x ranging over individuals – which are all the possible answers to the question, as shown in (7).

(7)   $\{INVITE \ (he) \ (x) \ | \ x \in D_e\}$

Focus is interpreted against this set of alternatives. The formalization by Neeleman and Vermeulen (2012) given in (8) represents the focus/background partition of the sentence in (2) – with the background corresponding to the open formula in (7) – together with the set of alternatives that are relevant for interpretation.

(8)   $< \lambda x$ [he invite x], Veronica, {Gianna, Francesca, Eva…} $>$[2]

The representation in (8) applies to (4) too, where a CF occurs. However, in (4), the alternative to the focus constituent (Gianna) is explicitly given in the discourse context. Thus, the set of alternatives is closed (see (9)), contrary to the question-answer pair in (2) – formalized in (7) and (8).

(9)   $< \lambda x$ [he invite x], Veronica, {Gianna} $>$

Based on the opposition between the non-contrastive focus in (8) and the CF in (9), it may be argued that contrast is just a pragmatic effect of focus depending on

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**2.**   Note that this formalization differs from the structured meaning notation (see Krifka (2007), in that it includes reference to the alternatives to the focus.

the size of the set of contextually relevant alternatives (more specifically, on the open vs. closed status of this set – see e.g., Kiss 1998).[3] Accordingly, contrast has no real theoretical import (see Repp 2010 for a discussion of this position), and IS phenomena can be accounted for by referring only to the notions of topic and focus.

Along the same lines, Selkirk (2008) proposes minimizing the number of IS notions that are represented in the grammar, by elaborating an IS model in which the only primitive categories are contrastive focus and discourse givenness. Discourse newness (new information focus in our terms) has an unmarked status. According to her proposal (elaborated for English), contrastive focus occurs in sentences endowed with a corrective interpretation (as (4) in § 1) or containing a focus sensitive operator (like *only, even*, etc.), and is used to indicate alternatives in the discourse context. Thus, her notion of contrastive focus overlaps with our notion of contrast[4] and – contrary to what is claimed by the alternative semantic accounts – does not apply to constituents answering a wh- question, as *Veronica* in (2), which are discourse new, and their prosody is derived by default rules of phrase stress assignment. If this generalization applies to Italian (new information) focus as well, the prosody of a focus constituent should not differ from the one of its counterpart in a broad focus sentence. This hypothesis will be verified by the experiment to be introduced in § 4. On conclusion, Selkirk's model is built around the notions of givenness and contrast, without referring to focus.

Following a different line of investigation, recent literature has shown that some IS-related phenomena cannot be accounted for by referring to only two informational categories. For instance, in English both CTs and CFs can undergo operator movement to the sentential left edge, as shown in (10a) and (10b) respectively. The examples are slightly adapted from Neeleman & Vermeulen (2012: 12).

(10)  (context: A and B know that John must read five books to prepare the exam; they are discussing which books he has read so far) B: *John's read the Selfish Gene*.

  a.  A: *Yes, I know, the Selfish Gene he's read (but the Extended Phenotype he hasn't)*.

  b.  A: *The Extended Phenotype he's read (not the Selfish Gene)*.

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**3.**  The formalization in (9) applies to CTs, too (see (5) § 1). CTs are analyzed as involving the occurrence of a focus within a topic (see Krifka 2007). As is the case of CFs, the contrastive interpretation associated with CTs may depend on the restricted size of the set of alternatives. Also, the interpretation of CTs depends on the interaction between the semantics of focus and the one of topic.

**4.**  Selkirk (2008) does not take into account the interpretation associated to *in-situ* contrastive constituent like in (3). However, I think that her definition of contrastive focus can be applied to such constituents as well, together with CTs and CFs.

Crucially, aboutness (i.e., non-contrastive) topics and new information foci cannot undergo the same type of movement as CTs and CFs (Neeleman & Vermeulen 2012). (10a) would not be felicitous without the continuation in parentheses that introduces an entity contrasting with *the Selfish Gene*. (10b) would be inappropriate as an answer to a wh-question. Therefore, the model must include a 'third' informational unit which licenses operator movement. The authors identify this IS notion with the category of contrast, which has a different semantic interpretation than focus (I refer to Neeleman & Vermeulen 2012: 12 for further details).

In compliance with Neeleman and Vermeulen (2012), in Torregrossa (2015) I showed that contrast and focus should be considered as two distinct categories in IS. This claim is supported by the analysis of Italian sentences like (11), in which contrast is considered independently from its occurrence with focus or topic, contrary to (10a) and (10b) – see also the discussion in § 1.

(11)  [context: at the greengrocer. A: When will they bring the melons?]
   B:  *I            melon-i       non so        ma porter-anno*
        ART.DEF.M.PL melon-M.PL   NEG know-SG   but bring-FUT.3PL
        *le           aranc-e       domani.*
        ART.DEF.F.PL orange-F.PL  tomorrow
        'I don't know about the melons, but they will bring the oranges tomorrow.'

By means of (11B), the speaker expresses that she does not know when the melons will be brought, and relates the answer "Porteranno le arance domani" (They will bring the oranges tomorrow) to a strategy of answering a super-question of the form "When will they bring the fruit?" (see Büring 2003 for a formalization of the resulting discourse structure). Questions like "When will they bring the oranges?" and "When will they bring the melons?" are sub-questions of this super-question. The constituents occurring in the sub-questions (i.e., the oranges, the melons, etc.) stand in *contrast* to each other and, for each type of fruit, it is asked when it will be brought.

Within this framework, the constituent *domani* (tomorrow) corresponds to the wh-operator in the implicit sub-question "When will they bring the oranges?", and is the (new information) focus. The constituent *le arance* (the oranges) indicates the presence of a contextually relevant alternative (corresponding to a different sub-question), i.e., the referent of *the melons* given in the previous question, and is thus an instance of contrast.[5] (12) and (13) show that both focus and contrast

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5.  Our notion of contrast overlaps with Büring's (2003) notion of CT (formulated for English). However, the category of CT cannot be applied to contrastive constituents in Italian. CTs are marked by means of clitic left dislocation in Italian, and not all contrastive constituents can be clitic left dislocated (see (6) in § 1). Furthermore, contrary to English, there is no common marking strategy for CTs and contrastive constituents (see footnote 2) that would warrant the use of a unique category of IS, like CT.

are interpreted against a set of alternatives.[6] More specifically, (12) is another application of the formalization for focus in (8). (13) indicates that contrast has the function of evoking alternatives within the open formula generated by focus interpretation. Therefore, even if focus and contrast both have the function of evoking alternatives in discourse, they operate in two different domains. While focus generates alternatives with respect to the focus constituent, contrast induces alternatives within the open formula generated by focus interpretation (i.e., within the background) – see Torregrossa 2015 for further details.

(12)  < λx [bring (they, the melons, at x)], tomorrow, {today, tomorrow, in two days…} >

(13)  { λx [bring (they, y, at x)] | y = ALT (the melons)}.

On conclusion, (12) and (13) show that focus and contrast are associated with two different semantic representations. The sentence in (11) will be used as a model to design the stimuli of the experiment in § 4.

According to the analysis reported in Vermeulen (2008), *in-situ* contrastive constituents in Italian (like *le arance* – the oranges – in (11)) have a very similar interpretation as *wa*-marked *in-situ* constituents in Japanese. In both cases, the target constituent indicates the presence of a contextually relevant alternative (i.e., Bill, in Vermeulen's example), and the speaker does not say whether the property at stake (being helped by John in (14) – taken from Vermeulen (2008)) holds for the alternative or not.

(14)  *John-ga    Mary-wa   tasuketa.*
      John-NOM Mary-wa   helped
      'John helped Mary.'

The data in (14) suggests that contrast is marked morphologically in Japanese. On the contrary, there is no morphological expression of contrast in Italian. The aim of this paper is to show whether *in-situ* contrastive constituents are realized by means of a specific prosodic pattern in Italian. More specifically, the analysis that will be reported in the next sections aims to verify the following hypothesis:

–  *Hypothesis I*: The prosodic representation of contrast (considered independently from its occurrence with topic or focus) differs from the one of focus.

If correct, *Hypothesis I* would support the claim that contrast and focus are two different categories of IS and cannot be reduced to each other (contrary to what is claimed by the alternative semantics accounts). However, even if *Hypothesis I* was

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6.  For the sake of clarity, I abstract away the semantic contribution of contrast in (13) from the formalization of the focus/background partition in (12).

correct, the issue of whether both focus and contrast are necessary components of IS would still remain undecided. Following on Selkirk (2008), (new information) focus may not be marked in grammar. If this was the case, new information focus would not differ from its counterpart occurring in a broad focus sentence. Therefore, the study will also compare (new information) focus and broad focus constituents, which will allow the verification of the following hypothesis:

– *Hypothesis II*: The prosodic representation of (new information) focus differs from the one of its counterpart in a broad focus sentence.

Before introducing the experiment, I will provide some background information on the prosodic marking of focus in Italian sentences.

## 3.   The prosody of focus and contrast in some Italian varieties

The prosodic realization of new information focus has been investigated in several studies dealing with different Italian varieties. Three different patterns of prosodic marking are attested. Frascarelli (2004) takes into account the Roman variety and, as already mentioned in § 2, shows that sentence final (new information) focus is marked by a specific type of pitch accent, i.e., H*, which distinguishes focus constituents from their counterparts occurring in broad focus sentences carrying a H+L* nuclear accent. This type of nuclear accent is consistently associated with the downgrading contour of broad focus statements across many varieties of Italian (e.g., Neapolitan, Bari, Palermo and Florentine, see Grice et al. (2005)). Focusing on the Veneto variety spoken in Verona, Torregrossa (2012) does not notice a difference in pitch accent type between broad focus and new information focus constituents. Both tend to be associated with a H+L* type of pitch accent. However, the two constituents show relevant differences in their phonetic properties. For instance, focus has a more expanded pitch range and *f0* maximum and its stressed syllable tends to be longer than its broad focus counterpart. Finally, Bocci (2013) – who considers the Tuscan variety spoken in Siena – claims that there is no prosodic distinction between new information focus and broad focus. They are both associated with a H+L* type of pitch accent and do not differ in their phonetic realization (e.g., height of the H target, pitch range). Interestingly, Bocci's results are compatible with the IS model elaborated in Selkirk (2008), which makes no distinction between broad focus and new information focus (see § 2). It should be noticed that all these analyses target the prosody of constituents appearing in sentence final position. Therefore, the lack of difference between focus and broad focus constituents in the type of pitch accent may be motivated by the fact that the choice of a pitch accent to mark focus is affected by the simultaneous marking of the sentence-final downgrading

intonation. In order to avoid this effect, the next study will target focus, contrast and broad focus constituents appearing in pre-final position.

The literature also shows that focus in Italian is marked by means of phrasing, but also in this case the results vary depending on which variety is taken into account. Based on the analysis of Florentine Italian, Frascarelli (2000) shows that broad focus and focus constituents differ in their phrasing patterns. (15′) represents the phrasing associated with (15), if it is interpreted as a broad focus sentence. The constituent *al cinema* (to the cinema) is mapped into a phonological phrase (φ-phrase). (16) represents the phrasing of (15) interpreted as an answer to the question 'Where will you go with your friends?'. The new information focus *al cinema* is marked by an intonational boundary at its right edge (see Frascarelli 2000: 35).

(15)   *and-rò       a-l             cinema   con   i*
go-FUT.1SG   to-ART.DEF.M.SG   cinema   with   ART.DEF.M.PL
*mie-i       amic-i.*
my-M.PL   friend-M.PL
'I will go to the cinema with my friends.'

(15′)   *[(andrò)_φ(al cinema)_φ([h]/\*[k]on i miei amici)_φ]*

(16)   *[(andrò al cinema)_φ]_I[([k]/\*[h]on i miei amici)_φ]_I*

The occurrence of the intonational boundary in (16) is signaled by the non-application of Gorgia Toscana, a sandhi rule that consists in changing the voiceless stop [k] into the fricative [h], whenever it occurs between two sonorants. The contrast between (15′) and (16) shows that Gorgia Toscana applies within an intonational phrase (i.e., across different φ-phrases), but not across different intonational phrases.

The data that I report in Torregrossa (2012) points in the same direction. I show that in the Veneto variety spoken in Verona focus undergoes pre-boundary lengthening to a greater extent than broad focus, which hints at a difference in phrasing between the two conditions. However, the data considered in Bocci (2013) exhibits a different trend, since focus does not seem to associate with a specific type of phonological phrasing distinguishing it from broad focus.

The literature on the prosodic marking of contrast is not as rich as that available for focus. While there are several studies concerning the intonation of CTs and CFs (see, e.g., Frascarelli & Hinterhölzl 2007 for CTs and D'Imperio 2002 for CF) and studies concerning the prosodic marking of contrast within DPs (see Frascarelli & Ramaglia 2013), the prosodic realization of *in-situ* contrastive constituents (independently of their co-occurrence with a topic or focus) has not yet been accounted for. The present paper aims to fill in this gap. The results of this investigation will be crucial to address *Hypothesis I* in § 2.

## 4. The Experiment: Focus and contrast in Rionero Italian

### 4.1 Methodology

The study aims to analyze the prosodic realization of *in-situ* contrastive and focus constituents. If contrast and focus are two distinct informational notions, they should be associated with two different prosodic patterns (*Hypothesis I*). I will also investigate whether focus is realized by means of a specific prosody, by comparing focus and broad focus constituents (*Hypothesis II*).

To test these hypotheses, I designed a production experiment, which consisted of a reading task. Three native speakers of Rionero Italian took part in the experiment. They were one male (M1) and two females (F1 and F2) ranging in age from 28 to 30. They were born and raised either in Rionero (F2) or in Atella (a suburb distant four kilometers from Rionero). They reported having no training in linguistics and were completely naïve to the purposes of the experiment. Rionero is a town in the northwest of the Basilicata region. It is not far from the border with the Campania region (on the west side) and with the Puglia region (on the east side). The dialect spoken in Rionero is the northwestern Lucano (Pellegrini 1977). The investigation of how this dialect marks contrast and focus is part of a more general attempt to develop an autosegmental-metrical analysis and prosodic annotation for the intonation of the Rionero variety, which has not yet been studied.[7]

The reading material included ten triplets of sentences differing in the interpretation of the pre-final constituent (e.g., *mignolo* 'little toe' in (17)).

(17) *H-a      mostra-to      il            mignolo*
AUX-3SG show-PST.PTCP ART.DEF.M.SG little toe
*a-l                  dottor-e.*
to-ART.DEF.M.SG doctor-M.SG
'He showed the little toe to the doctor.'

(18) *Che cosa h-a      fat-to         l'            infortunat-o?*
what       AUX-3SG do-PST.PTCP ART.DEF.M.SG injured man- M.SG
'What did the injured man do?'

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7. Grice et al. (2005) show that the intonation of some varieties spoken in the Puglia region (i.e., the Bari variety) differs in many respects from the intonation of some varieties spoken in the Campania region. For instance, contrastive focus is marked by means of a L+H* pitch accent in Neapolitan Italian and by means of a H*+L pitch accent in Bari Italian. The two varieties also differ in the way they mark prosodically yes/no questions, i.e., by means of L*+H and L+H*, respectively. Given the geographical location of Rionero, our analyses (to be conducted in future work) will reveal whether the Rionero variety exhibits intermediate patterns of prosodic marking or some contact phenomena.

(19) *A chi      h-a        mostra-to      il          pollice*
To whom AUX-3SG show-PST.PTCP ART.DEF.M.SG big toe
*l'              infortunat-o?*
ART.DEF.M.SG injured man- M.SG
'To whom did the injured person show the big toe?'

(20) *Che cosa h-a       mostra-to       al-l'        infermier-a*
what      AUX-3SG show- PST.PTCP to- ART.DEF.F.SG nurse-F.SG
*l'              infortunat-o?*
ART.DEF.M.SG injured man-M.SG
'What did the injured person show to the nurse?'

The different interpretations were triggered by the preceding context. If the target sentence followed a question like (18), the constituent received a broad focus interpretation. After a question like (19), *il mignolo* indicates a contextually relevant alternative (i.e., *il pollice* – the big toe) and is thus interpreted contrastively. On the contrary, *al medico* (to the doctor) corresponds to the wh-operator *a chi* (to whom) and is the sentence focus. To trigger the contrast-focus configuration together with the sense of uncertainty associated with contrast, (17) was introduced by the sentence *Non so a chi abbia mostrato il pollice, ma (…)* (I do not know to whom he showed the big toe, but (…)) – see Section § 2. Finally, the question in (20) triggers a focus interpretation on the pre-final word (*il mignolo*) and a contrastive interpretation over the final word (*al medico*). In this case, (17) was preceded by the sentence *Non so cosa abbia mostrato all'infermiera, ma (…)* (I do not know what he showed to the nurse, but (…)).

The task was administered as a sequence of Power Point slides on a computer screen. First, the participants had to read a question written in a bubble above the image of a female character (e.g., (18), (19) or (20)). They were then asked to answer the question, by reading the sentence written on the next slide (e.g., (17)). As already mentioned, in order to favor the production of the contrast-focus or focus-contrast configuration, the targets were preceded by a sentence of the form 'I do not know what/to whom (…)'. On the contrary, the broad focus sentence was read in isolation. The speakers had to read the sentences out loud, as naturally as possible and at a normal speech rate. In particular, given the nature of the task, the participants were asked to behave as they were engaged in a spontaneous conversation. A total of 60 sentences (30 targets and 30 fillers) were repeated three times by all participants, with a ten minute break after each session. Altogether, the corpus included 270 targets (10 targets x 3 conditions – broad, focus and contrast – x 3 participants x 3 repetitions). The appendix contains a list of the 10 targets included in the analysis. Notice that all target words (both in final and in pre-final position) are proparoxytone (in order to guarantee the maximum distance between the metrically strong syllable and the word boundary).

The data were recorded as *.wav*-files by means of a M-audio Microtrack 24/96 digital recorder at 44.1 kHz/16 bit sample rate. The recordings took place in a quiet room in a local language school.

The acoustic analysis of the recordings was made using Praat (Boersma & Weenink 2009). First, I annotated pre-final constituents according to the inventory of pitch accents and edge tones reported in the latest version of the Italian ToBI (see Gili Fivela et al. 2015). Then, I measured the duration of stressed and pre-boundary (i.e., last two) syllables in pre-final constituents and the duration of stressed syllables in final constituents. Finally, in the falling nuclear accent associated with the pre-final constituent, I considered the alignment of the H tone with respect to the offset of the stressed syllable and the alignment of the L tone with respect to the end of the word. For the identification of the H and L targets, I followed Prieto (2009). The H tone corresponded to "the local maximum in the vicinity of the stressed syllable immediately before the fall". The L tone occurred "at the end of the steepest falling movement right before the low stretch" (see Prieto 2009: 870). The measurements concerning the duration of the stressed and pre-boundary syllables (in both pre-final and final constituents) and the alignment of the H and L tones were collected onto a file in .txt format using a Praat script. To measure the difference between the three conditions, I ran t-tests by means of Stata 12 software.

If focus and contrast are two different components of IS, they are expected to differ in their prosody, i.e., either in the type of pitch accent or in phonetic parameters related to the duration of stressed/post-stressed syllables and to the alignment of H and L targets. Moreover, focus and contrast should differ from the "default" prosody associated with broad focus constituents.

## 4.2    Results

The results show a great inter-speaker variability: the participants adopt three different strategies to mark the distinction between the three informational conditions (broad, focus and contrast). Speaker M1 relies on a phonological strategy, associating a different type of pitch configuration with each interpretation. F1 expresses focus by means of a specific type of pitch accent, and distinguishes contrast and broad focus by means of phonetic parameters. Finally, F2 makes use of a phonetic strategy, relying on differences in the duration of the accented syllable in the target constituents. Given this great variability, each of the following subsections will consider each participant (i.e., each strategy) individually, presenting for each of them only the results that I found to be significant. Finally, in § 5 I summarize the results and discuss their implications for the elaboration of a model of IS.

### 4.2.1    *Phonological strategy: Differences in the type of pitch contour (M1)*

Figures 1, 2 and 3 show that M1 expresses broad, focus and contrast by means of three different pitch contours. The figures contain three tiers: (i) the syllable tier; (ii) the tone tier, indicating the tonal targets; (iii) the accent tier, indicating the type of pitch accent and boundary tone.

The sentence in Figure 1 has a broad focus interpretation. The pre-nuclear constituent is associated with a L+<H* pitch accent, realized as a *f0* rise reaching its peak in the post-tonic syllable. Gili-Fivela et al. (2015) argue that this type of pitch accent is found in pre-nuclear position in many Italian varieties. Figure 2 shows that contrast in pre-final position is realized by means of a rising-falling pitch accent labelled as L+H*L, in which the peak is aligned with the end of the stressed syllable and is followed by a low tone L at the right edge of the word. Focus carries the same rising pitch accent L+H* as contrast. However, in the case of focus the pitch accent is followed by a high boundary tone, optionally flanked by a prosodic break (as shown by the diacritic sign in the word tier, which represents a pause of 80 ms.). The resulting configuration is a sustained pitch. Thus, the right edge of focus constituents is marked by a prosodic boundary.[8] This observation seems to suggest that in Rionero Italian focus triggers a specific phrasing, along the lines of what Frascarelli (2000) found for Florentine Italian and Torregrossa (2012) for Veneto Italian. This seems to confirm Zubizarreta's (2010) claim that most Italian varieties mark focus by means of prosodic phrasing (alias *demarcatively*).

Figure 4 reports the frequency (expressed in percentage) with which each type of pitch configuration marks the three IS distinctions. The figure confirms that, in spite of some intra-speaker variation, L+<H* is the preferred option for pre-nuclear constituents in broad focus statements, L+H*L for contrastive constituents and (L+H*)H- for focus constituents.

### 4.2.2    *Mixed strategy: Type of pitch accent and tonal target alignment (F1)*

Figure 5 indicates that speaker F1 marks focus by means of a specific pitch accent, i.e., L+H*L (see the red portion in the third bar on the right) – the peak occurs within the stressed syllable and is followed by a fall to a low level. The contour is exemplified in Figure 8. On the contrary, broad focus and contrast do not differ significantly from each other in the type of accent, as also shown by Figures 6 and 7. The earlier alignment of the H tone in the focus condition (L+H* in focus vs.

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**8.**   Notice, however, that focus does not exhibit pre-boundary lengthening as compared to the other two conditions. Here, I follow Frota et al. (2007) in claiming that the occurrence of sustained pitch is a sufficient indicator of a prosodic break. Moreover, it should be noticed that the Neapolitan variety studied in Frota et al. (2007) marks prosodic breaks by means of continuation rises or sustained pitches (which is compatible with the pattern exhibited by M1), but, contrary to the data reported here, relies on the use of pre-boundary lengthening, too.
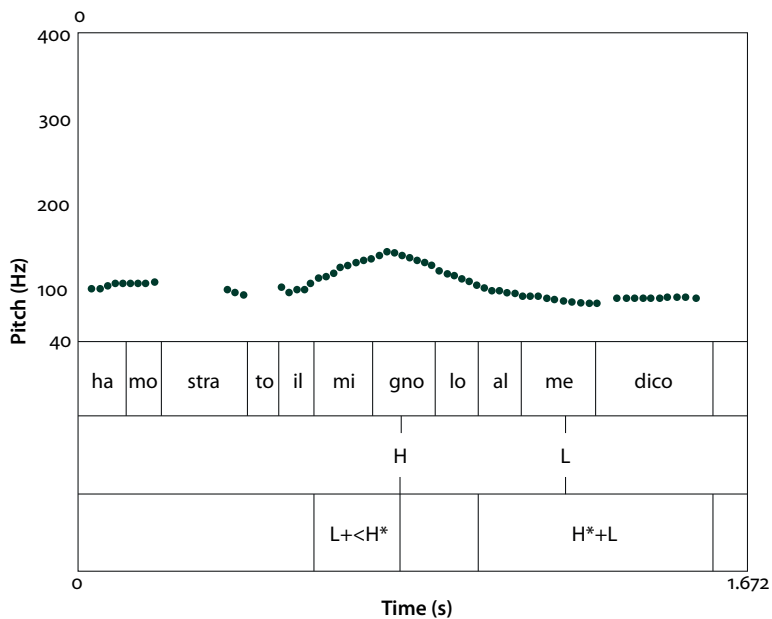
**Figure 1.** f0 trace of the sentence *Ha mostrato il mignolo al medico* (He showed the small toe to the doctor), in which *mignolo* is interpreted as broad focus. The sentence is uttered by M1
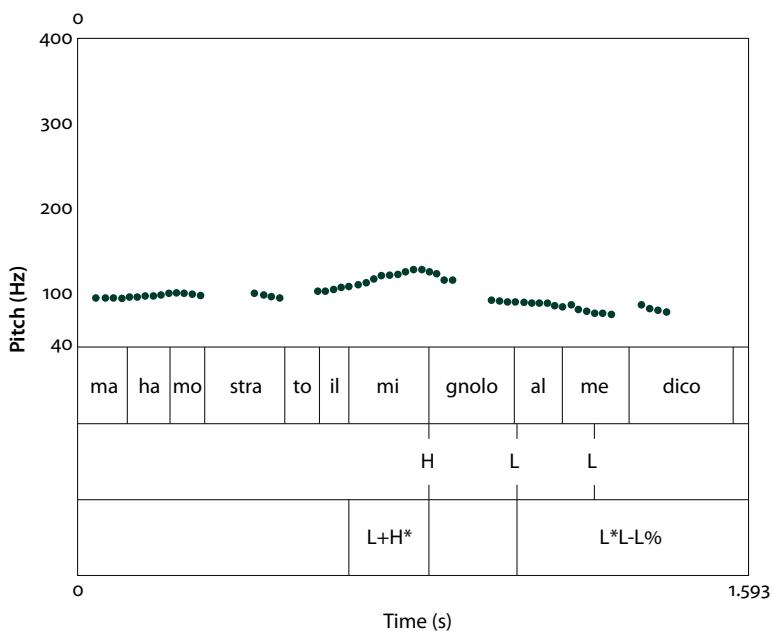


**Figure 2.** f0 trace of the sentence *Ha mostrato il mignolo al medico* (He showed the small toe to the doctor), in which *mignolo* is interpreted as contrast. The sentence is uttered by M1
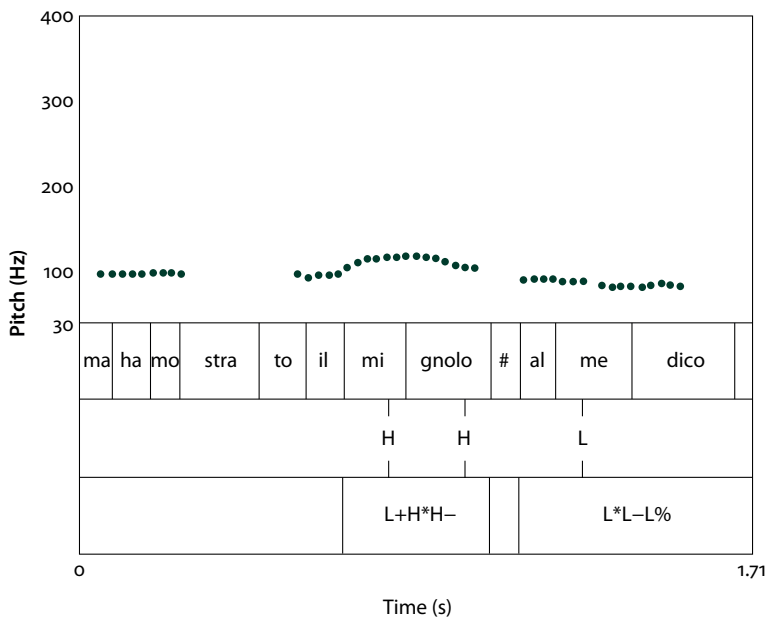
**Figure 3.** f0 trace of the sentence *Ha mostrato il mignolo al medico* (He showed the small toe to the doctor), in which *mignolo* is interpreted as focus. The sentence is uttered by M1
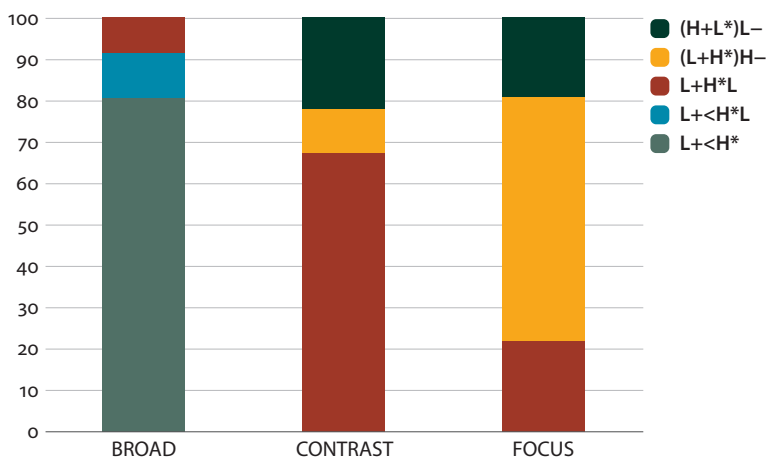


**Figure 4.** Percentage of types of pitch configurations found in association with broad focus, contrast and focus, respectively. The figure concerns M1
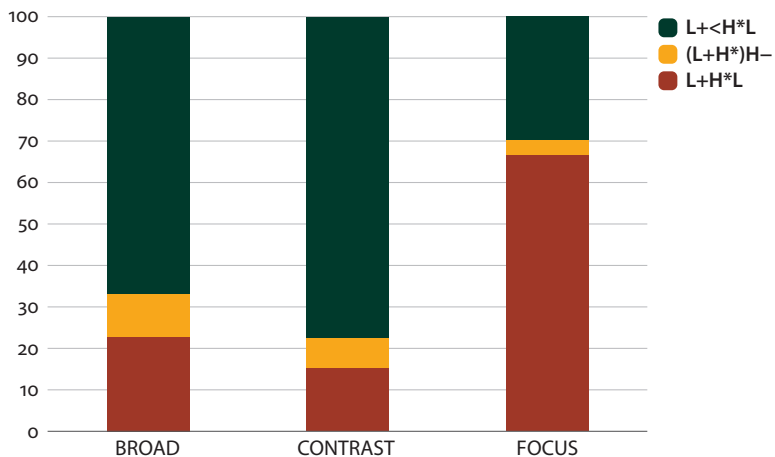
**Figure 5.** Percentage of types of pitch configurations found in association with broad focus, contrast and focus, respectively. The figure concerns F1
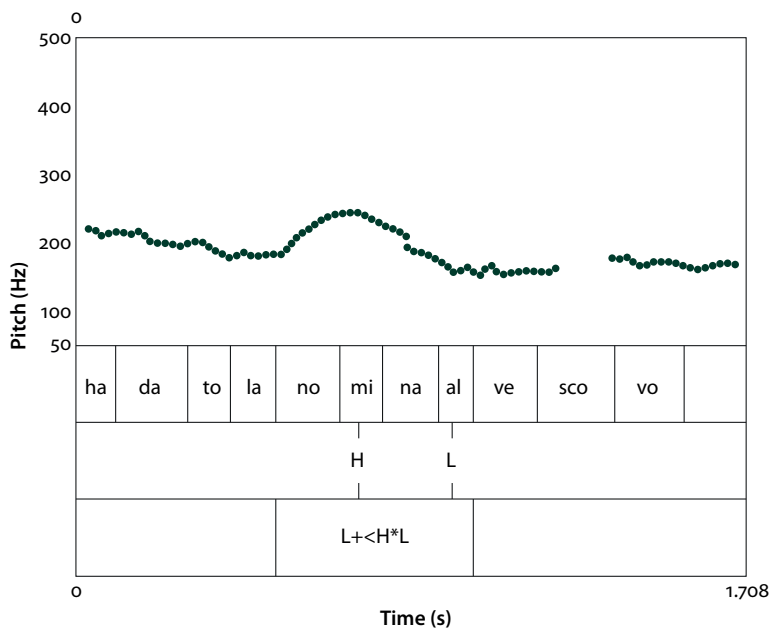


**Figure 6.** f0 trace of the sentence *Ha dato la nomina al vescovo* (He gave the designation to the bishop), in which *nomina* is interpreted as broad focus. The sentence is uttered by F1
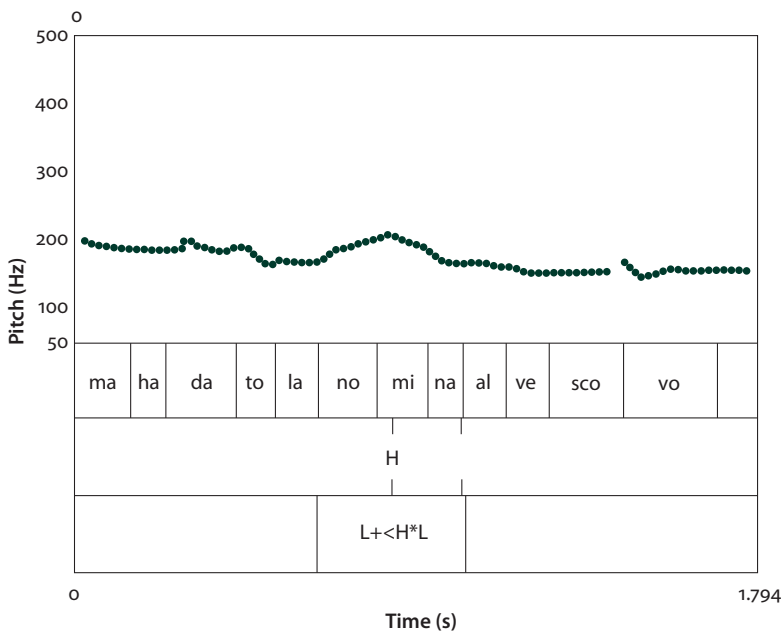
**Figure 7.** f0 trace of the sentence *Ha dato la nomina al vescovo* (He gave the designation to the bishop), in which *nomina* is interpreted as contrast. The sentence is uttered by F1
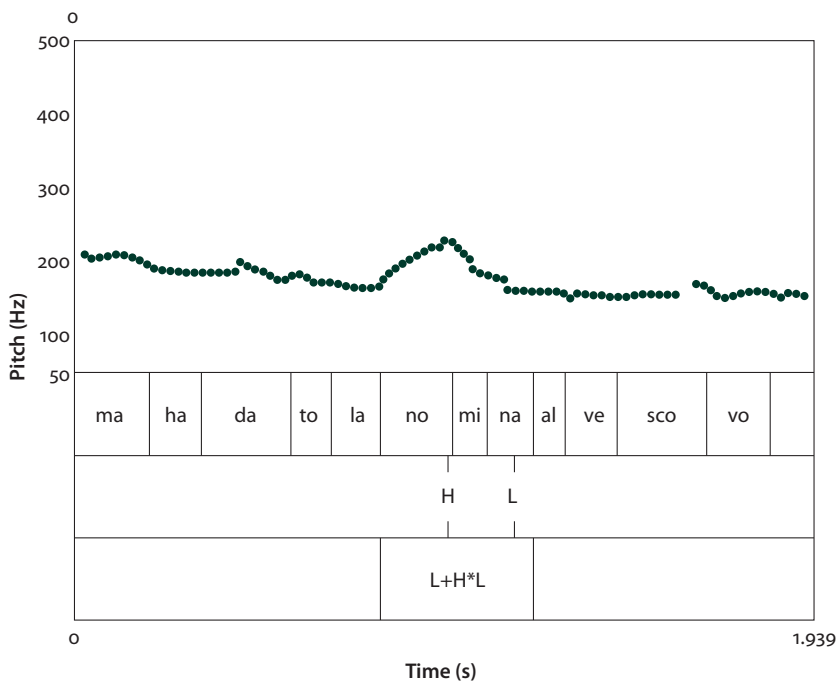


**Figure 8.** f0 trace of the sentence *Ha dato la nomina al vescovo* (He gave the designation to the bishop), in which *nomina* is interpreted as focus. The sentence is uttered by F1

L+<H\* in broad and contrast) is not due to the lengthening of the accented syllable in the focus constituent. The analysis of the duration of the stressed syllable reveals that the three conditions do not differ from each other (t-test (broad-focus), $t = 0.18$ $p > 0.05$ and t-test (contrast-focus), $t = 0.31$, $p > 0.05$). This provides empirical evidence in favor of the claim that, in marking focus, F1 uses a pitch accent which is phonologically distinct from the pitch accent used in the other two conditions.

Although broad focus and contrast are not distinguished by pitch accent type, they differ in the configuration of the falling contour. Figure 9 indicates that in the contrast condition the low tone is aligned earlier with respect to the target word's right edge than in the broad focus condition (see, e.g., the alignment of the low tone with respect to the syllable *na* of the word *nomina* in Figure 7 as compared to Figure 6). The comparison between the two conditions is significant (t-test, $t = 2.17$, $p = 0.03$). On the contrary, the two conditions do not differ in the alignment of the H tone with respect to the end of the stressed syllable. These results suggest that, in F1's production, contrast is realized by means of a steeper fall than broad focus, which could be interpreted as a strategy to enhance the prominence of the contrast constituent.
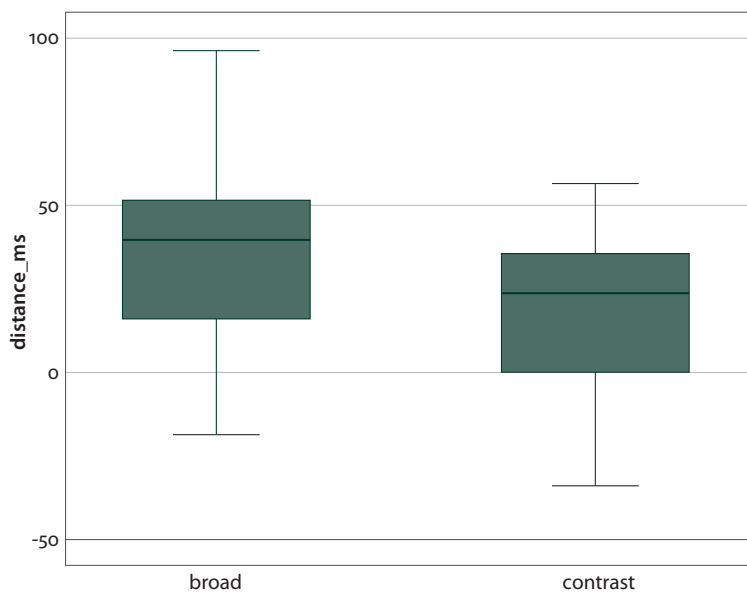


**Figure 9.** Box plots concerning the alignment (in ms.) of the low tone with respect to the edge of the target word in the broad and contrast condition

### 4.2.3   *Phonetic strategy: Different durations of the stressed syllables (F2)*

Figure 12 indicates that Speaker F2 does not consistently associate the expression of a type of IS category (broad, focus, contrast) with the choice of a pitch accent configuration, contrary to Speaker M1 and Speaker F2's marking of focus. For instance, Figure 10 and Figure 11 show that the same type of pitch accent L+<H*L – with the peak aligned with the post-tonic syllable and the L with the right edge of the constituent – expresses both contrast and focus.[9] L+<H*L is also found in association with pre-nuclear constituents in broad focus sentences, as shown in Figure 12.
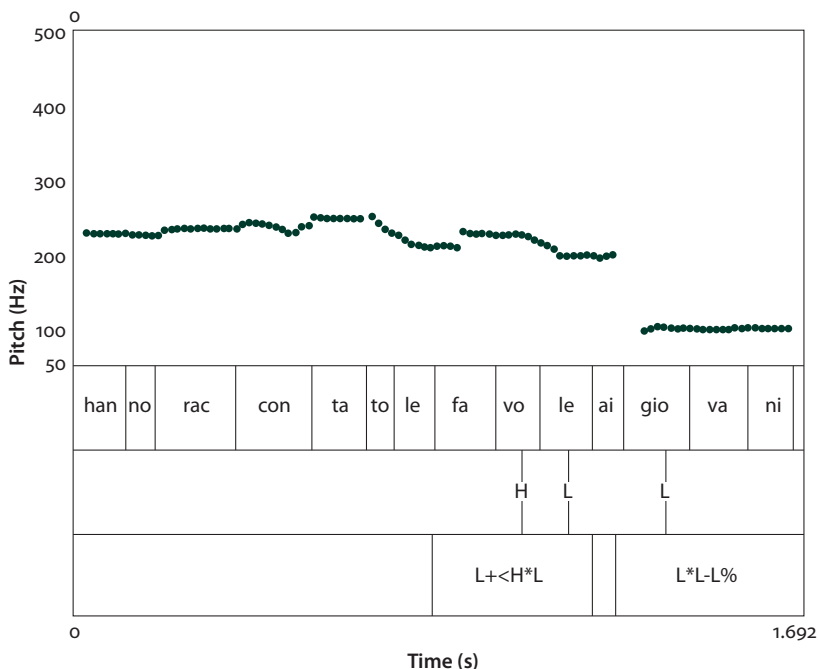


**Figure 10.**  f0 trace of the sentence *Hanno raccontato le favole ai giovani* (They told the fairy tales to the young), in which *favole* is interpreted as contrast. The sentence is uttered by F2

Although there is no significant difference in the use of type of pitch accents to mark IS categories, Figure 13 indicates that the stressed syllable of the target word tends to be longer in the contrastive condition than in the other two conditions, which do not differ from each other (t-test (contrast-broad), $t = 3.16$, $p = 0.002$; (contrast-focus), $t = 1.94$, $p = 0.05$; t-test (broad-focus), $t = 1.22$, $p = 0.22$). This suggests that speaker F2 uses stressed syllable lengthening to mark only contrast.

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**9.**   It should be pointed out that in Figure 10 and Figure 11 there is a discontinuity of the *f0* trace in correspondence with the final word of the sentence, i.e., *giovani* (the young). This is due to F1's extensive use of creaky voice in sentence final position.
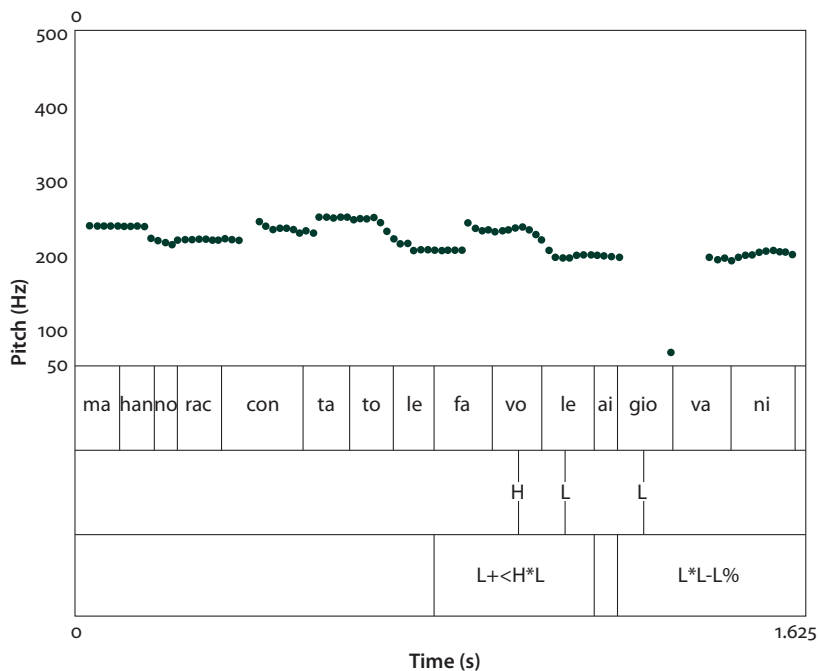
**Figure 11.** f0 trace of the sentence *Hanno raccontato le favole ai giovani* (They told the fairy tales to the young), in which *favole* is interpreted as focus. The sentence is uttered by F2
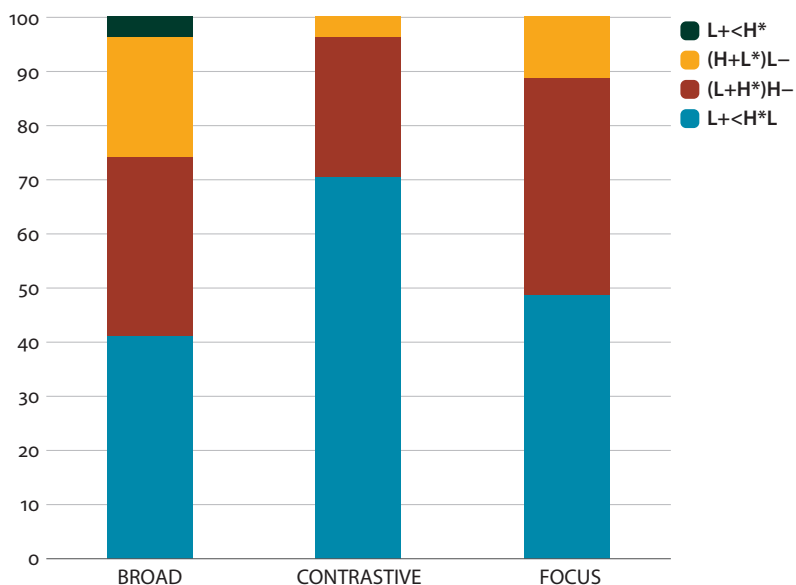


**Figure 12.** Percentage of types of pitch configurations found in association with broad focus, contrast and focus, respectively. The figure concerns F2
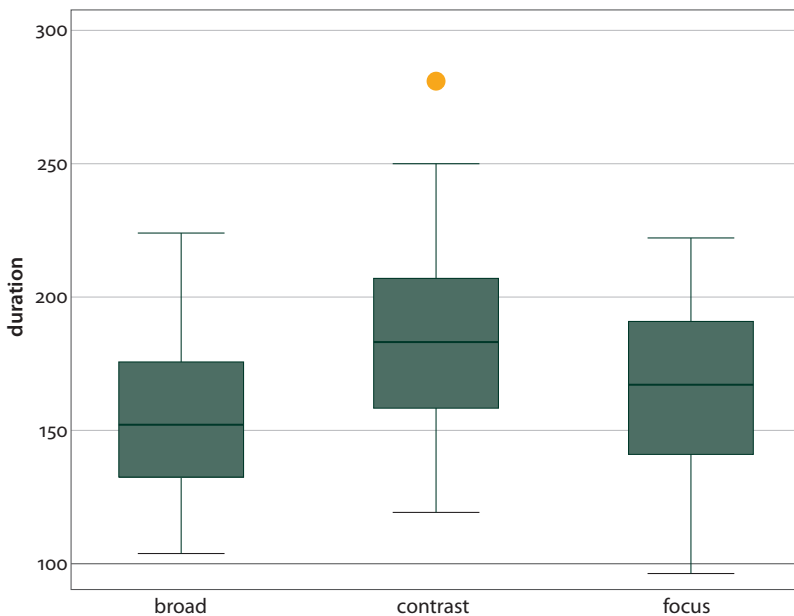
**Figure 13.** Box plots of the duration (in ms.) of the stressed syllables of the pre-final word when associated with a broad, contrast or focus interpretation, respectively

However, Figure 14 reveals a different pattern, if compared to Figure 13. The stressed syllable is shorter in constituents following a focus than in the other two conditions (t-test (broad, contrast), $t = 2.09$, $p = 0.04$; t-test (contrast, focus), $t = 2.19$, $p = 0.03$; t-test (broad, focus), $t = 0.23$, $p > 0.05$). Interestingly, given how I designed the experiment, the constituent following a focus is an instance of contrast – being part of a focus-contrast configuration. I interpret these results as showing that postfocal material undergoes stress reduction (see Giordano 2008 on the correlation between stress and syllable duration).[10] Therefore, the results suggest that F2 marks contrast and focus in two different ways. Prominence of contrast is enhanced by an increase in the duration of the constituent's stressed syllable. On the contrary, prominence of focus is enhanced (indirectly) by reducing the degree of prominence of the postfocal constituent, i.e. by reducing the duration of its stressed syllable.

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10. Italian does not deaccent postfocal material (see, e.g., Bocci 2013). Therefore, stress reduction may be interpreted as a means to reduce the degree of prominence of a word, while maintaining the corresponding prosodic unit accented.
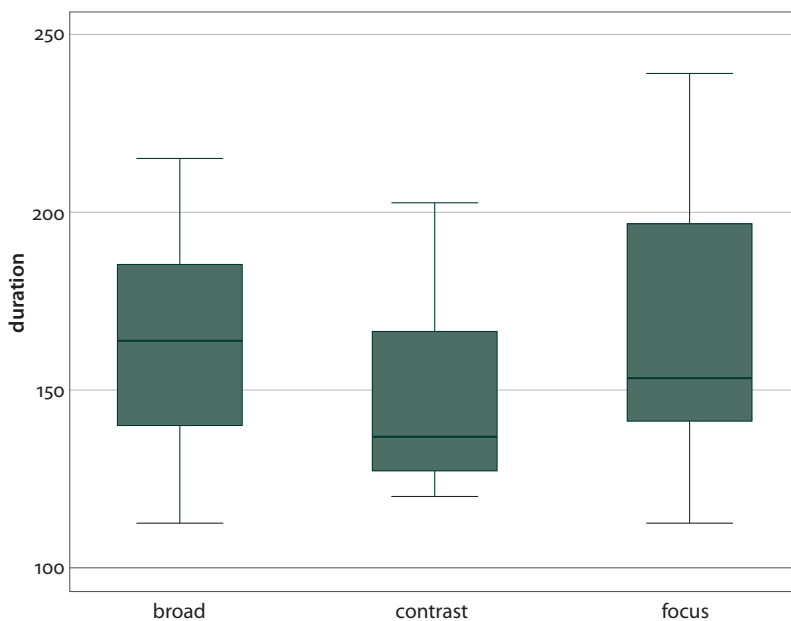
**Figure 14.** Box plots of the duration (in ms.) of the stressed syllables in the final word interpreted as broad, contrast (i.e., post-focus) and focus (i.e., post-contrast)

Table 1 summarizes the strategies used by each participant to mark focus and contrast.

**Table 1.** Summary of the strategies used by each speaker to mark focus and contrast at PF

| Speaker | FOCUS | CONTRAST |
|---|---|---|
| **M1** | *pitch configuration*: L+H*H- | *pitch configuration*: L+H*L |
| **F1** | *pitch configuration*: L+H*L | *early alignment of the low tone to the word edge* |
| **F2** | *reduction of post-focal material* | *lengthening of the stressed syllable* |

## 5. General discussion and conclusions: A different prosodic representation of contrast and focus

The experimental evidence reported in § 4 intends to verify *Hypothesis I* (i.e., that the prosodic representation of contrast differs from the one of focus) and *Hypothesis II* (i.e., that the prosodic representation of focus differs from the one of its counterpart in a broad focus sentence). To this aim, I compared the prosodic realization of constituents in penultimate sentence position, which were endowed with different interpretations, i.e., broad focus, contrast and focus. The results support both hypotheses.

The prosody of broad focus constituents is determined by default rules of phrasal stress assignment (Selkirk 2008). It will therefore be taken as the baseline for comparison. In all speakers, the prosodic realization of focus and contrast is always distinguished from that of broad focus. M1 relies on differences in the pitch configuration associated with each of the three conditions. When considering the pitch accent choice in the production of F1, broad focus and contrast form a natural class. However, the two interpretations are distinguished by phonetic parameters related to the alignment of the L tone with respect to the right edge of the target word. Finally, the pattern exhibited by F2 goes in the opposite direction. On first sight, broad focus and focus seem to form a natural class, since they do not differ in the duration of the stressed syllable in the target word. However, differently from broad focus, focus has an effect on postfocal material, since the sentence final constituent undergoes stress reduction. According to these results, neither contrast nor focus are assigned default prosody. Rionero Italian therefore distinguishes between broad focus and (new information) focus, contrary to the picture defined by Selkirk (2008) for English (see the discussion in § 2). Focus is thus a category of grammar and is associated with a specific strategy of prosodic expression (*Hypothesis II*).

Likewise, the categories of contrast and focus are distinguished in the grammar of all speakers, being associated with different pitch configurations in the production of M1 and F1, and triggering different phonetic effects in the production of F2. This provides empirical evidence in favor of *Hypothesis I*.

More in general, the IS-related phenomena presented in this paper can be only accounted for by relying on two different informational categories, i.e., focus and contrast. Assuming that the theoretical import of the category of topic has already been assessed in the literature on IS (see the evidence drawn from clitic left dislocation in § 1), this paper argues in favor of an IS model including three different IS categories, i.e., topic, focus and contrast. This is in line with the theoretical proposal introduced in Neeleman & Vermeulen (2012).

Before concluding, there are two issues that deserve further consideration. First, the data reveal a great inter-speaker variability. Recent research has pointed out that speakers of the same variety may adopt different prosodic strategies to produce certain pitch accent contrasts such as L+H* vs. L*+H in Neapolitan Italian and H* vs. H*+L in Pisa Italian (see Niebuhr et al. 2011). The data reported in this paper reveals an analogous pattern of variation. In future work, I will explore whether some of this variation can be explained by referring to influences from the neighboring language varieties (some varieties in the Puglia region and some varieties in the Campania region – see footnote 3), which may generate a less stable prosodic system. Furthermore, the results reported in this paper could also be interpreted as showing that there is a *continuum* of IS distinctions (e.g., broad, contrast and focus) which is reflected in a *continuum* of acoustic cues used to express them

(e.g., patterns of alignment, duration of stressed or unstressed syllables, etc.).[11] This would weaken the hypothesis that grammar treats focus and contrast as two distinct categories. It is difficult to decide between these two positions only relying on the empirical evidence presented in this paper. The next step of the analysis will be to conduct a perception experiment, to investigate whether the different prosodic patterns are perceived as expressing IS notions in a categorical way. Moreover, it is relevant to examine if there is a correlation between the behavior exhibited in perception and the choice of a specific strategy for marking IS notions in production.

## Acknowledgements

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**11.** I thank Stefan Baumann for pointing at this alternative interpretation of the data.

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## Appendix. List of sentence types used in the experiment

1.  Ha offerto le mandorle a Monica (He offered the almonds to Monica).
2.  Ha regalato i sandali a Marica (He gave the sandals to Marica).
3.  Ha dato la nomina al vescovo (He gave the designation to the bishop).
4.  Ha presentato il sindaco a Erica (He introduced the mayor to Erica).
5.  Ha affidato le musiche al fonico (He committed the music to the sound technician).
6.  Hanno intitolato il vicolo al milite (They entitled the street to the soldier).
7.  Ha mostrato il mignolo al medico (He showed the little toe to the doctor).
8.  Ha consegnato il modulo al giudice (He delivered the form to the judge).
9.  Hanno raccontato le favole ai giovani (They told the fairy tales to the young).
10. Ha spedito la scatola a Massimo (He sent the box to Massimo).

PART III

# Modality and exclamatives

CHAPTER 7

# Presupposed modality

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My contribution explores the possibility to treat meanings that have intuitively been called *surprise* and *obviousness* within a theory of presupposed modal operators. A bird's eye review of the literature on relevant intonational, morphological and syntactic expressions gathered from a broad range of languages is meant to give an impression both of the importance of these meanings as well as of the lack of a common pragmatic account. The case of miratives in Quechua is discussed considering some new data. The theory is developed in the form of language games and compares the behavior of presupposed modal operators both with the behavior of canonical modal expressions and with presuppositions triggered by lexical items.

## 1. Introduction

There are many ways that lead to the study of focus – and beyond. All theoretical frameworks in the study of syntax have discovered structural variation of sentences related to particular configurations of information structure, integrating concepts such as *theme/rheme, topic/comment* and *focus/background* into their respective formal inventories. More or less strongly related to this line of research are efforts to provide semantic accounts of the crucial concept of *focus*. The relatively recent rise of studies on the phonology of intonation has also corroborated the pivotal importance of notions such as *focus* and *givenness* for inquiries into the form of linguistic expressions. A perspective on the meaning of linguistic expressions that most approaches share in spite of their theoretical differences is nicely expressed in Chafe's (1976, 28) influential description of *information packaging,* dealing with phenomena that "have to do primarily with how the message is sent and only secondarily with the message itself, just as the packaging of tooth-paste can affect sales in partial independence of the quality of the toothpaste inside". Following this metaphor, the general idea seems to be that speakers first produce a meaning and then wrap it up and pass it on to the interlocutor. Thus, the conversational setting appears as something like the environment any construction will have to react to, very much like physical bodies changing their shape under different environmental conditions.

More recently, information structure has been connected to a wider perspective that relates its core categories to a field of research at the crossroads between language philosophy and linguistic pragmatics (Krifka 2007). This tradition put forth the concept of a *common ground,* understood as the set of (pragmatic) presuppositions that are taken for granted and modified in communication (Grice 1989; Karttunen 1974; Stalnaker 1974, 2002). In this perspective, the common ground is much more than just the immediate environment of a sentence. It rather defines the specific horizon of the construction of meaning towards which linguistic expressions are projected. Thus, the management of what a speaker believes that the interlocutor holds to be true is the very goal of conversational moves – be it because the speaker wants to get at this knowledge himself as in questions, to increment it as in statements, to make a joke, or to persuade his interlocutor to believe or to do something he is interested in.[1]

This perspective on the notion of common ground leads to a dynamic view on the construction of propositions that also takes into account the change of epistemic and deontic stances towards propositions through time. In natural conversation, speakers do more than just select real worlds out of a set of possible worlds, they also evaluate the change of the common ground through time and languages provide systematic means for these important conversational acts. If we define information structure as the set of linguistic expressions that serve to manage the common ground, we must extend our inventory of categories to also include expressions that explicitly encode changes of the epistemic and deontic modality of propositions. Just as focus expressions, such as pitch accents, copula constructions or syntactic movement, indicate the constituent for which the interlocutor is asked to rule out alternatives in the common ground, speakers also relate asserted propositions to whether there was any necessity or obligation of taking them for granted before the assertion.

In this paper, I want to explore this intuition that there is more to information structure (or common ground management) than a system for introducing and commenting on topics and a system for pointing to a set of alternatives and identifying the member of it that needs to be selected in order to yield the truth of the asserted proposition. I will propose that an additional dimension of information structure consists in the expression of the presupposed modality of the asserted propositions, the epistemic necessity or deontic obligation of a possible world to be or become true. As I will try to show, the corresponding pragmatic operations mirror precisely the relations of epistemic and deontic operators found in the lexicalized modal systems of natural languages (Levinson 2000; Palmer 2001; Portner 2009). I

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1.   Stalnaker centers his approach on the increment of information, treating other goals in conversation as derived pragmatic exploitations. I am not sure if the refinement of the mutual knowledge about the state of the world really is the nuclear pivot of the construction of meaning in natural conversations, but this will make no difference for this article.

will suggest to treat these notions as presupposed copies of at-issue meanings with modal operators in the common ground, triggered by intonation, morphology and/or syntax. In this line of argumentation, any linguistic expression that conveys a meaning of surprise presupposes an operator for impossibility or prohibition, a linguistic expression that conveys a meaning of obviousness presupposes an operator for certainty or obligation, while expressions that do not show any overt markers with respect to expectation presuppose an operator for possibility or allowance.

*Surprise* and *obviousness* are ordinary labels for the readings of expressions of presupposed modality. The emotional flavors conveyed by these expressions give rise to the strong impression of one facing a gradual, paralinguistic meaning. This is probably the reason why the question of the pragmatic nature of these meanings is hardly ever addressed. Disentangling levels of meanings surely is crucial, since most linguists would probably agree that the object of linguistics is not each and every meaningful sound people utter, but rather the system of discrete categories and rules that builds up meanings in discourse. Throughout this paper, I will try to show that surprise and obviousness are intuitive labels for systematic pragmatic operations that are related to systematic forms of expression, just like other parts of grammar.

While there is a growing body of research on the relation between notions such as focus, mirativity and evidentiality (Zimmermann 2008; Behrens 2012) and advanced proposals on how to treat mirativity in syntax (Bianchi et al. 2016), I am not aware of an account that treats *unexpectedness* and *obviousness* in a uniform way and relates it to general pragmatic concepts. This paper tries to go a step into this direction.

Although I believe that all languages develop explicit expressions that convey presupposed modality, the article will also bring new data on Conchucos Quechua into the discussion, because its morphology encodes meanings that we can describe better if we introduce the notion of presupposed modality. But first of all we should look at some examples of the many well attested forms of expression for the meanings to be discussed in a broader array of languages, in order to show that we are not dealing with a peripheral flavor or nuance of interpretation, but rather with a necessary dimension of the linguistic construction of meaning in general that we find in all domains of linguistic expression.

## 2.    Expressions of surprise and obviousness in the linguistic literature

### 2.1    Phonology: Epistemic tunes

Intonation is probably the domain of linguistic expression that is most intimately related to meanings such as obviousness and surprise. These meanings appear in all of the founding textbooks on intonational phonology. Liberman (1979: 96), Cruttenden (1986: 56), Bolinger (1989: 266–284), Ladd (1996: 303–304), and

Gussenhoven (2004: 85–89), all tackle „surprise" and "obviousness" in their discussion of meanings conveyed by intonational tunes. The last author posits surprise as a gradual, affective, universal interpretation of what he calls the "effort code", which, following Gussenhoven, gets grammaticalized as the linguistic category "focus". Correspondingly, many authors conceive of "surprise" as an emotional and thus paralinguistic category (cf. Scherer 2003 for a substantial approach to emotional meanings of prosody).

Also, if we take a look at some of the intonational grammars which have been proposed in the last decades for individual languages, we find many intuitive suggestions for meanings or contexts which seem to be related to a comparison of facts with their expected probability to be or become true. To start with some prominent accounts for German, Kohler (1987) analyzes the communicative meanings of pitch contours in German and postulates three positions for F0-peaks: early peaks are interpreted as "knowing", medial peaks as "observing" and late peaks as "contrasting" with (the speaker's) expectation. Féry (1993) describes a contour that correlates with a meaning labeled "implicitly obvious" (germ. *implizit selbstverständlich*). Baumann and Grice (2002) recognize an interpretation they call "statement of the obvious" (*selbstverständliche Aussage*) and another "confirmation of a known fact" (*Bestätigung einer bekannten Tatsache*). Grice and Savino (1995) directly address the question of "information-seeking queries" and "confirmation-seeking checks" for an Italian dialect. Checks relate clearly to the dimension of pragmatics that is at stake for our discussion: speakers control their expectation of what is asserted in propositions. For Castilian Spanish, Estebas and Prieto (2010) postulate tunes that correlate with meanings they call "statements of the obvious", "uncertainty statements", "confirmation yes-no questions" and "counterexpectational yes-no questions". Vanrell (2011) investigates this kind of distinctions in detail and describes categorical differences in the interpretation conveyed by the variation of pitch range in Catalan that directly address the relations between utterances and the discourse they construct. She dedicates a whole chapter of her book on the categorical distinction between *statements of the obvious* and *counterexpectational questions*.[2] My last example here is an account of the intonational contours in Brazilian Portuguese (as spoken in Rio de Janeiro) as put forth by Moraes (2008). In his inventory, we find, among other meanings of course, a "self-evident assertion", a "request for confirmation", a "rhetorical yes-no question" that "does not have the illocutionary force of a real question (request of information), since the speaker knows the answer in advance" (Moraes 2008: 392), an "incredulous yes-no question" and an "incredulous assertion".

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**2.**   If I wanted to properly document the impressive wealth of work on the intonational expression of related meanings done by the Catalan *Grup d'Estudis de Prosòdia* around Pilar Prieto in Barcelona, it would take the space of the whole article, so I just refer to these few papers and to their website: <http://prosodia.upf.edu/home/ca/publicacions.php>

Of course, this list is far from exhaustive and does not go into the details of the form of the related tunes. This chapter is only meant to show that surprise and obviousness appear as intuitive labels for categorical differences in intonation throughout the literature, but that the nature of their pragmatic import onto the meaning of linguistic utterances is still unclear.

## 2.2 Morphology: Mirativity – and some obviousness

A related morphological category seems to be what has been called *mirativity* in the typological literature. Introduced probably by the French grammarian Dozon in his grammar on Albanian as early as 1879 as "admirative" (apud Aikhenvald 2012: 435), DeLancey (1997) is mainly occupied with the defense of its independence from *evidentiality*, a category which classifies the source of information on which an assertion is based. DeLancey argues convincingly that evidentiality is related to, but essentially independent from the kind of meanings subsumed under the label *mirativity.* He claims that mirativity is a phenomenon which concerns "the status of the proposition with respect to the speaker's overall knowledge structure" (DeLancey 1997: 33). This intuition already approximates a preliminary description of information structure. His operational definition, though, is clearly far too vague: "it marks both statements based on inference and statements based on direct experience for which the speaker had no psychological preparation". What does *psychological preparation* mean linguistically and how can we relate it to general notions of linguistic meanings? The main goal of the present paper is to try to answer this question.

DeLancey (1997) shows instances of mirativity in Turkish. His claim that mirativity is independent from evidentiality is supported by examples like (1), in which (a) and (b) could be grounded in the same source of information, e.g. the radio, but only (a) would be uttered with the mirative morpheme *mIş*:

(1) a. *Ecevit istifa et-mış*
      Ecevit resignation make-MIR
      'Ecevit resigned.'
   b. *Nixon istifa et-ti*
      Nixon resignation make-PST
      'Nixon resigned.'

The resignation of Nixon was expected, but Ecevit's resignation came all of a sudden as a surprise: the speaker had no psychological preparation, in the terms of DeLancey (1997). He relates this meaning to examples from a wealth of languages. Besides Turkish, he discusses Hare, Korean, Sunwar and Lhasa Tibetan, and he cites literature for Albanian, Georgian, Washo, and other Tibetan dialects, as well as for Akha, Chinese Pidgin Russian, Khowar and Kalasha.

While in DeLancey's pioneering papers mirativity appears as the single meaning of the corresponding morphemes, usages observed in other languages suggest treating it as being intimately related to other readings of a given linguistic form of expression. Quechua is a language that shows very rich morphology related to the meanings we are discussing here. Traditional accounts introduce a subset of the suffixes of Quechua as indicating the source of evidence a speaker has for his assertions (Aikhenvald 2004): direct (*mi*), reported (*si*) or conjectural (*cha*). Refining these notions, Faller (2002, 2004) argues convincingly that the meaning of *mi* is better understood as *having the best possible grounds* to make an assertion, as it can be used also in cases in which certainty is achieved not by direct perception, but rather by the report of another person, e.g., when talking about this person's feelings. The same could be said, we might add, about conjectural evidence: there are cases in which *conjectural* is the only way of being certain about an assertion, such as in the field of logic and mathematics. Furthermore, connected with forms that are traditionally related to evidentiality, pragmatic meanings such as *speaker certainty* and *mirativity* are also available. For the Quechua spoken in Ancash, Parker (1976) explains that *naq* (or *naa* in the dialect of Conchucos) actually conveys a modal meaning that the speaker did not witness the state or event or did not realize what was happening.[3] This is probably the kind of reading that drives Hengeveld and Olbertz (2012) to analyze mirativity in the corresponding suffix *ñaq* from the dialect of Quechua they study, since in many cases it coincides with their definition of mirativity: "a linguistic category that characterizes a proposition as newsworthy, unexpected, or surprising" (Hengeveld & Olbertz 2012: 488). An important theoretical argument is their claim that mirativity cannot be anchored only in the speaker, but must take into account also what the speaker assumes that the hearer believes, since mirative morphology may be used also in order to surprise the audience and can have many rhetoric extensions. One of their examples comes from Pacaraos Quechua, a dialect spoken in the department of Lima in Peru:

(2)  *Altu-ĉaw*        *ka-yka-nqa-y-kama-**m***
highlands-LOC be-PROG-NML-1.A/S-DLMT-**CERT**
*intrega-rqa-ma:-**ñaq***          *mamá-y.*
give.away-PF-1.O/IO-3.A/S.**MIR**  mother-1.POSS
'While I was staying in the highlands, my mother had given me away [in marriage].'                    (Hengeveld & Olbertz 2012: 491, their glossing)

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3.  "La función de *-naq* en realidad no es temporal sino modal. Indica que el hablante no ha presenciado la acción o el estado denotado por la oración, o que el hablante no se había dado cuenta de la realidad que pasaba." (Parker 1976: 111–112)

Clearly, the dreadful fact reported in this utterance cannot be a surprise for the speaker, and the authors suggest that she rather assumes that it is unexpected for the addressee. I would like to suggest that we could go a step further and say that what she does is signaling that the fact reported is to be taken as unexpected in a moral sense: her mother shouldn't have done that! Here, it is the moral system of the speaker (and its projection onto the interlocutor) what constitutes the ground for expecting an event to happen. Thus, both epistemic as well as deontic grounds give rise to expectancy.

It is important to observe that the glossing in Hengeveld & Olbertz (2012) takes the forms *m(i)* and *ñaq* as pragmatic operators for epistemicity (*speaker certainty*) and mirativity (*counter expectancy*), respectively. While I readily agree with this reading in (2), we should keep in mind that these forms are usually introduced as conveying *direct evidence* (*mi*) and *reported past narrative* (*ñaq*). What is the connection between *evidentiality* and *certainty* and between *reported past narrative* and *mirative* and how should we account for it theoretically? Clearly, speaker certainty is related to evidentiality along the pathways already pointed out by Faller (2002): different types of evidence for a fact give rise to more or less degrees of certainty about it. The explicit expression of certainty, on the other hand, is related to *focus,* since certainty is naturally implicated by the Gricean maxim of quality in every utterance that does not explicitly erase it, so there should be also a meaning of *contrast* in the use of explicit morphemes for certainty, as otherwise speakers probably wouldn't feel the need to use them. This correlates with Faller's (2002: 24) treatment of the evidentials: "Quechua evidentials […] are enclitics which have the marking of focus as their only other function." Evidentiality, epistemic certainty and focus seem to be tightly related aspects of assertions. How do past narrative and mirative interact?

Our own empirical data from Conchucos corroborate the usage of -*naq/-naa* in contexts of surprise.[4] In one of our experiments, the informants were asked to guess the content of boxes by shaking them and listening to the noise they made. The box was later opened and the content revealed. In one of the boxes was a silver remote controlled car that the speaker had not guessed correctly:[5]

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**4.** The following examples are taken from an ongoing DFG-funded research project on *Zweisprachige Prosodie: Intonation, Metrik und Rhythmus zwischen Quechua und Spanisch,* that I run with my collaborators Raúl Bendezú and Timo Buchholz. We follow the *Leipzig Glossing Rules* with some extensions, two of which appear in these examples: REP stands for *reported evidence* and OBV stands for *obvious.* Meanings under discussion are repeated in their form of expression in the glosses.

**5.** I gloss -*cha* here as a marker of speaker certainty, following Parker 1976, 151 and in line with Hengeveld & Olbertz 2012. I refrain from glossing *naa* as a mirative, though, because of the facts documented in (6) and (7), and choose to leave the gloss open until my rather speculative reasoning about its nature has been corroborated by more systematic analysis of our data. A detailed pragmatic description will be part of the aforementioned project.

(3) *kaaru-cha ka-naa*
car-CERT COP-NAA
'It was a car!'

In a map-task activity, one of the speakers suddenly discovers that the way was passing at the side of a landmark:

(4) *hawa-n-paa        ka-naa*
underneath-POSS.3-DIR COP-NAA
'It was underneath of it!'

In a memory-like guessing task with covered pictures of referents that were revealed after guessing, an informant discovers that what she had thought to be a rich man was actually a lamb:

(5) *ashkash ka-naa*
lamb    COP-NAA
'It was the lamb!'

While it is clear that all of these examples with instances of *-naa* express events or states of affairs that contradict expectation and thus can be understood as contexts that would trigger miratives, we should not forget that they also occur in narratives of past events that have not been witnessed by the speaker. In the following examples, the informants were asked to retell a story that was presented to them before by means of a previously recorded version. The use of *-naa* without any relation to counter-expectance is straightforward:

(6) *huk aya-sh        ka-naa*
One dead.man-REP COP-NAA
'There was a dead man.'

(7) *hampi-ko-q aywa-naa*
healer      go-NAA
'He went to the healer.'

Apparently, the morpheme *-naa* occurs in expressions with both meanings, the reported past and the mirative. At this point of our research, we can only speculate about the relation of these different readings. Apparently, *-naa* is an expression that triggers a meaning that combines with both readings. Note that in English, just as I did in the translations of the examples, and in German, we use tenses for anterior in these situations, albeit the events and states of affairs that are asserted to be true are simultaneous to the moment of utterance, naturally occurring in combination with *contrastive* intonation, insinuated here by exclamation marks. In these cases, speakers do exactly what my introductory definition of surprise describes: they compare

the asserted proposition with its prior expectation and express epistemic contrast. By using the trigger *-naa* in Conchucos Quechua, speakers detach the assertion from a proposition that refers to the past. This may lead to a reading as reported past narrative if there is no contrasting fact witnessed at the time of utterance, or, to the (former) presupposition of negative epistemic necessity (impossibility) of the witnessed fact, which would give us the mirative reading. To put it in a paraphrase: "p is true but I did not assert p in the past".

A fact that cannot be put into question is that Hengeveld and Olbertz (2012) further enrich the line-up of languages with mirative morphology by Ecuadorian Highland Spanish, Xamatauteri (Yanomamɨ), Kham and Cupeño. By now it should be clear that meanings related to surprise are morphologized in many languages all around the world.

Obviousness, the opposite possibility of the comparison of expectation and evidence of facts, is harder to find in the morphological literature, unlike in intonation, which seems to be the more common crosslinguistic realm of expression for these meanings. Some languages however, do seem to have morphologized particular forms for these meanings. Hyslop (2011: 598) reports that in the Bhutanese language Kurtöp the suffix *-pala* encodes assertions in which "the speaker expects speech-act participants to have knowledge of the event".[6] In the dialect of Quechua spoken in Conchucos, the suffix *-cha* is analyzed by Hintz and Hintz (2017) as conveying mutual knowledge, in contrast to *-mi*, that would convey knowledge that the speaker assumes to not being shared by the hearer. In our data, some but not all occurrences corroborate this analysis. In (8), *-cha* nicely co-occurs with the Spanish particle *pues/pe* that has the same meaning. The example comes from a map-task activity and the speaker reminds the hearer of the instructions he gave:

(8) *hana-n-paa      ni-nki-cha      pe*
    above-POSS-DIR say-2SG-OBV   OBV
    'You did say above!'

Parker (1976, 151) says that the meaning of *-cha* is "surely", an interpretation that comes close to mutual knowledge. In our data, however, the usage of *-cha* is not consistent and many times looks interchangeable with *-mi,* focusing either the assertion of parts of propositions surfacing as noun phrases or adverbials or of whole propositions without the additional meaning of mutual knowledge or obviousness.

Digging deeper in the typological literature surely would reveal more languages that have morphologized forms to mark the obviousness of an asserted proposition, but, all in all, it seems that specialized forms for this meaning are less likely to occur in morphology than in intonation.

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6. I owe this example to Jan Fließbach's Master thesis (FU Berlin).

Again, we have seen that morphology has been attested in many languages for the expression of meanings related to the prior expectation of an event to occur, but that the pragmatic explanation of these meanings remains unclear.

## 2.3   Syntax

Within the realm of syntax, what first comes to anybody's mind when talking about surprise are exclamative structures of the *how beautiful you are*-type. They seem to correlate loosely with similar readings, but in my understanding, they don't convey any presupposition, e.g., whether the speaker thought before that the addressee was beautiful or not. As we will see, this relation to presuppositions is crucial for my account within information structure and, therefore, I do not count exclamative sentences of this type as epistemic structures in the sense developed in this paper. More promising candidates are instances of exclamative NPs in Castilian Spanish, as discussed by García García (this volume) and fronting as described by Leonetti & Escandell-Vidal (2009). The latter authors discuss an example with a fronted constituent, which apparently looks like being suitable for contexts of informative focus:

(9)   *¿Y   qué   te       ha-n       tra-ído       a   tí?*
And   what   2SG.DAT   AUX.-3PL   bring-PTCP   to   2SG.DAT?
'And what did they bring to you?'
*Unas   zapatillas   me       ha-n       tra-ído.*
Some   slippers     1SG.DAT   AUX-3PL   bring-PTCP
'A pair of slippers they brought me.'

In spite of the question context which seems to point directly to informative focus, they insist that this construction induces a contrastive reading:

> In our view, this is still a case of contrastive focalisation and represents a marked way to convey the additional idea that the new piece of information is surprising or unexpected, i.e., the example constitutes a case of contrastive focus used for the expression of informative focus.   (Leonetti & Escandell 2009: 163)

The alternative which is ruled out by the fronted focus construction in Spanish arguably is a value that cannot be recovered linguistically. It means something that is more valuable than a pair of slippers. Note that it could also be something less valuable, this is not clear at all if we look at the sentences on a sheet of paper without additional information conveyed by the intonation. But no matter how often we turn it around, the interpretation always contains a hint to a permission (they were allowed to bring me something less valuable), a commission (they should have brought me something more valuable), or an obligation (they were obliged to bring me something more valuable). In short, we are facing deontic values. This

reminds us of the interpretation of Example (2) from Quechua. Just as the suffix *naq/naa* in Quechua, syntactic fronting in Spanish of the kind described by Leonetti and Escandell (2009) can convey a contrast to a deontic evaluation that is taken for granted. Just as the evidence of a fact asserted in a proposition can align with or contradict epistemic expectation, it can align with or contradict deontic expectation. Bianchi et al. (2016) discuss the same type of fronting in Italian directly as a mirative and an instance of contrastive focus. In their view, miratives convey that the asserted proposition is less likely than at least one member of the set of alternatives evoked by the focus.[7]

Interestingly, obviousness seems to be no issue in syntax. If it was hard to find in morphology, it is absent in syntax, at least to my knowledge.

## 2.4    Empirical trouble

Many authors on evidentiality and mirativity seem to rely on rather impressionistic data. This is understandable, given the difficulty to elicit corresponding expressions, especially in the case of surprise and obviousness, since laboratories and linguistic interview situations seem to erase realistic assumptions about the world. In an experimental situation, nearly everything is accepted as normal, just like in some genres of movies and literature. It is a challenge for empirical linguistics to avoid this effect. On the other hand, Uth (2014, in press) shows that there are good reasons to suppose that elicited lab speech quite often contains evidential and/or mirative meaning components with different degrees of impact on the prosodic and syntactic realization of the utterances under study. This impact is often left unnoticed or discarded as negligible individual variation in the quantitative analysis. What Uth finds for miratives is also true for constructions that trigger obviousness. Clearly, the constructions discussed in the preceding sections entail contrastive focus, but with different shades of pragmatic meaning. If this is the case, we should find not only one contour for contrastive focus, as suggested by many of the pioneering papers on intonational phonology (see references in chapter (2.1)), but rather arrays of contours that follow different patterns of pragmatic content. The same holds for morphology and syntax: focus, mirativity, obviousness and evidentiality are not impermeable categories that we can assign constructions to in a biunique fashion, instead, they interact in complex ways that determine the precise form of linguistic expression.

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7.    Bianchi et al. (2016) explore the import of miratives as conventional implicatures in the sense of Potts (2007), a very interesting approach that should be combinable with the views unfolded in this article.

We are getting closer now to the central theoretical claim of this paper. All of the meanings conveyed by the expressions assembled in the preceding pages share a strong relation to a state of the common ground that the speaker assumes at the moment of the utterance. In all cases, the speaker prompts his interlocutor to infer the *previously anticipated* epistemic or deontic modal value of the proposition. Information structure, then, does not only adjust asserted propositions to states of affairs and events that are presupposed to be true in the common ground, it also expresses their *presupposed modality*.

## 3.   Presupposed modality

### 3.1    Expected worlds

Ever since Stalnaker (1973, 1974), we understand that in communication we add propositions to the common ground, thus eliminating possible worlds that are not compatible with these propositions. The common ground is understood as a set of shared propositions that form a set of worlds in which the truth conditions of at-issue meanings hold. The propositions in this context set are called pragmatic presuppositions or "speaker's presuppositions", they are taken for granted.[8]

If we adjust these notions to real discourse, I think that we have to introduce time in combination with modal operators. There is a difference between the epistemic stances concerning propositions about prior, simultaneous and posterior events. While the truth of prior events can be related either to direct, reported or inferential evidence, posterior (i.e., future) events can only be expected with more or less probability. Our ontological conditions force us to constantly compare what actually happens with what we expected to happen.

Speakers coin systematic forms in the grammars of their languages to express this important communicative act, namely the intonational, morphological, syntactic and lexical means we saw some examples of in Chapter 2. In pragmatic terms, the truth conditions of at-issue meanings are evaluated against the epistemic and deontic expectation of the possibility to add the corresponding proposition to the common ground. These epistemic and deontic operators are triggered by the prosodic, morphological and/or syntactic forms of linguistic expressions. We are dealing with pragmatically presupposed modality.

For presupposed epistemic operators, we can distinguish a priori three basic possibilities: if an asserted event or state of affairs has previously been assumed to

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**8.**   Since these notions are commonplace in pragmatics, I will just recall them, but see Kadmon 2001 or Chierchia & McConnell-Ginnet 1990 for substantial introductions.

happen with certainty, then we would expect "obviousness"; if it has previously been assumed to be improbable or impossible to happen, then we would expect "surprise"; and if nothing has been assumed about its probability to happen, then we would expect neither "obviousness" nor "surprise", but simply the registration of a possible fact. *Certainty, possibility* and *impossibility* are the cardinal points of canonical epistemic modality, to be understood as the system of linguistic expressions that refer to the speaker's epistemic stance concerning the assertion of propositions, and, if I am not mistaken, they also structure presupposed epistemic modality, the relation between perceived events or states of affairs and their prior expectation.

I would like to illustrate this claim in the form of a language game. Let us assume an ideal little world with bakeries in which everybody knows that

(10)  a.  On Mondays and Tuesdays, bakeries produce only apple pie.
     b.  On Wednesdays and Thursdays, bakeries produce only lemon pie.
     c.  On Fridays and Saturdays, bakeries produce both lemon pie and apple pie.

Jill comes home on a Tuesday and wants to have some pie, so she asks Jack to go to the bakery to get it for her. Within ten minutes, Jack is back:

(11)  Jill:  What kind of pie do you have?
     Jack:  I bought an apple pie OBV.

Jack could utter that while making use of an intonation (and/or syntactic or morphological devices, depending on the language) which signals *obviousness*, in the ways the papers cited in Section 2 suggest for English, German, Spanish, Catalan and Portuguese. He could also use a morphological or syntactic strategy, assuming that the language he is speaking provides such a possibility. Since I am concerned here with the theoretical explanation of the meanings and work with constructed examples using English as a metalanguage, I refrain from projecting ToBI-labels on them and prefer to introduce the symbols SUR and OBV for any phonological, morphological or syntactic expression that conveys meanings of surprise or obviousness, respectively.[9]

If the same dialogue were to happen on a Wednesday or Thursday, Jack could pronounce his answer in a different way, signaling *surprise* (or better, counter-expectancy, since he himself will not be surprised anymore when he utters the sentence), and again, maybe he would combine this intonation with fronting (*apple pie I bought*), depending on the tension that governs the emphasis he adds to his

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**9.**  Of course, all that is said here needs a sound empirical basis. The aforementioned research project on Quechua and Spanish in Peru is currently developing methods to elicit corresponding utterances and I hope that we will be able to ground the theoretical sketch of this article in linguistic facts in the near future.

utterance. On Fridays, neither of those previous options should be felicitous without adding further information to the context.

If we want to give full accounts of the meanings in 10, we must add a presupposed modal operator to a copy of the at-issue meaning in the common ground. The utterance (12a), uttered with the appropriate intonation, triggers the presupposition (12b):

(12) a. I bought an apple pie OBV.
     b. It was certain that I would buy an apple pie.

The utterance (13a) triggers with appropriate intonation the presupposition (13b):

(13) a. I bought an apple pie SUR.
     b. It was impossible that I would buy an apple pie.

I believe that surprise and obviousness usually combine with contrastive focus, while expressions that presuppose epistemically neutral operators coincide in many cases with what has been called informative focus.[10] On a Tuesday, Jack could pronounce his answer in (10) with *surprise* and contrastive focus on the object NP, but on Wednesdays the same answer in (10) would certainly combine this very focus with *obviousness*, while on a Friday he would probably use a sentence with what has been called "unmarked" or "basic" syntax and intonation.

## 3.2   Forbidden worlds

We can play a similar language game for presupposed deontic modality. Imagine that Jack is trying to lose weight. His diet prescribes him to eat fruit and salads, allows him to eat crispbread, but of course strictly forbids him to eat apple pie. One morning Jill comes into the kitchen and finds a used plate. After examining the leftovers she says with appropriate intonation:

(14) a. Jack ate an apple pie SUR.
        triggering: He must not eat apple pie.
     b. Jack ate a crispbread.
        triggering: He may eat crispbread.

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10. See Chafe 1976; Selkirk 2002; Krifka 2007 for discussions of a possible distinction between contrastive and informative focus. I think that the differences are gradual, since every utterance has to be necessarily contrastive in some sense if it is supposed to make a conversational contribution. I agree with Zimmermann (2008: 355) who defines contrastive focus on the grounds of expectation: "Contrastive marking on a focus constituent α expresses the speaker's assumption that the hearer will not consider the content of α or the speech act containing α likely to be(come) common ground." This perspective aligns easily with what I am trying to develop in this article.

c.  Jack ate fruit and salads OBV.
    triggering: He must eat fruit and salads.

Both deontic and epistemic evaluation of discourse worlds construct the expectation of events and states of affairs that conflict or align with the events asserted in at-issue meanings.

## 3.3  Emotional worlds

Of course, *surprise* and *obviousness* are hard to imagine in real conversations without emotional flavors – and exactly these flavors have been the prime realms of their description in the literature (see Bänziger & Scherer 2005, among many others) – but I think it is easy to see that these emotional meanings may vary from positive to negative under the same general headings, since surprise and obviousness both can be associated with good or bad feelings. If we add preferences for types of pies to our language game, we will get these flavors.

(15)  New context:
      Jill loves lemon pie much more than apple pie. She comes home on a Tuesday and sees a lemon pie on the table:
      Jill: Oh Jack! Where did you find this lemon pie for me?

Again, we could change emotional flavors by simply changing the settings in the preference context. The core interpretations of surprise and obviousness, based on what Jill thought would be the case before she saw the facts on the table, hold across these emotional meanings.

## 3.4  Presupposed modality mirrors the logical and pragmatic relations of modal operators in at-issue meanings

The meanings of presupposed modality show the same relations that structure the inventories of canonical semantic operators across languages. Horn (1989) and Levinson (2000) develop these relations along the pragmatic explanation of the traditional square of oppositions familiar from classical logic. In its updated version, it establishes the semantic and pragmatic relations that underpin the lexical inventories of operators across word classes. They follow the basic relations of logic *and* pragmatics: negation, contradiction, entailment and implicature.

The corners of this square define the logical space of affirmations (hence A and I: lat. *affirmo*) and their negations (lat. *nego*). All languages seem to lexicalize operators like *all, always, everywhere, certain, must* at the A-corner and *some, sometimes, somewhere, possible, may* at the I-corner, *none, never, nowhere, impossible,*
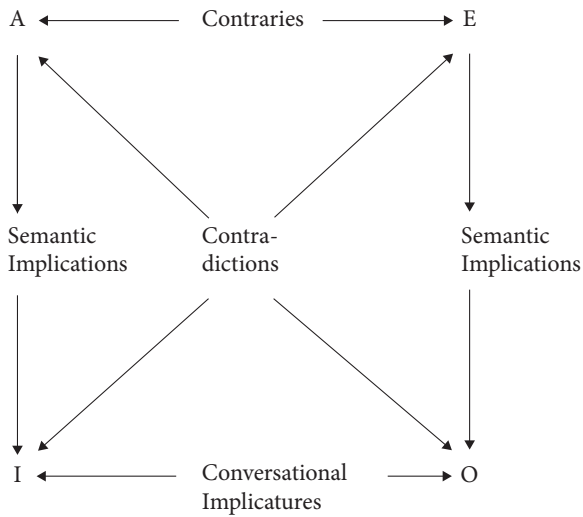
**Figure 1.** The square of oppositions (cf. Horn 1989: 10 ff.; Levinson 2000: 65 ff.)

*must not* at the E-corner, but normally we find no simplex forms at the O-corner, since these meanings are implicated by the forms of the I-corner (in English, e.g., there is no *nall* or *nalways;* see Levinson 2000 for an extensive account and more exemplification). The relations which define the corners are indicated in the square: a sentence like *no pirate loves lemon pie* is the contrary of *all pirates love lemon pie* which entails *some pirates love lemon pie* and this implicates *not all pirates love lemon pie* by the Gricean Maxim of Quantity and vice-versa.

Presupposed modality shows exactly these relations. If we utter a proposition with surprise, i.e. triggering its copy with an *impossible*-operator (E-corner), (i) we contradict a copy of the proposition with a *possible*-operator (I-corner), (ii) we imply the contradiction of the proposition with a *certain*-operator (A-corner) and (iii) we say the contrary of the same proposition with a *certain*-operator (A-corner). Just to turn it upside down, if we utter a proposition with obviousness, we imply that the event coded is possible, contradict a proposition with a *not certain*-operator and say the contrary of what we say when we utter the same proposition with surprise. If we utter the proposition presupposing a *possible*-operator, we contradict that it is surprising and implicate that it is not obvious. It fits!

We can now rewrite the presuppositions in the examples from our language game with symbols known from modal logic to establish them as discrete meanings in natural linguistic expressions and separate them from any additional emotional meaning:

(15)  a.   I bought an apple pie OBV.
  b.   ps $\square$ p

The utterance (12/16a) triggers with appropriate intonation the presupposition (12b), rewritten in (16b):

(16)  a.   I bought an apple pie SUR.
  b.   ps $\square \sim$ p

Just to make the picture complete, we should also say that the utterance (13a) q-implicates the presupposition (13b), rewritten in (17c), since if it had been either impossible or certain that Jack would buy apple pie, he would have used a form of expression to explicitly trigger these presuppositions. By not doing so, he triggers the implicature that it was possible, but not certain that he would buy an apple pie.

(17)  a.   I bought an apple pie.
  b.   It was possible that I would by an apple pie.
  c.   ps $\lozenge$ p

If this is correct, we are facing a system that works with exactly the same operators that make up the familiar system of modality, the epistemic operators *certain, possible,* and *impossible* and the deontic operators for *obligation, permission* and *prohibition.* The same relations that hold for modal operators in general also hold for the evaluation of an asserted proposition with regard to the presupposed modality of the same proposition in the common ground. Note that the way that linguistic expressions now fill out the corners also mirrors the inventories of lexicalized operators: besides the forms for surprise, obviousness and neutral expectation, there is no fourth form used to express the relation of asserted facts to their epistemic expectation. We don't need it, since it is implicated by the form of expression that signals neither surprise nor obviousness.

  Thus, the common ground does not only contain propositions taken for granted, but also modal operators that specify their expected relation to the discourse world, as well as their contraries, contradictions, entailments and implicatures.

## 3.5   Heritage properties

In pragmatic theory, it has become standard to apply tests for presuppositions known as families of sentences.[11] These tests address the behavior of the projection of presuppositions of embedded sentences to the whole construction. The corresponding behavior shows the heritage properties of presuppositions. Typically, these tests are applied to constructions with presuppositions triggered by lexical items (see Potts 2015 for an overview), but there is *a priori* no reason to believe that presuppositions related to other domains of expression should behave differently.

Karttunen (1974) postulates three types of operators, namely *holes, plugs* and *filters*. Negation, modal operators, conditionals, and interrogatives are typically holes for presuppositions, projecting the presupposition to the whole construction. If we assume that the meaning of the verb *succeed* presupposes a trial, we see that this presupposition survives the embedding under these operators:

(18)   a.   Timo succeeded in climbing the Alpamayo.
             ps: he tried to
       b.   Timo did not succeed in climbing the Alpamayo.
             ps: he tried to
       c.   Timo might have succeeded in climbing the Alpamayo.[12]
             ps: he tried to
       d.   Did Timo succeed in climbing the Alpamayo?
             ps: he tried to

Plugs are normally verbs of saying or psychological predicates that weaken the speaker's commitment, they block the presupposition:

(19)   a.   Raúl says that Timo succeeded in climbing the Alpamayo.
       b.   Raúl believes that Timo succeeded in climbing the Alpamayo.

Note that the ps (he tried to) does not appear to be completely cancelled in these cases, but rather restricted to the referent of the matrix subject (Potts 2015: 172).

The third type of operators for the projection of presuppositions are filters, they cancel some of the presuppositions of embedded clauses under certain conditions, mostly in cases where the meaning of the antecedent corresponds to the presupposition of the consequent (Karttunen's example is *If Jack has children, then all his children are bald)*. They involve normally logical connectives like conditionals, conjunctions or disjunctions.

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**11.**  See Potts 2015 for an overview, Kadmon 2001 and Tonhauser et al. 2013 provide more extensive discussion.

**12.**  The epistemic meaning is intended, not the counterfactual.

Presupposed modality shows the same type of behavior, with a few differences that appear to be related to their form of expression. The operators that have been shown to be holes change the complement of the presupposed modal operators as the whole construction necessarily shifts under its scope. Apparently, presupposed modality triggered by intonation cannot be restricted to embedded clauses. Assume an intonation that signals obviousness for the following examples:[13]

(20)   a.   Timo climbed the Alpamayo OBV.
              ps: It is certain that Timo climbed the Alpamayo.
         b.   Timo did not climb the Alpamayo OBV.
              ps: It is certain that Timo did not climb the Alpamayo.
         c.   It is impossible that Timo climbed the Alpamayo OBV.
              ps: It is certain that it is impossible that Timo climbed the Alpamayo.
         d.   Did Timo climb the Alpamayo OBV?
              ps: It is certain that Timo climbed the Alpamayo.

The more interesting cases are (20c) and (20d). The combination of a modal in the at-issue meaning with a presupposed modal does not show any restrictions on the operators involved, neither in the sense of mutual exclusion nor in the sense of the logical and pragmatic relations exposed in Chapter 3.4. Any modal can be combined with presupposed possibility, impossibility or certainty, and no modal operator in the context set implies, contradicts or implicates a modal expression in the at-issue meaning. (20d) is a hint that on the grounds of the theoretical perspective developed here, we can describe the pragmatic differences between polar questions. Both questions with presupposed certainty and presupposed impossibility triggered by intonation appear to render checks, not queries (Grice & Savino 1995). Queries necessarily presuppose operators for possibility.

Let's have a look at plugs. These are very important predicates for our purpose, since they are held to be a necessary condition on "presuppositionality" (Potts 2015, 173). If we use convenient intonation for presupposed certainty (of course we could always play the game also with impossibility or possibility) in constructions with verbs of saying or verbs of propositional attitudes, we get the same effects as described above for lexical triggers (see 19). In (21a) we get the reading that Raúl is a big admirer of Timo's climbing skills, while in (21b), to the contrary, Rául seems to be a person who never believes that Timo might have success.

(21)   a.   Raúl says that Timo climbed the Alpamayo OBV.
              ps: It is certain that Raúl says that Timo climbed the Alpamayo.
         b.   Raúl doubts that Timo climbed the Alapamayo OBV.
              ps: It is certain that Raúl doubts that Timo climbed the Alpamayo.

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**13.**  In order to imagine real utterances for the examples with OBV, it helps to raise or shrug one's shoulder, a gesture that seems to be linked to this meaning.

The presupposed modal takes scope over the matrix clause and has no relevance for the interpretation of the embedded clause: both in (21a) and in (21b), nothing is presupposed about Timo's climbing efforts, he might even never have thought about any mountain at all. Presupposed modality coincides in this behavior with presuppositions triggered by lexical items: "[…] the presupposition is evaluated as part of the argument to the matrix verbs (Potts 2015, 172)".

How does presupposed deontic modality behave with respect to its heritage properties? Let's go back to Example (8) from Leonetti & Escandell-Vidal (2009), repeated here with a paraphrase of the presupposed deontic operator I suggested for it:

(22) *¿Y   qué   te      ha-n      tra-ído     a   tí?*
And  what  2SG.DAT  AUX-3PL  bring-PTCP  to  2SG.DAT
'And what did they bring to you?'
*Unas   zapatillas   me       ha-n       tra-ído.*
Some   slippers    1SG.DAT  AUX-3PL  bring-PTCP
'A pair of slippers they brought me.'
ps. it was not expected for them to bring me slippers.

If we construct similar examples with negators, we get changes in the polarity of the presupposed modal, but it is the same modal as in the sentence with opposite polarity:

(23) a.  *Las   zapatillas   me       ha-n       tra-ído.*
The   slippers    1SG.DAT  AUX-3PL  bring-PTCP
'They brought me the slippers/The slippers they brought me.'
ps: They shouldn't have brought me the slippers.
   b.  *Las   zapatillas   no   me       ha-n       tra-ído.*
The   slippers    NEG  1SG.DAT  AUX-3PL  bring-PTCP
'They didn't bring me the slippers/The slippers they didn't bring me.'
ps: They should have brought me the slippers.

It is difficult to construct a sentence with a fronted object as a complement of a modal verb, but we can insert an adverbial expression to test the behavior of presupposition projection with modal operators. In this case, the presupposed modal stays alive and kicking, just as happens with lexical triggers of presuppositions (see (18c) below):

(23) c.  *Las   zapatillas   me       ha-n       tra-ído     seguramente.*
The   slippers    1SG.DAT  AUX-3PL  bring-PTCP  surely
'They surely brought me the slippers.'
ps: They shouldn't have brought me the slippers.

If we construct the sentence as a polar question, I believe that we get a very interesting effect. If I am not mistaken, we get a reading with an epistemic presupposition (cf. also Bianchi et al. 2016):

(23) d.  *¿Las zapatillas me     ha-n     tra-ído?*
     The slippers   1SG.DAT AUX-3PL bring-PTCP Q
     'They brought me the slippers?'
     ps: It was impossible that they would bring me the slippers.

We can confirm the presuppositionality of the contents in question, by showing that presupposed modality shows a behavior comparable to that of lexical triggers at least with respect to plugs. It is more than probable, however, that it is not sufficient to observe these syntactic constructions without analyzing their intonation at the same time. Promising steps in this direction have been undertaken by Bianchi et al. (2016). Moreover, we need to check for the heritage properties of morphological markers of presupposed modality, labeled as miratives and expressions for mutual knowledge, and very often treated together with evidentials.

## 3.6   Rhetorical uses

The language games in this chapter have hopefully developed an impression that was useful to illustrate my view on presupposed modality as a dimension of information structure. An important shortcoming is that it treats presuppositions only as reactions to context settings. In real discourse, the forms of linguistic expressions that trigger pragmatic presuppositions can also convey intentional meanings that actively construct discourse worlds. Speakers want their hearers to believe that it is obvious or surprising that some event occurred or that some state of affairs is the way it is. Think of a political discussion in which participants try to win by presenting facts as obvious, even if they are not settled yet. Think of a taxi driver stopped by the police showing him that he was driving too fast and reading the speed displayed on the screen in a very "surprised" fashion. We can use forms to trigger presupposed modality and expect that the hearer will accommodate the content. Thus, speakers are aware of these linguistic devices and readily use them for their communicative purposes. Further research should disentangle this field of conversational moves that exploit the possibilities of presupposed modality for communicative purposes.

## 4.    Conclusions and perspectives

All in all, I think that the suggestion to treat surprise and obviousness within a theory of presupposed modality that enriches the inventory of basic notions of information structure looks quite convincing. I have tried to show that it is possible to map expectation to linguistically well-established pragmatic concepts. Thus, we can organize intuitively labeled meanings that have been shown to be important for the phonological, morphological and syntactic structures of many languages in a common theoretical framework that is directly related to the needs of communicative interaction in time.

The picture we get is not mysterious, albeit it offers some surprise. Presupposed modality is a communicative necessity we need for the discursive treatment of everyday life. The events and states of affairs we experience need to be accommodated in our representation of the world. Sometimes they correspond to what we expect, sometimes they don't, and we need tools in our language to express these relations. That's why it is not surprising at all to discover that the languages of the world have developed systematic categories for the expression of these relations. After all, what we code in grammar is what is important to us and the comparison of experienced facts with prior assumptions surely is. It is probably due to the rather late discovery of the importance of sound and time in spoken language that this system for the management of the common ground has remained at the outskirts of linguistics for such a long time, giving the impression of a feature of "exotic languages".

Hopefully, further research on the relation between pragmatic meanings such as focus, evidentiality and presupposed modality and on the ways they are expressed in the grammatical systems of languages will shed more light on the ways languages coin devices for communicative needs. Theoretical pragmatics and empirical research are a couple that obviously has a promising potential to uncover surprising facts.

## Acknowledgements

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CHAPTER 8

# NP exclamatives and focus

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This paper makes a contribution to the study of Spanish noun phrase (NP) ex-
clamatives, such as ¡*Las tonterías que dicen!* 'The silly things they say!'. The main
purpose is to explore the relation between NP exclamatives and the notion of
focus. I compare NP exclamatives with canonical focus-marking constructions
such as focus-fronting constructions and cleft sentences and show that they
share some crucial syntactic and prosodic features. Elaborating on both the sim-
ilarities and differences between these different constructions, I argue that NP
exclamatives exhibit a special kind of focus that points not to the propositional
content, but rather to the relation between the propositional content and the
exclamative illocution. Making use of both focus theory and speech act theory, I
claim that exclamative constructions express a non-contrastive focus that indi-
cates the presence of non-fulfilled speaker expectations.

## 1. Introduction

This paper deals with Spanish noun phrase (NP) exclamatives such as in (1), which
are related to other exclamative constructions such as wh-exclamatives (2a) or ad-
jective phrase exclamatives (2b).

(1) a. ¡*Las GALLETAS que se ha comido!*
   b. ¡*La de GALLETAS que se ha comido!*
      'The cookies (s)he has eaten!'

(2) a. ¡*Que GALLETAS que se ha comido!*
      'What cookies (s)he has eaten!'
   b. ¡*Lo gordo que está!*
      'How fat he is!'

Though many of the aspects discussed in this paper may be relevant to all of these
exclamative constructions, I will focus on the NP exclamatives exemplified in (1).
At least since Elliott (1971) and Grimshaw (1979), NP exclamatives and exclama-
tive constructions in general have been intensively investigated (for an overview

see Villalba 2008; Bosque 2017). These constructions have been characterized as having a complex syntactic structure and a number of characteristic semantic and pragmatic properties. Syntactically, NP exclamatives have been analyzed as NPs followed by a relative clause (cf. Alarcos Llorach 1978; Michaelis 2001; Portner & Zanuttini 2005) or as complement clauses with a fronted NP (cf. Plann 1984; Brucart 1992, 1999; Leonetti 1999). With respect to their semantic and pragmatic properties, it has been pointed out that (i) they are factive, (ii) they denote an extreme degree of the situation in question, and (iii) they are used to express surprise or unexpectedness on the part of the speaker (cf. Grimshaw 1979; Michaelis 2001; Villalba 2008). Thus, the constructions in (1) may express the fact, i.e. the necessarily true proposition, that the person in question has eaten cookies, that he or she has eaten an excessive amount of cookies, and that this was unexpected to the speaker.

In addition to the syntactic, semantic, and pragmatic particularities, NP exclamatives also show a characteristic prosodic property: They bear a nuclear accent on the initial NP. Interestingly, this less well-studied fact is also found with focus-fronting constructions as in (3).

(3) *La GALLETA se ha comido Ana.*
   'Ana has eaten the COOKIE.'

The purpose of this paper is to explore the relation between NP exclamatives and the notion of focus. I will expose some syntactic and prosodic similarities between NP exclamatives and canonical focus-marking constructions in Spanish, i.e. focus-fronting constructions and cleft sentences. Elaborating on both the similarities and differences between these three constructions, I will argue that NP exclamatives exhibit a special kind of focus that points not to the propositional content, but rather to the relation between the propositional content and the exclamative illocution. Making use of both focus theory and speech act theory, I will claim that exclamative constructions express a non-contrastive focus that indicates the presence of non-fulfilled speaker expectations.

The paper is organized as follows: Section 2 introduces the main syntactic, prosodic, and functional properties of NP exclamatives in Spanish by providing a detailed description of the two slightly different types of constructions exemplified in (1a) and (1b). Section 3 offers a systematic comparison between NP exclamatives, focus-fronting constructions, and cleft sentences with regard to their structural properties and semantic and pragmatic functions. Section 4 deals with the relation between focus and illocutionary force and proposes an analysis of NP exclamatives within speech act theory framework. Section 5 briefly discusses and summarizes the results.

## 2.  The structure of NP exclamatives

### 2.1   Two types of NP exclamatives

On the basis of the main findings in the literature as well as some new observations, this section will give a detailed description of the structure of NP exclamatives in Spanish. As mentioned above, Spanish has at least two types of NP exclamatives (cf. (1) as well as the examples given in (4) and (5)). They have been labeled *emphatic relative constructions* and *pseudo-partitive constructions* (cf. Brucart 1999: 481–485; Real-Academia-Española 2009: § 20.22, 42.16 among others). For convenience, I will adopt these labels. Both constructions consist of a definite, non-referential NP followed by a *que* clause. The emphatic relative construction differs from the pseudo-partitive construction due to its definite determiner that agrees in number and gender with the following noun. Depending on the number and gender of the noun, the definite articles can be singular or plural and feminine or masculine, as in (4).

(4)  Emphatic relative constructions (D + N + *que* clause)
  a.  *¡La SUERTE que tienen!*
    'The luck they have!'
  b.  *¡El RUIDO que hacen!*
    'The noise they make!'
  c.  *¡Las COSAS que compran!*
    'The things they buy!'
  d.  *¡Los LIBROS que leen!*
    'The books they read!'

This type of NP exclamative is also found in many other languages such as English, French, and German (cf. Michaelis 2001). The other type of NP exclamative, i.e. the pseudo-partitive construction, seems to be rather particular to Spanish. It consists of the invariant determiner *la*, the definite article marked for feminine and singular; the preposition *de* 'of', which is followed by a noun; and the subsequent *que* clause, as in (5).

(5)  Pseudo-partitive constructions (la+ de + N + *que* clause)
  a.  *¡La de SUERTE que tienen!*
    'The luck they have!'
  b.  *¡La/*El de RUIDO que hacen!*
    'The noise they make!'
  c.  *¡La/*Las de COSAS que compran!*
    'The things they buy!'
  d.  *¡La/*El/*Los de LIBROS que leen!*
    'The books they read!'

Note that the determiner *la* does not agree with the noun following the preposition. This is evidenced in constructions with a masculine noun, as in (5b, d), or a feminine plural noun, as in (5c). The reason for this apparent agreement mismatch seems to be due to the fact that the pseudo-partitive construction contains the elliptical head noun *cantidad* 'quantity', which is feminine singular (cf. Torrego Salcedo 1988: 114 among others). Thus, a sentence such as (5b) is actually a variant of the construction *la cantidad de ruido que hacen* 'the great amount of noise they make', where the determiner and the adjacent noun *cantidad* do agree in number and gender. Since the determiner *la* introduces the elliptical head noun *cantidad*, which functions as a sort of quantifier denoting an extremely large quantity, the noun following the preposition is actually a bare noun that receives a non-referential interpretation. According to the Real Academia Española (2009: 3218), the pseudo-partitive construction is a highly productive though historically rather young construction that arose at the end of the 19th century; obviously, it emerged from the omission of the head noun *cantidad* 'quantity'.[1]

Assuming that the pseudo-partitive construction contains the elliptical head noun *cantidad* 'quantity' explains not only the apparent morphosyntactic agreement mismatch between the determiner *la* and the noun following the preposition, but also some interesting semantic and pragmatic restrictions. Firstly, pseudo-partitive constructions only allow for NPs with singular mass nouns (5a, b) or plural count nouns (5c, d), but not for NPs with singular count nouns (6).

(6)  a.  *¡La [cantidad] de \*BICI/BICIS que tienen!*
         'The many bicycle/bicycles they have!'
     b.  *¡La [cantidad] de \*PELÍCULA/PELÍCULAS que ven!*
         'The many film/films they see!'

This restriction has not been pointed out in the literature so far. The mentioned restriction follows from the fact that for obvious semantic reasons the (elliptical) NP *la cantidad de* 'the quantity of' cannot quantify singular count nouns, i.e. it can only be complemented by plural count nouns or singular mass nouns. Secondly, there is a pragmatic restriction that seems to be due to the elliptical head noun *cantidad* 'quantity': According to Brucart (1999: 485), the pseudo-partitive construction always forces both an exclamative and a quantitative interpretation.

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1.  As an anonymous reviewer correctly points out, the reference grammar of the Real Academia Española does not support sufficient empirical evidence for this diachronic claim. In order to prove whether the pseudo-partitive construction really arose at the turn of the 19th century, a thorough corpus analysis is needed. However, such a diachronic investigation lies outside the scope of the present paper.

In contrast to the pseudo-partitive construction, the emphatic relative construction type does not show the mentioned semantic and pragmatic restrictions. Emphatic relative constructions may appear with any kind of noun, including singular count nouns as in (7).

(7)  *¡La BICI que tienen!*
'The bicycle they have!'

Moreover, emphatic relative constructions may point to a qualitative rather than quantitative meaning of the initial NP (Brucart 1999: 485). Whereas (7) clearly suggests a qualitative interpretation of the singular count noun *bici* 'bicycle', the construction with the corresponding plural NP in (8) is compatible with both a qualitative and quantitative meaning.

(8)  *¡Las BICIS que tienen!*
    a.  'The extraordinary kind of bicycles they have!'
    b.  'The many bicycles they have!'

Furthermore, Brucart (1999: 485) notes that, in contrast to the pseudo-partitive construction, the emphatic construction type is not restricted to an exclamative interpretation. As shown in (9), the relative emphatic construction might be ambiguous between an exclamative and an interrogative reading.

(9)  *No sabes las bicis que tienen.*
'You do not know how many bicycles they have.'

However, this ambiguity only seems to be the case with emphatic constructions introduced by an overt matrix predication such as *no sabes* 'you do not know'. Leaving these differences aside, the pseudo-partitive and the relative emphatic constructions show a very similar structure with regard to both syntax and prosody.

## 2.2  The macro-syntactic and prosodic structure of NP exclamatives

### 2.2.1  *The macro-syntactic structure*

Syntactically, NP exclamatives are composed of two major constituents, i.e. the initial NP and the following *que* clause. Among the more fine-grained analyses that have been proposed, two markedly different approaches can be distinguished according to their characterization of the *que* clause. While in the first approach the *que* clause is conceived of as a relative clause (cf. inter alia Alarcos Llorach 1978; Michaelis 2001; Portner & Zanuttini 2005), in the second one it is considered a complement clause (cf. Plann 1984; Brucart 1992, 1999; Leonetti 1999; Delfitto & Fiorin 2014). I will refer to them as the relative clause and the complement clause analysis, respectively.

The relative clause analysis is adopted in traditional work on Spanish (cf. inter alia Bello [1847] 1981; Alarcos Llorach 1978), as well as in more recent research on other (non-European) languages (cf. Michaelis 2001; Portner & Zanuttini 2005). According to this approach, NP exclamatives are composed of an initial NP that licenses a relative clause. The plausibility of this analysis is supported by languages such as German in which the clause following the initial NP is unambiguously introduced by a relative pronoun, as in (10).

(10)   *Der KUchen, den Pepe gebacken hat!*
       'The cake that Pepe has baked!'

Here, the relative pronoun *den* clearly refers to the initial NP, i.e. *der Kuchen* 'the cake'. However, at least in languages such as Spanish – where the corresponding expression *que* is homophonous to the complementizer 'that', the interrogative pronoun 'what', and even some other functions – the relative clause analysis is confronted with a number of problems (cf. Bosque 1984; Plann 1984; Brucart 1992, 1999; Delfitto & Fiorin 2014). I will only draw attention to four of the most relevant problems for this paper.

Firstly, unlike canonical relative clauses, the *que* clause appearing in an NP exclamative construction cannot be omitted. This is illustrated in (11).

(11)   *¡No sabes el pasTEL \*(que ha hecho Pepe)!*
       'You can't imagine the cake Pepe has baked!'

Secondly, the *que* clause in an NP exclamative requires obligatory subject inversion, as in (12), which is also the case for indirect questions but not for canonical relative clauses (Plann 1984: 106).

(12)   *¡No sabes el pasTEL que ha hecho Pepe/\*que Pepe ha hecho!*
       'You can't imagine the cake Pepe has baked!'

Thirdly, NP exclamatives only accept *que* and no other word can be used as a relative pronoun. This is evidenced by the ungrammaticality of *quienes* 'who' in (13), a pronoun that fits perfectly in a normal relative clause with a human antecedent.

(13)   *¡Los estuDIANtes que/\*quienes vinieron!*
       'The students that/who came!'

Last but not least, the relative clause analysis is confronted with an agreement mismatch between the matrix predicate and the putative subject, as in (14).

(14)   *¡Es increíble las COSAS que dicen!*
       'It's incredible the things they say!'

Whereas the matrix predicate, the copula *ser* 'to be', appears in the singular, the alleged subject *las cosas* 'the things' is plural and thus does not agree with the matrix verb. This fact strongly suggests that *las cosas* is not the subject of the matrix predicate.

Given these problems, Bosque (1984), Plann (1984), and Brucart (1992, 1999) reject the notion of the NP exclamative as an NP followed by a relative clause. Instead, they propose a complement analysis according to which the constituent headed by *que* is not a relative but a complement clause that can either appear with a matrix predicate, as in (9) or (14), or without a matrix predicate, as in (8) or (13). Depending on the presence or absence of a matrix predicate, the *que* clause can be characterized as a subordinate or free complement clause, respectively. As for the other major component of the NP exclamative, i.e. the NP preceding the *que* clause, it is assumed that it is not an antecedent of the *que* clause but a fronted constituent belonging to the *que* clause. Thus, for an NP exclamative such as in (15), one can assume a representation as in (16), where the exclamative NP *las tonterías* 'the silly things' is moved out of the VP into the specifier of the CP (cf. Brucart 1992: 55).[2]

(15)   *¡Las tonteRÍas que dicen!*
       'The silly things they say!'

(16)   [_CP_ las tonterias [_C_ que [_IP_ pro [_I_ dicen [_VP_ ~~dicen~~ [_NP_ ~~las tonterias~~]]]]]]

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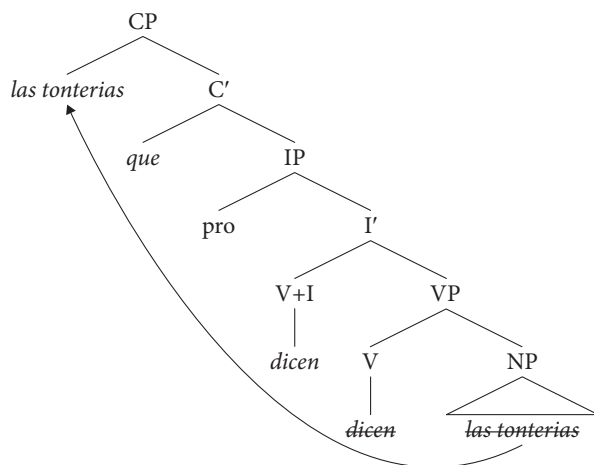
**2.**   For an alternative representation involving multiple layers of CP structure, see Portner & Zanuttini (2003: 59–62; 75f.).

The complement analysis seems to avoid all of the above-mentioned problems: According to this analysis, it is to be expected that the *que* clause cannot be omitted (cf. (11)). Furthermore, it can also cope with the obligatory subject inversion found in the *que* clause (cf. (12)). Note that, unlike the relative clause analysis, it does not impose any restriction on the subject position, though it does not predict that the subject must be realized postverbally. Moreover, the complement analysis also accounts for the fact that the clause following the exclamative NP can only be introduced by *que* (cf. (13)). Since *que* is characterized as a complementizer and not as a relative pronoun, it follows that it is not possible to substitute *que* by any other word functioning as a proper relative pronoun. In addition, the complement analysis is not faced with any kind of agreement mismatch (cf. (14)). As shown in (16), the exclamative NP, i.e. *las tonterías* 'the silly things', is not considered the subject of an (elliptical) matrix predicate such as *es increíble* 'it's incredible' (cf. (14)), but the object of the embedded predicate *dicen* 'they say'.

The complement analysis offers clear advantages with respect to the relative clause analysis, at least as far as NP exclamatives in Spanish are concerned. However, rather than concluding that the relative clause analysis must be replaced by the complement analysis, I simply want to emphasize that the relative clause analysis of NP exclamatives presents some interesting problems. These problems suggest that the *que* clause is at least not a canonical relative clause. This does not imply that it must be a complement clause, however. Interestingly, whether the *que* clause is analyzed as a relative clause or a complement clause does not seem to be relevant for the interpretation of an NP exclamative. The primary function of the *que* clause is neither the modification of a nominal antecedent nor the introduction of a subordinate proposition. Rather, it relates to information structure: The *que* clause seems to provide the background for the highlighted exclamative NP (cf. Section 3.1). This is also mirrored in the prosodic structure of NP exclamatives.

### 2.2.2   *The prosodic structure*

As far as prosody is concerned, exclamatives have been characterized by a number of intonational features:

> hyperarticulation, increasing intensity and quantity in stressed syllables (in polysyllabic expressions), changes in individual tonal range (more specifically, movement of the general range of pitch over or below standard levels), and a perceptible acceleration or retardation of "tempo". (Bosque 2017: 7f.)

As noted by Bosque (2017: 7), this characterization holds for all types of exclamatives, including NP exclamatives. Focusing on the prosodic structure, the most salient property of NP exclamatives is that the initial noun bears the nuclear accent. In turn, the following *que* clause is presented as a prosodically non-highlighted

constituent. Thus, similar to the syntax, the prosody of NP exclamatives also provides a bipartite structure resembling a focus-background partition, whereby the initial NP is presented as the prosodically highlighted information and the *que* clause as the background content. Note that in Spanish declarative sentences the nuclear accent is usually placed on the last content word, except for contrastive narrow focus contexts where placing the nuclear accent on a non-final word is a possible albeit rather marked option (cf. Hualde 2005: Chapter 14.13–14.15). Hence, the prosodic structure of NP exclamatives strongly deviates from that of a canonical declarative sentence, since the nuclear accent is not placed on a final but on a non-final word.

Admittedly, this is a very general account of the prosodic structure of NP exclamatives. A more detailed description of exclamatives using ToBi parameters is provided by the studies in Prieto & Roseano (2010b). These studies showed that "[i]n the majority of dialects, exclamatives share the same nuclear configuration found in narrow focus statements, which is typically L+H* L%" (Prieto & Roseano 2010a: 10).[3] Note, however, that the studies in Prieto & Roseano (2010b) only seem to have considered wh-exclamatives of the type exemplified in (17).

(17)　*¡Que olor a pan tan BUEeno!*
　　　 'What a lovely aroma of bread!'

These kind of wh-exclamatives differ with respect to typical NP exclamatives such as (16), since the nuclear accent is placed not on a non-final, but on a final word, i.e. on the accented syllable of the adjective *BUEno* 'lovely'. Still, the interesting point is that the intonation of the analyzed wh-exclamatives patterns with narrow focus statements.

Similar results have also been obtained for other languages such as German. According to Altmann (1993: 1017), German exclamatives display a characteristic prosodic contour called "exclamative accent". This accent is generally characterized by a greater $F_0$ and a longer duration of the accented syllable than in corresponding declarative and interrogative sentences. However, experimental analyses have shown that the so-called exclamative accent closely resembles a focus accent (cf. Batliner 1988: 252–255). Consequently, the assumption of a constitutive prosodic accent of exclamatives remains controversial, at least in Spanish and German (cf. Batliner 1988; Oppenrieder 1998; Prieto & Roseano 2010a; Roguska 2008).

In sum, Spanish has two types of NP exclamatives, namely the so-called emphatic relative construction (4) and the pseudo-partitive construction (5). The two types of NP exclamatives display some syntactic and semanto-pragmatic differences,

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**3.**　Deviations from this intonational configuration are only found in Canarian, Venezuelan, and Argentinian Spanish (Prieto & Roseano 2010a: 10).

but show a very similar macro-syntactic and prosodic structure consisting of an initial NP bearing the nuclear accent and a subsequent *que* clause. Though the *que* clause seems to be a complement rather than a relative clause, the main conclusion of this section is that the syntax and the prosody of NP exclamatives provide a bipartite structure with the initial NP functioning as a sort of focused constituent and the *que* clause as a kind of backgrounded constituent.

The syntactic and prosodic peculiarities of NP exclamatives are not exclusive to this construction. Some of them are also shared by two other well-known constructions in the study of information structure. These will be discussed in the next section.

## 3. NP exclamatives, clefts, and focus-fronting constructions

### 3.1 NP exclamatives and clefts

In this section, I will show that NP exclamatives share a number of syntactic and prosodic properties with clefts and focus-fronting constructions. Let us first look at cleft sentences such as the so called initial-copula cleft in (18), which is the most frequent type of cleft construction in Spanish (Helfrich & Pöll 2012: 343).

(18)   *Ha sido PEpe quien ha hecho el pastel.*
       'It was Pepe who baked the cake.'

Cleft constructions such as in (18) share the following properties with NP exclamatives: (i) They have a bipartite structure composed of a matrix and a subordinate clause; (ii) the analysis of the subordinate clause presents similar problems as that of NP exclamatives; (iii) the two clauses of the cleft construction form an intonational unit with the post-copular constituent of the matrix clause bearing the nuclear accent, such as the DP *PEpe* in (18). In the following, I will describe these commonalities in more detail.

Cleft sentences are generally characterized as biclausal constructions (cf. inter alia di Tullio 2006; Hartmann & Veenstra 2013; Lambrecht 2001): They are composed of a matrix clause containing a form of the copula verb *ser* 'to be' together with a further constituent, such as a DP, and a subordinate clause. In (18), the subordinate clause is introduced by the relative pronoun *quien* 'who'. Like NP exclamatives, however, it is not clear whether the subordinate clause is a free relative clause, a complement clause, or neither (di Tullio 2006: 486). One argument that seems to favor the complement analysis is that, in many cases, the relative pronoun can be substituted by the complementizer *que* 'that', as in (19).

(19)   *Fue en MaDRID **dónde/que** empezaron a sentirse libres.*
       'It was in Madrid where/that they began to feel free.'

In Canarian and American Spanish, where cleft sentences are more grammaticalized than in Standard European Spanish, the use of *que* has been generalized. As the contrasting examples from American and European Spanish in (20) show, this generalization is accompanied by the fact that in American Spanish varieties the prepositional expression of the matrix clause need not be repeated in the subordinate clause.

(20)   a.   *Es de la veCIna **que** todos hablan.*
            American Spanish
       b.   *Es de la veCIna **de la que/quien** todos hablan.*
            European Spanish
            'The neighbor is the one everybody is talking about.'

<div align="right">(cf. di Tullio 2006: 488)</div>

However, neither the preference nor the generalization of *que* imply that the subordinate clause is actually a complement clause. According to di Tullio (2006: 486), there is at least one important argument against a complement clause analysis: Cleft constructions do not contain a proper selector for such a complement. Unlike the biclausal sentence in (21), which includes a canonical complement clause that is dependent on the matrix predicate *saber* 'to know', cleft constructions such as those in (20) do not have a matrix predicate that is able to select a real complement clause.

(21)   *Sabemos que la vecina está en casa.*
       'We know that the neighbor is at home.'

Di Tullio (2006: 486) concludes that the subordinate clause of a cleft construction is neither a canonical relative nor a complement clause, "but rather a focusing modifier and so a special 'relative clause' (thus the quotation marks)". As evidenced by this quote, the bipartite structure of cleft constructions has been directly related to their pragmatic function, most clearly to the information structural categories of focus and background, though the concepts of topic and comment might be relevant as well (cf. inter alia Collins 1991; Lambrecht 2001).

   Usually, the focused expression appears in the matrix clause of a cleft sentence. In initial-copula clefts, as in (18)–(20), the focused element is the post-copular constituent. As shown in these examples, the nuclear accent is always placed on the lexical head of the post-copular constituent, more precisely on the stressed syllable of the lexical head constituent in question, i.e. on *PEpe, MaDRID* and *veCIna* 'neighbor'. Note that in so-called mid-copula clefts the focused constituent appears before the copula, as in (22).

(22)  *PEpe fue quien hizo el pastel.*
  'It was Pepe who baked the cake.'

Still, the nuclear accent is placed on the same element as in the corresponding initial-copula cleft in (18), viz. on the DP *PEpe*. This is also the case with other types of Spanish clefts such as wh-clefts (23) and the so-called focalizing *ser* (24).[4]

(23)  *Quien  hiz-o      el  pastel  fu-e      PEpe.*
  who   do.PST-3SG  the  cake   be.PST-3SG  Pepe
  'The one who baked the cake was Pepe.'

(24)  *Lo        hiz-o      fu-e      PEpe.*
  it.ACC.SG.M  do.PST-3SG  be.PST-3SG  Pepe
  'It was Pepe who did it.'

However, with respect to intonation, wh-clefts and the focalizing *ser* construction pattern with regular declarative sentences since the nuclear accent is placed on a final word. In contrast, the more common initial-copula clefts (18) and mid-copula clefts (22) as well as NP exclamatives (15) do not pattern with regular declarative sentences: Here, the nuclear accent might be placed on a non-final word. Note that in Spanish, this intonational pattern is generally restricted to contrastive narrow focus contexts (cf. Hualde 2005: Chapter 14.13–14.15).

  Whereas both the post-copular constituent in initial-copula clefts and the pre-copular constituent in mid-copula clefts function as the prosodically marked focus of the corresponding cleft construction, the relative-like subordinate clause is associated with the prosodically non-highlighted background. It expresses presupposed or already-given information. With respect to (18) or (22), the background can be paraphrased by the existential presupposition that someone baked the cake in question.

## 3.2  NP exclamatives and focus-fronting constructions

Besides cleft sentences, focus-fronting constructions, as in (25), are a further productive syntactic means of focus realization in Spanish.

(25)  *El pasTEL se ha comido Pepe.*
  'Pepe has eaten the cake.'

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4.  The focalizing *ser* construction is a particular cleft that resembles a wh-cleft or pseudo-cleft, but lacks a wh-element and uses a finite form of the copula in addition to another finite verb (cf. the glosses in (24)). It is restricted to Caribbean Spanish, mainly Colombia and Venezuela (cf. Méndez Vallejo 2009; Sedano 1995).

Unlike NP exclamatives and cleft sentences, including initial-copula (18), mid-copula (22), and pseudo clefts (23), focus-fronting constructions do not have a bipartite syntactic structure involving a subordinate clause. They are composed of a single matrix clause.[5] Nevertheless, they show some syntactic, prosodic, and pragmatic commonalities with the aforementioned constructions. With NP exclamatives, they share the marked syntactic property of obligatory subject inversion (cf. (12) and (25)). Apart from NP exclamatives and sentences with focus fronting, obligatory subject inversion in Spanish is only found with wh-constructions (cf. Torrego Salcedo 1984: 111; Plann 1984: 106).

As far as prosody is concerned, focus-fronting constructions resemble both NP exclamatives and (initial- and mid-copula) cleft constructions because in all cases a non-final word bears the nuclear accent of the whole construction (cf. (15), (22), and (25)). Thus, at least prosodically, focus-fronting constructions show a bipartite structure which is very similar to that of clefts and especially to that of NP exclamatives: While the fronted initial NP bears the nuclear accent of the construction, the remaining part is expressed as non-highlighted content.

As for the pragmatic function, focus-fronting constructions are very similar to cleft sentences. As already mentioned, both of them are productive syntactic means of focus realization in Spanish, more specifically for identification or contrastive focus. They are preferentially used in contrastive or corrective contexts such as (26).

(26)   a.   A:   *Pepe se ha comido el jaMÓN.*
                'Pepe has eaten the ham.'
       b.   B1:  *El pasTEL se ha comido Pepe* (*no el jamón/el melón, etc.*)
                'Pepe has eaten the cake (not the ham/the melon, etc).'
       c.   B2:  *Ha sido el pasTEL lo que se ha comido Pepe* (*no el jamón/el melón, etc.*).
                'It is the cake that Pepe has eaten (not the ham/the melon, etc).'

This can be spelled out more precisely on the basis of Krifka's (2007: 18) general definition of focus. According to this definition, which goes back to the central claims of Alternative Semantics (cf. Rooth 1999, 1992), focus indicates the presence of alternatives to the focused expression or to its denotation. Thus, in (26b) and (26c), the foregrounding of *el pasTEL* 'the cake' indicates that there are alternative referents such as a given ham or melon that are relevant for the interpretation of the corresponding clauses. Interestingly, the very similar sentence containing the exclamative NP in (27) does not allow for such an interpretation.

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**5.**   A monoclausal structure involving a single matrix clause has also been proposed with respect to the focalizing *ser* construction (24). For a discussion see Curnow & Travis (2004: 3f. ), among others.

(27)    *¡El pasTEL que se ha comido Pepe! (#no el jamón/el melón, etc.).*
        'The cake Pepe has eaten (#not the ham/the melon, etc.).'

In (27), the NP *el pasTEL* 'the cake' is foregrounded, but obviously without indicating that the presence of alternative referents is relevant for the interpretation of the clause.

To sum up, NP exclamatives share important structural properties with both cleft and focus-fronting constructions. Similar to focus-fronting constructions, they show a bipartite structure involving a fronted and prosodically highlighted NP which bears the nuclear accent. Similar to cleft constructions, the constituent following the foregrounded NP is expressed as a subordinate clause functioning as a kind of background. In contrast to cleft and focus-fronting constructions, however, NP exclamatives do not seem to be suitable for the expression of focus, at least not for identification or contrastive focus. Obviously, they cannot be associated with information focus either. While information focus serves to mark non-presupposed information (cf. Kiss 1998: 248f. among others), the content of exclamatives has been described as containing presupposed information (cf. Grimshaw 1979: 285; Portner & Zanuttini 2003: 40 as well as Section 1 in this paper). In addition to these functional discrepancies, there are also clear structural differences between NP exclamatives, clefts, and focus-fronting constructions: Unlike clefts, NP exclamatives do not require a copula as an obligatory constructional element; in contrast to focus-fronting constructions, which are clearly monoclausal and do not contain a *que*, NP exclamatives are characterized by the presence of a *que* clause.

One may conclude from all of this that there is no relation whatsoever between NP exclamatives and focus. On the contrary, I will argue in the next section that NP exclamatives are focus-marking devices involving proper alternatives. However, these alternatives are of a different kind than those of canonical focus-marking devices, such as cleft and focus-fronting constructions.

## 4.    Exclamative NPs and focus

In this section, I will first refer to Portner & Zanuttini (2003) and consider the hypothesis that NP exclamatives are focus-marking devices involving alternative domains of quantification (cf. 4.1). In a second step, I will elaborate on the interaction between focus and illocutionary force by sketching a new proposal of NP exclamatives within a speech act theoretical framework (4.2).

## 4.1    Focus and domain widening

According to Portner and Zanuttini (2003: 40), exclamatives have two basic ingredients: (i) a wh-feature with the meaning of a quantificational operator and (ii) a factive morpheme which conveys the meaning that the propositional content is presupposed. Note that these ingredients are assumed for both wh-exclamatives (28a) and NP exclamatives (28b).[6] Whenever these two conditions are met, a pragmatic inference called widening occurs. Widening is conceived of as a conventional scalar implicature according to which the proposition expressed by the exclamative lies at the extreme end of a scale.

   To illustrate the notion of widening, Portner and Zanuttini (2003: 50) give the examples in (28), which are uttered in a context where the eating habits of a group of friends concerning hot peppers is under discussion. In such a context one can assume two domains: the domain D1, which represents an ordered set of propositions ranked according to the spiciness of the involved peppers, and the domain D2, which is a broader ordered set including both D1 and spicier peppers than those of D1 such as, for example, the *habaneros*.

(28)   a.   *Che roba che  l   magna!*
            what stuff that  he  eats!
            'The things he eats!'

       b.   *The things he eats!*
            D1 [he eats poblanos, he eats serranos, he eats jalapeños, etc.]
            D2 [he eats spicier peppers than those in D1, e.g. habaneros]

The clauses in (28) refer to the eating habits of a friend who eats extremely spicy peppers. In Portner and Zanuttini's (2003) terms, the uttering of (28a) or the equivalent (28b) causes the widening of D1 to D2.

   Interestingly, Portner and Zanuttini's account on exclamatives is essentially based on the notion of alternatives. They assume that "[e]xclamatives widen the domain of quantification for the WH operator, which gives rise to the set of *alternative propositions* denoted by the sentence" (Portner & Zanuttini 2003: 40, italics MGG). Nevertheless, the authors do not address the relation between exclamatives and focus. However, in an unpublished paper, Dufter (2013) refers to Portner & Zanuttini (2003) and states that exclamatives express a sort of "hyperbolic focus". Following this idea, the central point concerning the notion of focus is that exclamatives involve a special kind of focal alternative consisting of alternative

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**6.**   The wh-feature is provided either by a wh-word, as in wh-exclamatives (28a), or by the alleged relative pronoun following the initial NP, as in NP exclamatives (28b); the second ingredient, i.e. the factive morpheme, is a null morpheme located in the specifier of an additional CP layer of both wh-exclamatives and NP exclamatives (cf. Portner & Zanuttini 2003: 75f., 2005: 63f.).

domains of quantification. By uttering (28a) or (28b), the speaker communicates that the friend in question eats extremely spicy peppers, namely those represented in the contextually given domain D2. Crucially, this assertion is implicitly opposed to the assumed standard, i.e. to the alternative propositions referring to the eating of the less spicy peppers contained in D1.

Our above-discussed NP exclamative (27) *¡El PASTEL que se ha comido Pepe!* 'The cake Pepe has eaten!' can also be analyzed along these lines. Here, the speaker might refer to the eating of an extremely large cake, let us say a 3-foot-long cake, that can be represented by an expanded domain of quantification (D2). This content contrasts with the expected situation, i.e. with the alternative domain of quantification (D1) representing the eating of much smaller cakes.

In sum, Portner and Zanuttini's (2003) account represents a straightforward way of applying the notion of focus to different kinds of exclamative constructions, including NP exclamatives. By combining their approach with the notion of focus developed within the framework of Alternative Semantics, it is possible to account for one of the main semanto-pragmatic functions of exclamatives, namely the denotation of an extreme degree of a given situation contrasting with an expected one.

However, much more needs to be said about the connection between focus and NP exclamatives. One point in question is the form-function relation, which does not seem to be fully comparable to that of canonical focus expressions. Most importantly, one has to face the fact that unlike cleft and focus-fronting constructions, NP exclamatives are not used for assertive but for exclamative speech acts.

## 4.2   Focus and illocutionary force

As shown, exclamative NPs can be considered focus expressions to the extent that the presence of alternative domains of quantification seems to be relevant for the interpretation of the corresponding exclamative utterances. Still, exclamative NPs cannot express a contrastive focus (cf. Section 3). At this point, it seems appropriate to ask why this is the case. More specifically, I would like to raise the following question: Why do the observed focus-marking devices shared by cleft and focus-fronting constructions (i.e. fronting, nuclear accent on the fronted constituent, subject inversion) not trigger a contrastive focus in NP exclamatives? In order to answer this question, I will outline the idea that focus-marking devices interact with illocutionary force. The central claim is that this interaction may cause different interpretations depending on the illocutionary force of a given utterance.

I assume that focus marking is primarily related to those parts of an utterance that legitimize the underlying speech act. As for assertive speech acts, focus marking is essentially related to the propositional content of the utterance in question. For example, in an assertive utterance such as (25) (*El pasTEL se ha comido Pepe* 'Pepe has

eaten the cake'), focus is associated with the highlighted referent of *El pasTEL*. Unlike the contextually given alternatives, the referred cake is the only one that renders the proposition in (25) true. This is very much in line with Lambrecht (1994: 213), who defines focus as "the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition" (cf. also Jacob 2005: 77). However, Lambrecht's notion of focus is confined to assertive speech acts.

In non-assertive speech acts, focus marking may be related to non-propositional information of the relevant utterance, at least as far as exclamatives, such as (27) (*¡El pasTEL que se ha comido Pepe!* 'The cake Pepe has eaten!'), are concerned. Rather than pointing to the presence of (false) alternative propositions as in (25), in (27) the highlighting of *EL pasTEL* primarily indicates the emotional involvement of the speaker, more precisely, his or her non-fulfilled expectations with respect to Pepe's behavior. The expression of unexpectedness or surprise, which is claimed to be an essential part of exclamative constructions (cf. Michaelis 2001: 1039; Villalba 2008: 15f. among others), is clearly a non-propositional component. In order to gain a better understanding of this non-propositional component and its interaction with focus, in the remainder of this section I will outline an analysis of NP exclamatives within a speech act theoretical framework.[7]

Though the idea of analyzing exclamatives within the framework of speech act theory is not new, there have been very few relevant attempts (cf. Castroviejo 2008: 44f.; Villalba 2008: 23f. and the literature cited therein). Closest to the present approach is Villalba (2008: 23f.). On the basis of Searle's (1976) well-known taxonomy that differentiates five illocutionary acts, i.e. assertives, directives, commissives, declaratives, and expressives, Villalba (2008: 23f.) classifies exclamatives as a subtype of expressive speech acts. This classification is grounded in the specification of Searle's (1976) four basic sets of conditions given in (29).

(29) Exclamative speech acts (Villalba 2008: 23f.):
    i.  Propositional content conditions:
        a.  The speaker expresses the proposition that *p* in the utterance T; and
        b.  expressing that *p*, the speaker predicates an emotional attitude toward a certain state of affairs or degree.
    ii.  Preparatory conditions: None
    iii.  Sincerity condition:
        The speaker is committed to the truth of the proposition involved and of the emotional attitude expressed.
    iv.  Essential condition:
        A certain state of affairs or degree of something exists that surpasses the speaker's expectations and causes an emotional reaction in the speaker.

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7.  For a more general pragmatic account on the notion of surprise within a model of presupposed modal operators, see Reich (2018 [this volume]).

I generally agree with Villalba's (2008) proposal of the exclamative speech act, in particular his specification of the (iii) sincerity condition and the (iv) essential condition. However, I disagree with his specification of the (i) propositional content conditions as well as with (ii) the preparatory conditions. Let us first reconsider the (i) propositional content conditions. While the first propositional content condition (29 i.a) is uncontroversial, the second one (29 i.b) seems rather problematic. Though it is clear that the speaker is communicating an emotional attitude toward a certain state of affairs or degree of something when performing an exclamative speech act (cf. 29 i.b), the emotional attitude is not part of the propositional content. Rather, it belongs to the sincerity conditions, i.e. the required psychological state. On the level of the proposition, the speaker merely expresses that $p$ denotes an extreme deviation from his or her expectation.

As for the preparatory condition (29 ii.), Villalba (2008: 24) argues that "since the hearer is not taken into account, one can conclude that there are none". In my view, this conclusion is not justified. Note that, apart from directive speech acts, the preparatory conditions do not require any involvement of the hearer. Actually, the preparatory conditions apply exclusively to the speaker. According to Searle and Vanderveken (1985), this is the case with the assertive, commissive, and declarative illocutionary force: The assertive illocutionary force requires the speaker to have some reasons for asserting $p$, more precisely for supposing that the asserted proposition is true; the commissive illocutionary force demands that the speaker has the disposition for performing the communicated act; and the declarative illocutionary force requires the speaker to have the relevant authority to perform the declarative speech act in question (cf. Searle & Vanderveken 1985: 54–60). In contrast to Villalba (2008), I suppose that there is also a speaker-oriented preparatory condition for exclamative speech acts, namely that the speaker expects a certain state of affairs or degree of this state of affairs.

Building on these revisions of Villalba (2008), I assume the conditions for exclamative speech acts given in (30).

(30) Exclamative speech acts:
  i. Propositional content conditions:
     a. The speaker expresses the proposition that $p$ in the utterance T.
     b. The propositional content $p$ denotes an extreme deviation from his or her expectation toward a certain state of affairs or degree of something.
  ii. Preparatory condition:
     The speaker expects a certain state of affairs or degree of this state of affairs.
  iii. Sincerity condition:
     The speaker is committed to the truth of the proposition involved and of the emotional attitude expressed.

iv. Essential condition:
A certain state of affairs or degree of something exists that surpasses the speaker's expectations and causes an emotional reaction in the speaker.

Let me briefly illustrate this definition on the basis of the example in (31). In order to successfully communicate (31) as an exclamative speech act, the utterance must count as a conventionalized construction expressing a state of affairs that deviates extremely from the speaker's expectations (essential condition). More precisely, the speaker must have a scalar expectation regarding the quantity of cookies Pepe and/or other people normally eat (preparatory condition). Thus, in (31) the speaker expresses that Pepe has eaten an excessive amount of cookies (propositional content condition), committing to both the truth and the emotional attitude caused by the unexpectedness of this fact (sincerity condition).

(31) *¡La de gaLLEtas que se ha comido Pepe!*
'The cookies Pepe has eaten!'

On the basis of these brief specifications concerning the exclamative illocution, I will now readdress the above-mentioned question: Why do the observed focus-marking devices shared with cleft and focus-fronting constructions (i.e. fronting, nuclear accent on the fronted constituent, subject inversion) not trigger a contrastive focus in NP exclamatives?

My central claim is that the interaction of focus-marking devices with illocutionary force yields different effects. Unlike assertive speech acts, with exclamative speech acts the focus-marking devices in question do not point to the propositional level, i.e. to the presence of alternative propositions, but rather to the non-propositional level, more precisely to the non-fulfilled speaker expectations. As proposed in (30), the speaker expectations constitute the preparatory conditions of exclamative speech acts.

In the same vein, combined with exclamatives, the mentioned focus-marking devices do not highlight the referents in question with the purpose of properly contrasting them with alternative referents. Rather, fronting and nuclear accent on a non-final word serve to express the emotional attitude of the speaker, i.e. his or her surprise, wonder, admiration, etc. toward an unexpected fact. As proposed in (29) and (30), the relevant emotional attitude constitutes the sincerity condition of exclamative speech acts. It goes without saying that the speaker need not be surprised. However, in order to fulfill a successful exclamative speech act, (s)he must at least communicate the relevant psychological state, otherwise the utterance may point to an ironic or rhetorical exclamative (cf. Villalba 2008: 24). Moreover, the expression of the adequate psychological state of a given exclamative may not be an end in itself. Usually, it serves further communicative goals such as turn-taking or other perlocutionary effects.

Note that the formal means of expressing a speech act, such as word order or a certain intonation, are not conceived of as proper components of speech acts, neither in Searle's (1979) original account nor in Searle & Vanderveken (1985) and later work. Rather, such means are taken as so-called illocutionary force indicating devices. As for NP exclamatives, the above-mentioned focus-marking devices, i.e. the expression of a fronted NP and its realization with a nuclear accent, can be taken as two relevant and very salient illocutionary force indicating devices located on the syntactic and prosodic level, respectively. Moreover, the conventionalized graphic means for exclamatives, i.e. the use of exclamation marks and capitalization, can also be considered corresponding illocutionary force indicating devices.[8]

## 5.   Conclusion

The aim of this study was to explore the relation of Spanish NP exclamatives and the notion of focus. Firstly, I have elaborated on the differentiation of two kinds of NP exclamatives, i.e. emphatic relative constructions (e.g. *¡La bici que tiene!* 'What a bike (s)he has'!) and pseudo-partitive constructions (e.g. *¡La de bicis que tiene!* 'What a lot of bikes (s)he has'!). They show some minor morphosyntactic and semanto-pragmatic differences, including restrictions on (i) the determiner, (ii) the NP-type, and (iii) their quantitative or qualitative interpretation (cf. Section 2.1).

Secondly, I have highlighted the commonalities of the mentioned NP exclamatives: The two types of NP exclamatives have a very similar macro-syntactic and prosodic structure consisting of a bipartite structure with an initial NP bearing the nuclear accent and a subsequent *que* clause with obligatory subject inversion. Syntactically, the *que* clause shows some interesting difficulties as to whether it should be categorized as a relative or complement clause, a problem that also affects the analysis of cleft constructions (cf. di Tullio 2006: 486). Following Brucart (1992, 1999) and Plann (1984), I have argued that the *que* clause of NP exclamatives is a complement rather than a (free) relative clause, though the more important conclusion was that the syntax and the prosody of NP exclamatives provide a structure with the initial NP functioning as a sort of focused constituent and the *que* clause as a kind of backgrounded constituent.

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**8.**   As far as wh-exclamatives are concerned, the wh-word *cuán* can be identified as a lexical illocutionary force indicating device for exclamatives (e.g. *¡Cuán fuertes que eran!* 'How strong they were!'). Note that this somewhat archaic wh-word, which is the predecessor of the apocopated pronoun *cuánto* 'how (much)', cannot be used as an interrogative pronoun in a corresponding question, i.e. a directive speech act. Thus, it is a clear and unambiguous illocutionary force indicating device for exclamatives.

Thirdly, I have shown that the macro-syntactic and prosodic structure of NP exclamatives resemble that of two canonical constructions for expressing focus in Spanish, i.e. (initial- and mid-copula) clefts and focus-fronting constructions. However, while cleft and focus-fronting constructions are typically used for the expression of identification or contrastive focus, NP exclamatives are not suitable for expressing these information-structural purposes. Following Portner and Zanuttini (2003) and Dufter (2013), I have argued that NP exclamatives are a special kind of focus expression involving alternative domains of quantification, rather than alternative referents or propositions.

Fourthly, I have elaborated on the interaction of focus and illocutionary force by outlining an analysis of NP exclamatives within a speech act theoretical framework. Crucially, this line of investigation was motivated by the fact that exclamatives are not used for assertive but for expressive – that is, non-assertive – speech acts. I have basically followed Villalba's (2008) account on exclamative speech acts, though I have also made some revisions concerning the propositional content conditions and the preparatory conditions (cf. (30)). Sticking to the tenets of speech act theory, the characterization of the exclamative illocution only includes the constitutive semanto-pragmatic conditions, but no conditions concerning the formal side of exclamative speech acts, such as the above-mentioned macro-syntactic and prosodic properties. These formal means have been conceived of as corresponding illocutionary force indicating devices.

On the basis of the outlined approach, I have finally tried to disentangle the form-function differences between NP exclamatives on the one hand, and cleft and focus-fronting constructions on the other. While in the latter constructions formal highlighting, i.e. fronting and nuclear accent on a non-final word, is used to express a contrastive focus pointing to alternative propositions, with NP exclamatives the very same formal highlighting is used to express a non-contrastive focus that indicates the presence of non-fulfilled speaker expectations.

The analyzed interaction between focus and illocutionary force reveals that the relationship between these domains is not a bilateral but a unilateral one. As shown, it is the illocution that determines the interpretation of focus-marking devices (fronting and nuclear accent on a non-final word) – be it contrast, as with declaratives, or non-fulfilled speaker expectations, as with exclamatives. Within the framework of speech act theory, this unilateral relationship between illocutionary force and focus is expected, since the illocution always has scope over the propositional part of an utterance. This is reflected in the general form representing speech acts F(P), where P relates to the illocution and P to the proposition (cf. Searle & Vanderveken 1985: 2). As an anonymous reviewer points out, the assumed unilateral relationship between focus and illocutionary force is also consistent with Rizzi's (1997) traditional analysis of the left periphery, where the functional category Force c-commands the functional category Focus.

Given that NP exclamatives, clefts, and focus-fronting constructions are characterized by very similar means of highlighting (fronting and nuclear accent on a non-final word), there remains at least one important question: How is it possible to differentiate between NP exclamatives and the mentioned focus constructions in the first place?

Here, I can only sketch two possible answers to this question: Firstly, one could resort to context by arguing that whenever formal highlighting does not relate to the propositional alternatives provided by the context, the formal highlighting must be associated with the expression of an exclamative rather than an assertive speech act (cf. Batliner 1988: 269). An alternative answer may be found in the syntactic and prosodic domains. As far as syntax is concerned, it has already been mentioned in Section 3.2 that NP exclamatives can clearly be distinguished from both clefts and focus-fronting constructions. Unlike clefts, NP exclamatives do not require a copula as an obligatory constructional element. From focus-fronting constructions NP-exclamatives can be distinguished by the fact that only the latter display a *que* clause. These structural differences are already sufficient to distinguish between the mentioned constructions. Further, a detailed prosodic analysis might show that there are also intonational clues that help to differentiate between NP exclamatives on the one hand and cleft and focus-fronting constructions on the other.

## Acknowledgements

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# Cleft constructions

CHAPTER 9

# Adverbial cleft sentences in Italian, French and English
## A comparative perspective

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The aim of this paper is to offer a multi-layered analysis of adverbial clefts in Italian, French, and English. In particular, we intend to offer a corpus-based study of the syntactic category of the cleft constituent, its semantic type and, finally, the information structure of adverbial clefts. In the first part of our contribution, after defining the concept of adverbial, we discuss which categories of adverbials can (or cannot) be clefted. In the second part, we cast light on the similarities and differences between the three languages. The main cross-linguistic similarities concern the semantic type of cleft adverbials, whereas the most significant differences lie in information structure. Finally, we will relate our empirical findings to the ongoing theoretical discussion on the semantics (and pragmatics) of adverbial clefts.

## 1. Introduction

Cleft sentences (It. *frasi scisse*; Fr. *phrases clivées*) are bi-clausal syntactic constructions involving an initial copular clause and a subordinate clause called a *cleft clause* (henceforth CCL). Consider the following example:

(1)  *È **Stella** che legge Kant. / C'est **Stella** qui lit Kant. / It's **Stella** who reads Kant.*

Here, *è Stella / c'est Stella / it is Stella* is the copular clause and *che legge Kant / qui lit Kant / who reads Kant* is the subordinate clause. In the copular clause, the constituent following the copula (i.e. *Stella*) is the cleft constituent (in short CC). Cleft sentences are generally considered to be focalizing constructions (see, among others, Frison 1988 for Italian; Lambrecht 2001 for English and French).

Empirical studies based on written and/or spoken language data (see, e.g., Berretta 1994: 95 for Italian; Dufter 2008: 48 and Carter-Thomas 2009: 142 for French; Collins

1991: 54ff. for English) distinguish between two main syntactic types of cleft sentences: subject clefts, as illustrated in (1) on the basis of Italian, French and English, respectively, and adverbial clefts (a term employed, e.g., in Carter-Thomas 2009), illustrated in (2). Clefts on complements, such as direct (3) and indirect objects (4), have a marginal status (cf., e.g., Carter-Thomas 2009 on French).

(2) *È **con facilità** che Stella legge Kant. / C'est **avec facilité** que Stella lit Kant. / It's **with ease** that Stella reads Kant.*

(3) *È **Kant** che legge Stella. / C'est **Kant** que Stella lit. / It's **Kant** that Stella reads.*

(4) *È **a sua figlia** che Stella legge Kant. / C'est **à sa fille** que Stella lit Kant. / It's **to her daughter** that Stella reads Kant.*

In subject clefts such as (1), the CC functions as the subject of both the main verb of the CCL (*leggere / lire / read*) and the corresponding non-cleft agnate clause (5). In the clefts illustrated in (2), by contrast, the CC has an adverbial syntactic function, and as such is neither subcategorized by the main verb of the CCL nor obligatory in the corresponding non-cleft agnate clause (6).

(5) ***Stella** legge Kant. / **Stella** lit Kant. / **Stella** reads Kant.*

(6) *Stella legge Kant [**con facilità**]. / Stella lit Kant [**avec facilité**]. / Stella reads Kant [**with ease**].*

While most of the literature does not explicitly distinguish between subject and adverbial clefts, there are good reasons for doing so.[1] First, adverbial clefts make up for a good proportion of CCs in Italian, French and English (as shown in our data, see § 3.2.1.). Second, a number of their syntactic, semantic and pragmatic features differ from those of subject clefts. While the CCL of subject clefts may involve a specialized relativizer, such as It. *a* (cf. *È Stella a leggere Kant*), Fr. *qui* and E. *who*, adverbial clefts' CCL involve a generic relativizer, i.e. the complementizer *che/que/that*, respectively. Moreover, while subject clefts are a special type of specificational sentence, it is not always clear whether adverbial clefts are also specificational sentences, i.e. whether the CC functions as the focus of the construction (cf. De Cesare

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**1.** There are only few studies devoted to adverbial clefts alone, the most important one being Wienen 2006, based on French, Spanish and German. See also Benincà 1978 on a special form of Italian temporal cleft (the so-called scisse *spurie*, such as *è tre ore che ti aspetto*, lit. 'It is three hours that I have been waiting for you [I have been waiting for you for three hours]'). For English adjunct adverbials in clefts, see Hasselgård 2004 and (2010: 152–168). Important observations on adverbial clefts can of course be found in studies devoted to clefts in general (see Berretta 1994, 1996, and 2002; D'Achille, Proietti & Viviani 2005 as well as Roggia 2008 and 2009 for Italian; Carter-Thomas 2009 and Wehr 2010 for French; Collins 1991 and Patten 2012 for English).

& Garassino 2015).[2] In several occurrences, in fact, the cleft is used to "emphasize rather than identify, in which case there is hardly anything left of their specificational meaning" (Declerck 1988: 223). For instance, it would be difficult to imagine that a cleft such as *it's at this point that she knew* would serve as an appropriate answer to the question *When did she know?*; the behavior of adverbial clefts thus differs from subject clefts such as the one given in (1) above (*Who is reading Kant? It's Stella who is reading Kant*). Finally, from a pragmatic point of view, adverbial clefts tend to display a characteristic information structure.[3] While subject clefts typically involve a CCL encoding given information, adverbial clefts tend to have a CCL containing new information (cf. the corpus study provided in Hasselgård 2010: 157 for English; for data regarding Italian, French and English, see § 3.2.4.). Adverbial clefts are thus tightly connected to the information structure that Prince 1978 called *informative presupposition clefts*.

Interestingly, diachronic studies show that *informative presupposition clefts* seem to have arisen or spread later than the *canonical* type of cleft (called *stressed-focus clefts* in Prince 1978), with a CCL encoding given information. At the same time, there seem to be some cross-linguistic differences between their first attestation and their establishment. In French, informative presupposition clefts are claimed to have emerged in the 16th century and spread thereafter (see Dufter 2008: 50). For English, it has been claimed that informative presupposition clefts are already attested in the 14th century (cf. Ball 1994: 610–611 and Patten 2012: 205), but that it was not until the end of the 17th century that they became an established construction (Patten 2012: 207). We do not have an in-depth study on the history of informative presupposition clefts in Italian, but we know that Italian clefts involving an adverbial realized as a prepositional phrase (PP) are considered to be French calques, spreading from the 18th century onward (D'Achille, Proietti & Viviani 2005: 273–274).

In light of these observations, we would like to find out whether, as could be hypothesized on the basis of their different historical paths, there are cross-linguistic syntactic, semantic and/or pragmatic differences in the use of adverbial clefts in

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**2.**   Focus is conceived here as "the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition" (Lambrecht 1994: 213), which is selected in a set of relevant discourse alternatives (Rooth 1992). Although Focus tends to associate with new information, it can by no means be reduced to it (cf. also footnote 18).

**3.**   For Belletti 2015, subject and non-subject clefts do not have the same derivation and differ in their information structure: In subject clefts, the CC can be either a contrastive-corrective focus or an information focus; in non-subject clefts, the CC can only be contrastive-corrective. As we will see in § 3.2.4., this view is in need of revision as the CC of non-subject clefts can also express an information focus.

present-day French, Italian and English. Based on the observations made in the literature, we expect to find both quantitative and qualitative differences between adverbial clefts in French, Italian and English. Specifically, we expect to find more adverbial clefts in French than in the two other languages. Based on the widespread idea that French clefts are more grammaticalized in French than in other (Romance) languages (see, e.g., Dufter 2009; Lahousse & Lamiroy 2012 and Wehr 2015), we also expect to find a greater degree of flexibility in the type of adverbial that can be clefted in French. This study will address these issues by proposing a corpus-based description of adverbial clefts. Specifically, based on data drawn from a comparable multilingual corpus of electronic news, we will offer a multi-layered analysis of adverbial clefts in Italian, French and English.

Since some corpus-based studies on adverbial clefts already exist for the languages we are interested in (in particular for French and English: see references in footnote 1), we ought to briefly explain the motivation behind this new contribution. This is twofold. Firstly, no comparable study involving Italian, French and English adverbial clefts has been proposed so far. Secondly, the research output described in studies on a single language or two different languages is generally not directly comparable.[4] The fact that the results of similar studies, which are based on the same language but differ in their empirical foundation, are not directly comparable does not come as a surprise, since slight differences in the empirical basis (e.g., differing in text types) can alter the way clefts are used. Thus, homogeneity in the data used in a comparable study is a fundamental tenet for assessing cross-linguistic similarities and differences.

This chapter is organized as follows: In Section 2, we define the concept of *adverbial* and briefly discuss what categories of adverbials can function as a CC. In Section 3, we describe our comparable corpus (§ 3.1.) and subsequently report on our cross-linguistic and corpus-based findings (§ 3.2.) by (a) assessing the frequency of use of adverbial clefts in relation to other types of syntactic clefts; (b) describing the syntactic categories of the CCs occurring in adverbial clefts; (c) identifying the semantic categories of adverbials that can function as a CC of adverbial clefts; and (d) analyzing the information structure of adverbial clefts. Finally, in Section 4, we highlight our main findings and draw some conclusions on the degree of conventionalization associated with adverbial clefts in general and with the three languages taken into account in particular. In this chapter, we

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4. As pointed out for instance in Hasselgård (2010: 158), her results (based on empirical material extracted from the ICE-GB corpus) are not identical with those described in Johansson (2002: 188). While she considers both written and spoken data, Johansson 2002 only takes into account written texts. The differences she points out are related to the information properties of clefts, but we could find other differences as well.

use "conventionalization" in an intuitive way to describe a process that results in the association of a certain linguistic form with a certain meaning or a discourse/ textual function (cf. § 4.; in the relevant literature, cf. for instance Traugott 1989, this term is used in a more theoretical fashion in reference to the semantic conventionalization of conversational implicatures; this topic will not be addressed here). Moreover, following the perspective outlined in Berretta 2002, we conceive of the conventionalization process involved in adverbial clefts as an ongoing change ("un mutamento in atto" in Berretta 2002: 15).

## 2.   Defining (cleftable) adverbials

Before we can describe the data found in our corpus, it is necessary to clarify a few theoretical points concerning the concept of *adverbial*. In this Section, we thus start by providing our working definition of adverbials (§ 2.1.) and proceed with the description of the syntactic categories that adverbials can belong to (§ 2.2.); finally, we briefly discuss the criteria according to which adverbials can be clefted (§ 2.3.).

### 2.1   Adverbials as a syntactic function

In the literature, adverbials are easily confused with adverbs (on this issue, cf. for instance Hasselgård 2010: 14; and Maienborn & Schäfer 2011). The term *adverbial* (in French *complément adverbial*; cf. Molinier & Levrier 2000: 24[5]) refers to the syntactic function of a sentence constituent and therefore is part of the same notional paradigm as subject, subject predicative and direct object. The term *adverb*, on the other hand, refers to a word class (part of speech or lexical category) and is therefore related to other word classes, such as noun, adjective, verb, preposition and conjunction. As we will see in §2.2., adverbials can be realized syntactically as adverbs (thus projecting adverb phrases), but they may also take other forms, such as noun phrases.

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**5.**   In the Italian linguistics literature, the term *avverbiale* is in general used differently. Typically, it refers to an adverbial syntactically realized as a subordinate clause (e.g., *Riprenderà a lavorare quando starà meglio* / *perché sta meglio* / *anche se non sta meglio*, '[s/he] will start working again when [s/he] is feeling better / because [s/he] is feeling better / even if [s/he] is not feeling better'). Moreover, for Lonzi (1991: 341), the term *avverbiale* is used for a phrase that can occupy the same position and have the same function as an adverb (for instance the PP *negli ultimi tempi* is an *avverbiale* since it functions like *ultimamente*, e.g., in *ultimamente / negli ultimi tempi è molto distratta* 'lately / in recent times, she is very distracted').

Adverbials are often confused with other syntactic functions, in particular with complements (subject predicatives and direct objects). One of the main points of disagreement among scholars is whether adverbials are optional or obligatory sentence constituents, i.e. whether they can be verb arguments or not. Following Greenbaum (2000: 56, 174), among others, we consider that adverbials are optional sentence constituents by definition. As optional constituents, adverbials can be omitted without giving rise to an ungrammatical or semantically incomplete sentence (cf. Greenbaum 2000: 56). The main test used in our study to determine whether a constituent is an adverbial or is associated with another type of syntactic function is the 'omission test'. Only if a sentence constituent can be omitted without changes in sentence meaning (particularly regarding the verb) is it an adverbial, as *frankly / truly / funnily enough* in (7). On these grounds, we thus rule out that expressions such as *to those men and women serving our country* in (8a) are adverbials because sentence (8b) is ill-formed. An important consequence of this view for the present study is that, differently from other studies (such as Hasselgård 2010; see also Biber et al. 1999: 122), we do not consider the *it*-cleft given in (9) as being an adverbial cleft.

(7)  a.  ***Frankly/Truly/Funnily enough**, I don't know.*
     b.  *I don't know.*

(8)  a.  *Tonight my thoughts go out most **to those men and women serving our country**.*
     b.  *\*Tonight my thoughts go out (most).*

(9)  *It is **to those men and women serving our country** that my thoughts go out most tonight.*          (ex. adapted from Hasselgård 2010: 160; emphasis ours)

While the adverbial status of most expressions can be easily determined by means of the omission test, there are some problematic cases that we would briefly like to present (for a more detailed discussion, refer to Ackema 2015: 263–269). The first (but least) problematic case is represented by expressions that are optional with some verbs but not with others, thus functioning both as adverbials and complements. These expressions are best represented by the category of circumstance adverbs, which provide information on the location and time of the event denoted by the main verb (or predicate). In the following examples, the circumstance expressions *in London* and *today* in (10a) function syntactically as adverbials because they can be omitted without changing the meaning of the sentence (10b).[6] By contrast, the

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6. In Pustejovsky (1995: 64), circumstance adverbials such as *in London* and *today* in (10) are called *true adjuncts*.

same expression *in London* in (11a) is a complement because it cannot be omitted without changing the meaning of the verb *to live* (11b). In cases like these, the adverbial status of a given expression (cf. *in London*) is thus determined on the basis of the main sentence verb alone.

(10)  a.  *I met a girl **in London today**.*     (ex. adapted from Greenbaum 2000: 56)
      b.  *I met a girl.*

(11)  a.  *Peter lives **in London**.*                 (ex. from Hasselgård 2010: 46)
      b.  #*Peter lives.*

Again, contrary to Hasselgård (2010: 46), who considers the circumstance adverb given in (11a) to be an adverbial even if it is "required by the verb in order to make the clause grammatically acceptable", we claim that expressions such as the PP *in London* in (11a) are in fact complements. Consequently, our conception of adverbial cleft is slightly more restricted than the one adopted in Hasselgård's study. From this view, it also follows that in the present study only constructions such as (12a) are adverbial clefts, while instances such as (12b) are considered to be complement clefts.

(12)  a.  *It's **on the train** that I met a girl.*
      b.  *It is **in London** that Peter lives.*

The second, most problematic case is represented by expressions that can or even must remain unexpressed with certain groups of verbs. Several subtypes can been distinguished, such as the so-called *default arguments* and *shadow arguments* (see Pustejovsky 1995: 63–65). *Default arguments* are "necessary for the logical [i.e. semantic] well-formedness of the sentence, but may be left unexpressed in the surface syntax" (Pustejovsky 1995: 64). These arguments typically encode the material (13) or the instrument (14) involved in a certain action and are often present in the discourse setting. *Default arguments* ought to be distinguished from other seemingly optional complements, corresponding to direct objects, such as the one encoded by ingestion verbs (e.g., *eat*, *drink*, etc.). Since default arguments and direct objects of ingestion verbs are associated with different syntactic functions and semantic roles, a distinction between them can be made on the basis of their pronominalization potential. Only the latter type of complement can be substituted by a (clitic or personal, tonic) pronoun (*I drank [a glass of water] > I drank it* vs *I cut the bread [with the knife] > *I cut the bread it*).

(13)  *Mary carved the doll [**out of wood**].*        (ex. from Pustejovsky 1995: 64)

(14)  *I cut the bread [**with the knife**].*

In turn, *shadow arguments* are verb arguments that are semantically encoded in the lexical verb and remain unexpressed unless they specify certain features of this argument (see Pustejovsky 1995: 63–64). In (15), the verb *to butter* encodes the argument *butter*, which cannot be syntactically expressed for obvious redundancy reasons. By contrast, the verb *to butter* can be further specified by expressions such as *with margarine*.

(15)   *Mary buttered her toast \*[**with butter**] / [**with margarine**].*

<div align="right">(ex. from Pustejovsky 1995: 65)</div>

In light of their syntactic properties, i.e. being optional verb arguments, in this study we consider both *default arguments* and *shadow arguments* to be adverbials. Consequently, constructions such as (16) are considered instances of adverbial clefts.

(16)   a.   *It's **out of wood** that Mary carved the doll.*
       b.   *It's **with a knife** that I cut the bread.*
       c.   *It's **with margarine** that she buttered her toast.*

## 2.2   Syntactic categories of adverbials

Adverbials can be realized by a variety of syntactic categories (cf. for instance Greenbaum 2000: 56; Hasselgård 2010: 14): noun phrases (NPs), prepositional phrases (PPs), clausal phrases (CPs), and adverb phrases (AdvPs). Here are some examples with Italian, French and English adverbials realized as NPs, PPs, CPs and AdvPs, respectively:

(17)   ***Questo pomeriggio** non lavora. / **Cet après-midi** elle ne travaille pas. / **This afternoon** she is not working.*

(18)   *Lavora **a Parigi**. / Elle travaille **à Paris**. / She works **in Paris**.*

(19)   ***Quando si annoia**, lavora. / **Quand elle s'ennuie**, elle travaille. / **When she is bored**, she works.*

(20)   *Lavora **rapidamente**. / Elle travaille **rapidement**. / She works **fast**.*

In our view, there is another point to discuss here, namely the fact that some adverbials traditionally claimed to project AdvPs are in fact best accounted for as being NPs. Following e.g., Huddelston & Pullum (2002: 564–565), Salvi & Vanelli (2004: 180–181) and Salvi (2013: 110), we will thus reconsider the syntactic category of the three following groups of anaphoric or deictic expressions:

i.  locative expressions such as It. *qui* and *là* (cf. for instance Salvi 2013: 110), Fr. *ici* and *là*, E. *here* and *there*

ii.  temporal expressions such as It. *ora, allora* as well as *ieri, oggi, domani* (cf. Salvi 2013: 112); the same claim is made for E. *yesterday, today, tomorrow, tonight* (see Huddleston & Pullum 2002: 564) and will be extended to Fr. *hier, aujourd'hui, demain, maintenant, alors* and E. *then*

iii.  modal expressions such as It. *così* (Salvi 2013: 110), Fr. *ainsi* and E. *so*.

These expressions are pronouns, and thus project NPs rather than AdvPs based on a bundle of peculiar syntactic properties. Firstly, as shown in (21), these forms can be paraphrased by a full lexical PP. The syntactic status of expressions such as *qui, ici* and *here* as pronominal heads of NPs is determined based on the fact that *qui* etc. can be preceded by a preposition (22), while genuine adverbs cannot (cf. *⋆da lontanamente*). Secondly, besides the possibility of functioning as adverbials, expressions such as It. *qui, oggi* and *così*, Fr. *ici, aujourd'hui* as well as E. *here, today* and *so* can also be used as verb arguments associated with different syntactic functions (Salvi & Vanelli 2004: 180). They can occur as subjects (in Italian, the subject can be omitted: *è piacevole* '[it] is pleasant') as in (23) and (24); subject predicatives (25); or complements, as in (26) and (27).

(21)  ***Qui** [= in questo posto] si sta bene. / **Ici** [= à cet endroit] on se sent bien. / **Here** [= in this place] I feel well.*

(22)  ***Da qui** si vede tutto. / **Depuis ici** on voit tout. / **From here** we can see everything.*

(23)  ***Oggi** è il più bel giorno della mia vita.* (ex. from Salvi & Vanelli 2004: 180) 'Today is the best day of my life.'

(24)  ***Yesterday** was the first day for weeks that it hasn't rained.* (ex. from Huddleston & Pullum 2002: 564)

(25)  *Sono **qui**. / Je suis **ici**. / I am **here**.*

(26)  *Ha detto **così**.* (ex. from Salvi 2013: 113) */ She said **so**.*

(27)  *Aspetto **domani** con grande ansia.* (ex. from Salvi & Vanelli 2004: 180) Lit. 'I await tomorrow with great anxiety'.

Following from this view, we consider constructions such as (28) to be adverbial clefts with a cleft adverbial realized as a pronominal NP:

(28)  a.  *It's **yesterday** that they arrived.*

   b.  *È **qui** che si sta bene. / C'est **ici** que je me sens bien. / It's **here** that I feel well.*

## 2.3   Cleftable adverbials

Having determined how we use the concept of *adverbial*, it is important to say a few words about the categories of adverbials that can be used as CCs. It is a well-known fact that only certain adverbial categories can be clefted (cf. already Lees 1963: 371ff. and Greenbaum 1969: 23 for English; Nøjgaard 1992 and Moliner & Levrier 2000 for French; Pecoraro & Pisacane 1984 and Lonzi 1991: 369–370 for Italian). However, from the literature at hand it is not all too clear what parameters are at play. For space reasons, in what follows, we will mainly discuss the proposal made in Greenbaum 1969 and Hasselgård 2010 for English (for a discussion based on French, see De Cesare in press).[7]

For Hasselgård (2010: 152), following Quirk et al. (1985: 504), the only adverbial class that can be clefted is the one she refers to as *adjunct adverbials* (called circumstantial adverbials in Biber et al. 1999: 131), which are characterized by the fact that they "contribute to referential meaning" (Hasselgård 2010: 19).[8] According to Hasselgård's 2010 findings, within the adjunct adverbials class, six semantic categories appear in clefts, the first being by far the preferred one (see Hasselgård 2010: 153, Table 7.1):

i.   time adjuncts, such as (29) and (30), which account for 41% of the total amount of cleft adverbials (for French, see Carter-Thomas 2009: 142)
ii.  space adjuncts (22%)
iii. manner adjuncts (14%)
iv.  respect adjuncts (10%), a class that specifies "a circumstance of the action which is neither temporal nor spatial, though they often consist of a spatial expression used metaphorically" (Hasselgård 2010: 28)
v.   contingency adjuncts (8%), which can be elicited by the question *why* and express causal, purpose, result, conditional and concessive relations (Hasselgård 2010: 27)
vi.  situation adjuncts (6%), which "refer to spatiotemporal location and are thus closely related to both time and space position adjuncts" and which "characteristically refer to a location in time and space simultaneously" (Hasselgård 2010: 30).

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**7.**   Relevant observations on this issue can be found in studies that propose a classification of the category of adverbials/adverbs. In classifying adverbials/adverbs, clefts are used as a test to pin down different properties of adverbials/adverbs (cf., e.g. Nøjgaard 1992: 33).

**8.**   As shown for instance in Hasselgård (2010: 22, Table 2.1), the category of adverbials is not subdivided in the same ways in English grammars. This is of course also true if we compare the classification of adverbials proposed on the basis of English, French and Italian. Moreover, the labels used to refer to the subgroups of adverbials can also vary quite significantly. In light of the different proposals made in the literature to classify and label adverbials, we chose to take Hasselgård 2010 as our main descriptive reference point.

(29)   *Maybe just that it's **this week** that uhm there aren't enough people around.*
<div align="right">(ex. from Hasselgård 2010: 152)</div>

(30)   *And it was **then** that he felt a sharp pain.*     (ex. from Hasselgård 2010: 154)

By contrast, neither disjuncts (stance adverbials in Biber et al. 1999: 131), which convey "the speaker's evaluation of something in the proposition" (Hasselgård 2010: 19) nor conjuncts (linking adverbials in Biber et al. 1999: 133; on the definition of this category, see again Hasselgård 2010: 19), which mainly have text-organizing and connective functions, can be clefted. Consider the following ungrammatical examples with the disjuncts *certainly / annoyingly / foolishly / admittedly* and the conjunct *nevertheless*:

(31)   *\*It was **certainly / annoyingly / foolishly / admittedly** that they left early.*
<div align="right">(ex. from Greenbaum 1969: 119)</div>

(32)   *\*It was **nevertheless** that they asked for it.*     (ex. from Greenbaum 1969: 42)

From this account, it would seem that the main parameter allowing an adverbial to function as the CC of a cleft is the nature of its semantic content: An adverbial can function as the CC of a cleft only if it conveys denotational (referential) meaning, i.e. if it participates in linguistically encoding an event. By contrast, non-denotational meanings, such as the speaker's comment on a proposition (conveyed by disjuncts) or the linguistic instructions given in the process of connecting two propositions (conveyed by conjuncts) are excluded as CCs. This view, however, does not hold if we consider examples (33b) with the disjuncts *nominally / officially / technically*. With respect to (33a), what allows the disjuncts in (33b) to function as CCs of a cleft sentence is the mere fact that they are modified by the restrictive adverb *only*:

(33)   a.   *\*It was **nominally / officially / technically** that discussions opened today.*
       b.   *It was **<u>only</u> nominally / officially / technically** that discussions opened today.*
<div align="right">(ex. from Greenbaum 1969: 118)</div>

Thus, in examples such as (33) is it obvious that the possibility of functioning as the CC of a cleft sentence does not depend solely on the semantic category of the adverbial. This view is further confirmed by the fact that not all adjunct adverbials can be clefted. Examples (34) and (35) show that there are restrictions even in the same semantic category: Both *often* and *usually* are habitual temporal adjunct adverbials, yet only the first one can function as the CC of a cleft. According to Greenbaum (1969: 179), what makes *often* acceptable in (34) and *usually* not acceptable in (35) is the fact that the former is more integrated in the clause than the latter.[9]

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9.   The different degree of integration of these adverbials can be further described by taking into account the different structural positions they occupy in the hierarchy of clausal functional projections. Cinque (1999: 90–93, 106) shows that *usually* (a habitual adverb occurring in AspP) occurs in a higher structural position than *often* (a repetitive/frequentative adverb).

(34)   *It was **often** that John replied politely.*          (ex. from Greenbaum 1969: 21)

(35)  *\*It was **usually** that John replied politely.*          (ex. from Greenbaum 1969: 21)

In addition to semantic criteria, the cleftability of adverbials thus also depends on their syntactic properties, in particular their degree of integration in the clause, which is measured on the basis of their link to the verb or predicate (cf. Molinier & Levrier 2000: 44ff.). When an adverbial can be clefted, it happens because it is tightly connected to the verb of the subordinate clause, i.e. it is part of the VP (Nøjgaard 1992: 33).

## 3.   Adverbials in Italian, French and English clefts: Corpus findings

Having defined how we use the notion of *adverbial*, in this section we describe the methods and data used in this study (§ 3.1) and report on our corpus findings by offering a comparative analysis of adverbial clefts in Italian, French and English (§ 3.2.).

### 3.1   Methods and data

#### 3.1.1   *Corpus*
The corpus used in this study has been extracted from a larger comparable corpus (called ICOCP; see De Cesare et al. 2014: 52–62 for a detailed description of this data collection). Table 1 specifies the general design of the corpus, which includes three sub-parts:

**Table 1.**  Corpus size (number of words)

| Italian | ± 315,000 |
|---------|-----------|
| French  | ± 262,000 |
| English | ± 335,000 |

Our corpus can be described as a comparable collection of written news comprising articles published in electronic Italian, French and English daily national newspapers. As can be observed in Table 2, the websites chosen as sources for our data collection include the most visited and popular online newspapers:

**Table 2.**  Sources of news items

| Italian | repubblica.it; corriere.it; lastampa.it; ilsole24ore.com |
|---------|----------------------------------------------------------|
| French  | lemonde.fr; lefigaro.fr                                   |
| English | theguardian.co.uk; independent.co.uk                     |

The choice of working with electronic news can be justified in at least three ways. First of all, written media can be conceived of as a good source for investigating the standard variety of different languages. Second, from a practical point of view, electronic news items are easy to collect. Thus, creating a corpus of electronic news items is relatively easy, especially compared with the creation of a corpus of printed news items (which are not free). Finally, and importantly, from a methodological point of view, we wanted to construct a multilingual corpus of written texts that was as comparable as possible. The texts of our corpus can be considered highly comparable as (i) they were mostly collected during the same period of time (the last quarter of 2011[10]); (ii) they were extracted from the same or similar thematic sections of the news (we considered national, regional and international news from the following sections: politics, sports, economy/business, science and technology).[11] As a result, the corpus is relatively homogeneous in terms of its content.

There are some differences in the size of the data collected in the Italian, French and English subparts of the corpus. The English and Italian subparts are slightly larger than the French one. Moreover, the Italian subcorpus includes a wider selection of newspapers and is broader than the other two subparts in terms of the thematic areas covered. We will keep these differences in mind when reporting on our findings and provide relative frequencies when describing quantitative data.

### 3.1.2 *Corpus query*

In Italian, French and English, adverbial clefts can be outlined as shown in (36):

(36) IT: ø + [*essere*] + adverbial [AdvP, NP, PP, CP] + cleft clause (introduced by *che*)
FR: *ce* + [*être*] + adverbial [AdvP, NP, PP, CP] + cleft clause (introduced by *que*)
E:  *it* + [*be*] + adverbial [AdvP, NP, PP, CP] + cleft clause (introduced by *that/ which/ø*)

There are obvious structural differences between the three languages: While French and English adverbial clefts are always opened by a pronoun (Fr. *ce*, E. *it*), Italian adverbial clefts are opened directly by the copula. This difference is of course due to the fact that Italian is a null-subject language, while French and English are

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10. The only exceptions are the texts drawn from the online dailypaper independent.co.uk, which were gathered as an extension of the British English corpus between November 2014 and February 2015.

11. Since the journalistic styles and traditions are very different in Italy, France and the UK, it is not always straightforward to choose truly comparable news sections. For instance, the British section "environment" (featured in both guardian.co.uk and independent.co.uk) only has a direct parallel in some French dailies (cf. the section "planète" in lemonde.fr). In Italian newspapers, this section partially overlaps with other sections (such as "cronaca").

not. In turn, Italian adverbial clefts always involve the complementizer *che*, while French uses *que* and English *that* (or, more marginally, *which* and the zero complementizer[12]). Thus, based on the obligatory and invariable components of adverbial clefts in the three languages, we searched the corpus for the items given in Table 3.

**Table 3.** List of query words

| | |
|---|---|
| ICOCP_Italian | *che* 'that' |
| ICOCP_French | *ce* / *c'* 'it' |
| ICOCP_English | *it* |

Since we also intend to compare the frequency of adverbial clefts in the three languages with the frequency of subject clefts, we additionally searched for the Italian form *a*, which is used in Italian implicit clefts (cf. *È Stella a leggere Kant* 'it is Stella who reads Kant'; as already mentioned in § 1., the preposition *a* can only introduce a subject cleft).[13] Also note that, contrary to what is sometimes claimed in the literature, we do not consider syntactic structures such as (37) to be adverbial clefts because their status as clefts is doubtful. In our view, structures such as (37) are predicational constructions involving an implicit subject (*[questa] non è la prima volta che…*) or an anaphoric pronoun (see the English translation).

(37)　***Non è la prima volta*** *che il centro di accoglienza viene dato alle fiamme.*

(repubblica.it, 20.9.2011)

'This/It is not the first time that the immigration center has been burnt.'

### 3.2　Corpus findings: Italian, French and English

#### 3.2.1　*Frequency of adverbial clefts*
In Table 4, we first offer an overview of the distribution of cleft sentences in the Italian, French and English subparts of the corpus:

**Table 4.** Frequency of cleft sentences (absolute frequency and, in parentheses, normalized frequency per 100,000 words)

| | Italian | French | English |
|---|---|---|---|
| Total clefts | 143 (**45**) | 158 (**60**) | 87 (**26**) |

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**12.** As in, e.g., *it was then Ø I saw the clipboard* (guardian.co.uk, 27.10.2011). In our data, this is the only example with a zero complementizer in an adverbial cleft.

**13.** The Italian implicit subject cleft has no direct equivalent in English and French. For a more detailed description of this cleft type, refer to Roggia (2009: 33–34).

Comparing the normalized frequencies of cleft sentences across the three languages suggests that (i) clefts are more frequent in French than in the other two languages (which confirms a well-known fact already supported empirically in other studies; cf. among others Dufter 2009 and De Cesare et al. 2014: 81), and (ii) English clefts are much less common than in French or even Italian (as already pointed out in De Cesare et al. 2014: 81).

However, if we consider the distribution of subject and adverbial clefts within our corpus, the three languages show similar behavior (as confirmed by the non-significant result of the statistical test; see data in parentheses):

**Table 5.** Frequency of subject, adverbial and complement clefts (absolute frequency and percentages. Pearson's Chi-Square test, $\chi^2_{(4)} = 6.8$, $p = 0.14$)

|                    | Italian    | French     | English    |
| ------------------ | ---------- | ---------- | ---------- |
| Subject clefts     | 93 (65%)   | 94 (60%)   | 61 (70%)   |
| Adverbial clefts   | 37 (26%)   | 43 (27%)   | 23 (26.5%) |
| Complement clefts  | 13 (9%)    | 21 (13%)   | 3 (3.5%)   |

Subject clefts are the most widespread type of cleft sentence observed in the corpus. The second most widespread cleft type are adverbial clefts, which account for roughly a quarter of all cleft sentences in Italian, French and English. The other types of clefts, namely direct and indirect object-clefts (complement clefts) are overall relatively marginal.

### 3.2.2 Syntactic categories of the cleft constituent in adverbial clefts

Table 6 reports the data found in our corpus regarding the syntactic category of the CC in Italian, French and English adverbial clefts:

**Table 6.** Syntactic category of cleft adverbials (absolute frequency and percentages; Fisher's exact test, $p = 0.01$)

|       | Italian   | French    | English   |
| ----- | --------- | --------- | --------- |
| PPs   | 26 (70%)  | 27 (63%)  | 16 (69%)  |
| CPs   | 0         | 6 (14%)   | 5 (22%)   |
| NPs   | 11 (30%)  | 8 (19%)   | 2 (9%)    |
| AdvPs | 0         | 2 (4%)    | 0         |

As seen in Table 6, there are some similarities between Italian, French and English adverbial clefts, especially concerning the syntactic categories PP and AdvP. In particular, cleft PPs, as illustrated in examples (38) to (40), are by far the most frequently occurring type of CC in the three languages:

(38)   [PP_IT] *E' **per questo** che le organizzazioni criminali italiane cercano di taroccare le partite di serie A [...].*                    (repubblica.it, 25.09.2011)
'It is for this reason that Italian criminal organizations are trying to alter the results of the A series soccer games'

(39)   [PP_FR] *C'est d'ailleurs **pour cela** que nous proposons des prépas gratuites en ligne depuis la rentrée 2012.*               (lefigaro.fr, 21.08.2012)
'It is for this reason that we have been offering free online preparatory classes since the beginning of the school year 2012'

(40)   [PP_EN] *It's only **with hindsight** that you realise just how influential it was in terms of setting things up for the digital future.*          (independent.co.uk, 25.01.2015)

On the other hand, cleft AdvPs such as Fr. *dehors* 'outside' in (41) are the most marginal forms of CC used across the three languages. We only found two cases in French (besides the case given in (41), there is one instance of *jeudi* 'Thursday'); there is no occurrence in Italian and English. The rarity of AdvPs used as CC is a rather surprising finding, since adverbials are typically realized as adverbs. At the same time, as outlined in § 2.2, we have considered the syntactic category of expressions such as It. *allora*, Fr. *alors* and E. *then* in clefts such as (42) to (44) as projecting NPs rather than AdvPs. This resulted in changing the category of 6 occ. in Italian, 6 occ. in French and 2 occ. in English.

(41)   [AdvP_FR] *c'est **dehors**, en ville, qu'il faut chercher*    (lemonde.fr, 26.10.2011)
'it's outside, in town, that one must look'

(42)   [NP_IT] *Tornando alla recente instabilità globale dei prezzi degli alimenti, la morsa della crisi finanziaria internazionale sembra essersi stretta attorno al mercato delle materie prime in seguito alla crisi dei mutui subprime nel 2008. E' **allora** che, spiega la fisica indiana, "**grandi investitori hanno abbandonato il mercato immobiliare**".*                    (corriere.it, 19.10.2011)
'Coming back to the recent global instability of food prices, the raw materials market seems to be caught in the grip of the international financial crisis following the 2008 subprime mortgage crisis. It was then that, as the Indian physicist explains, "big-time investors abandoned the real estate market"'

(43)   [NP_FR] *En juillet 2009, Rossen Plevneliev entre au gouvernement, chargé du développement régional et des chantiers publics. **C'est alors seulement qu'il découvre**, assure-t-il, **le niveau de corruption, la concurrence faussée, les chantiers abandonnés en milieu de projet.***             (lemonde.fr, 28.10.2011)
'Rossen Plevniev became a member of the government in July 2009, when he was appointed to regional development and public construction sites. It was only then that he discovered, he assures us, the level of corruption, unfair competition and abandoned construction sites right in the middle of a project'

(44) [NP_EN] *"But while you're here…"* **It was <u>then</u> I saw the clipboard and the RSPCA logo on her T shirt, and realised they were "chuggers".**

(guardian.co.uk, 27.10.2011)

We turn now to the differences (which are statistically significant[14]) between Italian, French, and English adverbial clefts. Table 6 shows that these differences concern two other syntactic categories, namely CPs and, to a lesser extent, NPs. Interestingly, while clausal constituents (CPs) are avoided in Italian adverbial clefts (we found no example in the corpus), they are far from being marginal in both French (14%) and English (22%; it is in fact the second most commonly occurring CC in adverbial clefts). Here are two representative examples from our corpus:

(45) [CP_FR] *C'est seulement **après avoir emménagé** que les nouveaux propriétaires ont réalisé que la maison était humide et inondable!*     (lefigaro.fr, 19.12.2011)
'It is only after moving that the new owners realized that the house was damp and prone to flooding!'

(46) [CP_EN] *It was **after Luke was sent to prison** that Marie found out she was pregnant.*                                              (theguardian.co.uk, 2.09.2011)

In turn, CCs realized as NPs are more common in Italian (30%) than in the other two languages (where they amount to 19% of the total clefts in French and 9% in English). While French and English adverbial clefts on an NP involve an anaphoric expression such as ***alors*** and ***then***, as illustrated in (43) and (44), respectively, Italian employs an additional type of cleft, called *scissa spuria* (lit. 'spurious cleft'), illustrated in (47) to (49). This is an idiosyncratic type of "temporal" cleft, which is not documented in English but which is fairly frequent in (spoken) Italian, even in our corpus (there are 5 occ. of this kind, making up half of Italian adverbial clefts on an NP).[15] Italian spurious temporal clefts show peculiar syntactic features. As can be

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**14.** It is necessary to point out, though, that the total number of occurrences found in our corpus is rather low and it is therefore hard to draw generalizations from these data.

**15.** There is no one-to-one equivalent of "spurious" clefts in French and English (cf. D'Achille, Proietti & Viviani 2005: 258). In Lambrecht (2001: 500), one finds a discussion on an English temporal cleft called *since*-cleft (cf. *it's been forty years since the FDA authorized the birth control pill*). However, *since*-clefts do not have the same meaning as the Italian spurious temporal clefts. Italian spurious clefts are best translated by English sentences involving the *present* (or *past*) *perfect progressive* and the preposition *for* (cf. the translation of examples (47) to (49)). As far as French is concerned, the closest equivalent to Italian spurious clefts is the structure "cela/ça fait X jours/mois/ans, etc. que", which is also a bipartite structure expressing a durative meaning. This structure, however, differs from "true" cleft sentences in important ways: The expletive subject is not *ce/c'* and instead of the copula one finds the verb *faire*. For these reasons, we will not consider such structures any further.

observed in (47) to (48), they display the pattern '*sono* N (= *anni, giorni* etc.) *che…*', lit. '[ø] are N (= years, days, etc.) that…' or, as shown in (49), involve the pronoun *molto*, which is to be understood as *molto tempo*, 'a long time'. However, as shown in (50), in the corresponding non-cleft agnate clause, the presence of a preposition is required (on the syntactic properties of Italian *spurious clefts*, see Benincà 1978 and Roggia 2009: 32–33 as well as De Cesare 2017: 541):

(47) [NP_IT] *Del resto sono **anni** che sui suoi strafalcioni si dilettano anche i giornali locali.*  (corriere.it, 24.11.2011)
'After all, even local newspapers have been joking about her blunders for years'

(48) [NP_IT] «*sono **ormai giorni** che la Lega Nord chiede al presidente Mario Monti di intervenire in Parlamento […]*».  (corriere.it, 02.12.2011)
'The Lega Nord party has already been asking Prime Minister Mario Monti for a Parliament speech for days'

(49) [NP_IT] *Oggi lo scienziato ha ritirato il premio Ig Nobel per la Biologia con il giusto umorismo: "Era **molto** che me l'aspettavo, perché ci avete messo così tanto?"*
(repubblica.it, 30.09.2011)
'Today the scientist collected the Ig Nobel prize for Biology with the appropriate sense of humor: "I have been waiting for this for a while. Why did it take you so long?"'

(50) [NP_IT] *sui suoi strafalcioni si dilettano **\*anni / da anni** anche i giornali locali.*
'Even local newspapers have been joking about her blunders for years'

### 3.2.3 Semantic categories of the cleft constituent in adverbial clefts

In Table 7, we show the distribution of the semantic categories associated with the CC in Italian, French and English adverbial clefts. As we can observe, four main semantic categories are represented cross-linguistically, namely time, space, cause (that are part of the contingency adjunct category of Hasselgård 2010's classification) and manner.

**Table 7.** Semantic categories of cleft adverbials (absolute frequencies and percentages; Fisher's exact test, $p = 0.95$)

|  | **Italian** | **French** | **English** |
|---|---|---|---|
| Time | 12 (32%) | 17 (40%) | 9 (39%) |
| Space | 9 (24%) | 8 (18.5%) | 5 (22%) |
| Cause | 8 (22%) | 6 (14%) | 3 (13%) |
| Manner | 8 (22%) | 11 (25.5%) | 6 (26%) |
| Domain | 0 | 1 (2%) | 0 |

In contrast to what we observed on the syntactic category of the CC in adverbial clefts, at first glance there is much more homogeneity regarding the semantic categories associated with the CC in Italian, French and English adverbial clefts (this first impression is also confirmed by the non-significant result of the statistical test). Cleft time adverbials, as illustrated in the three examples below, are by far the most frequent semantic category found in our corpus (cf. also the data presented in Carter-Thomas 2009 for French and Hasselgård 2010: 153 for English). In all three languages, this semantic category roughly accounts for a third of the data. A closer look at the types of time adjuncts found in our corpus reveals further striking similarities between Italian, French and English as well as an important cross-linguistic difference. First, in none of the three languages did we find instances of time frequency adjuncts, which "indicate the frequency with which the action denoted by the verb occurs" (Hasselgård 2010: 153). Moreover, while French and English clefts always involve what Hasselgård (2010: 25) calls time position adjuncts, i.e. adjuncts that "establish a temporal location for a situation or an event, which may be a point or a period in time", in Italian another semantic category is equally well represented in the data. Besides time position adjuncts such as (51), Italian employs in half of the cases duration adjuncts, which indicate a stretch of time, in particular by denoting the whole period of time (see again Hasselgård 2010: 25). In Italian, this semantic subcategory of time adjuncts is represented by the so-called *scisse spurie*, illustrated in examples (47) to (49), which do not have a direct equivalent in French and English (see § 3.2.2.; and footnote 15).

(51)   [TIME_IT] *E' **in questa seconda fase** che Jobs dà il meglio di se stesso in tutti i campi.*                                                    (repubblica.it, 06.10.2011)
'It is in this second period that Jobs gives his best in every field'

(52)   [TIME_FR] *c'est **au cours du quinquennat de Nicolas Sarkozy** que le Sénat a basculé à gauche pour la première fois.*            (lefigaro.fr, 29.09.2011)
'It was during the presidency of Nicolas Sarkozy that the Senate turned to the Left for the first time'

(53)   [TIME_EN] *Recognising the added value to people of wages over benefits might mean a living wage for all, rather than complex tax credits, for example. Indeed it is **at times of financial constraint and limited resources** that these rights best prove their worth.*                                     (guardian.co.uk, 28.10.2011)

The other three semantic categories of cleft adverbials occur with a similar frequency. This is especially true for Italian: In our corpus, space (54), cause (55) and manner (56) adverbials are distributed very equally.

(54) [SPACE_IT] *E' **qui*** [sull'altro lato della strada, dove si trova l'abitazione di Ida Lagrutta, del marito e dei due figli] *che ieri mattina molte persone hanno voluto attendere l'uscita dei familiari.* (lastampa.it, 20.11.2011)
'It is here [on the other side of the street where one finds the house of Ida Lagrutta, her husband, and her two children] that yesterday morning many people wanted to wait for the relatives to exit'

(55) [CAUSE_IT] *Dal 2001 al 2011 amministratore delegato e oggi presidente di Google, Schmidt è un tecnico – si direbbe in gergo politico – o più semplicemente un ingegnere col pallino degli affari, che da Sun Microsystems è passato a Novell, dove ha potuto assaggiare la sconfitta al termine di un lungo braccio di ferro col gigante e concorrente Microsoft. E forse **è** <u>**anche per questo**</u> **che non solo è stato chiamato a guidare Google, ma a far parte del consiglio di amministrazione di Apple nell'agosto del 2006.*** (repubblica.it, 6.10.2011)
'CEO of Google from 2001 to 2011 and afterwards its president, Schmidt is a technician, one would say in political jargon, or more simply an engineer who has a bent for business, moving from Sun Microsystems to Novell, where he could sense defeat after a long standoff with the rival giant Microsoft. It is perhaps also for this reason that he has been appointed not only to lead Google but also to be part of Apple's Board of Directors in August 2006'

(56) [MANNER_IT] *È **così** che il neo presidente intende rispondere alla Bce.*
(lastampa.it, 18.11.2011)
'It is this way that the newly elected president wants to answer to the BCE'

The data provided in Table 7 also show that space and manner adverbials are distributed fairly equally in French and English, too.

(57) [SPACE_FR] *C'est **là*** [à Valmorel] *que le groupe construit ses premiers chalets vendus à des investisseurs privés.* (lefigaro.fr, 10.12.2011)
'It's there [in Valmorel] that the group built its first chalets sold to private investors'

(58) [SPACE_EN] *It was **at school, rather than at home,** that Marie had problems.*
(guardian.co.uk, 02.09.2011)

(59) [MANNER_FR] *c'est **avec la qualité** qu'on résiste à la concurrence.*
(lemonde.fr, 3.11.2011)
'It is with quality that we fight competition'

(60) [MANNER_EN] *She announced her decision in a column published today by Time.com. "I play for the love of the game," she wrote. "And it is **with that love in mind, and a new understanding of the true meaning of forgiveness,** that I will proudly return to Indian Wells in 2015."* (independent.co.uk, 04.02.2015)

On the other hand, French and English cause adverbials are less frequent than both space and manner adverbials in the same languages and cause adverbials in Italian. In the English subcorpus, we only find three instances of cause adverbials, all based on a PP, such as (61). As shown in Garassino 2014, the quantitative difference between Italian and English could be explained by the presence of a competing syntactic structure in English, namely the availability of reverse pseudo-clefts (or *that is wh-* constructions), illustrated in (62).[16]

(61)   [CAUSE_EN] *It is **through James Murdoch's lack of interest** that Wapping's tabloid excesses left News Corp's reputation in the mud.*
(guardian.co.uk, 11.11.2011)

(62)   [CAUSE_EN] *While you are dancing you don't talk about it – because if you are not going to stop, what possible value is there in letting [those thoughts] fester? **That's why** I would question research which only talks to people who are still working.*
(guardian.co.uk, 10.11.2011)

The lower frequency of cause adverbials in French than in Italian cleft sentences is rather puzzling, as it has been shown that this semantic category is very well attested in French clefts. In this language a wide array of forms are available to convey a causal relation between the content encoded in the subordinate clause of the cleft sentence and the preceding context: *c'est pour cela / ça que*; *c'est pour ce motif que*; *c'est pour cette raison(-là) que*; *c'est à cause de cela / ça que* (see Wienen 2006: 325, 335–349). In our data, we find four cause adverbials based on a PP (2 occ. of *pour cela*, 1 occ. of *à cause de cela* and 1 occ. of *pour ça*), such as (63), and two instances based on a clause opened by the subordinator *parce que* (see (64) and (65)). In both these instances, the cleft subordinate clause and the CCL are negated. Thus, as shown in (66), there is no possibility to use a non-cleft agnate sentence in this case. In Italian adverbial clefts, by contrast, causal relations are always expressed by means of a PP, such as (55) above. Interestingly, while Italian tends to use the proximal anaphoric pronoun in these expressions (*è per questo che*, lit. 'it's for this that', i.e. 'it's for this reason that' or 'this is why'), French prefers the distal form (*c'est pour cela que*, lit. 'it's for that that', i.e. 'it's for that reason that' or 'that's why').

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**16.** This kind of cleft is actually fairly frequent in the English section of the ICOCP corpus, where a survey conducted in Garassino 2014 has revealed 21 occ. per 100,000 words. However, unlike the present study, the survey was based on a different corpus (the independent.co.uk was not yet part of the corpus and the corpus examined at the time included other journalistic text genres).

(63)   [CAUSE_FR] *Les menaces du monde, je les méprise; ses faveurs, je m'en moque. Je ne crains pas la pauvreté, je ne désire pas la richesse ; je ne crains pas la mort, je ne désire pas vivre sinon pour vous faire progresser.* **C'est *à cause de cela* que je vous avertis de ce qui se passe.**                 (lefigaro.fr, 07.10.2011)[17]
'I despise the dangers of the world and do not care about its good things. I do not fear poverty, I do not desire its wealth; I am not afraid of death; I do not want to live, unless it is to make progress for you. It is because of that that I warn you about what is going on'

(64)   [CAUSE_FR] *Les économistes préviennent:* **ce n'est pas *parce que la guerre est finie* qu'elle ne nous coûtera plus rien.**                 (lefigaro.fr, 18.12.2011)
'The economists warn: it's not because the war is over that it will not cost us anything anymore.'

(65)   [CAUSE_FR] *Ce n'est pas* **parce que nous n'avons plus de candidat** *que nous n'avons plus de projet.*                 (lefigaro.fr, 13.11.2011)
'It's not because we no longer have candidates that we no longer have projects'

(66)   *La guerre ne nous coûtera plus rien pas parce qu'elle est finie.*
Lit. 'The war will not cost anything anymore not because the war is over.'

In the French corpus, we also find an additional semantic category of CC, the so-called domain adverbial (we adopt the term used in Diepeveen 2013), which refers to a functional class of modifiers that restrict the domain of applicability of a proposition and functions as "an orienter to the message. It orients the listener / reader to the message that is about to be perceived and provides a framework for the interpretation of that message" (see Fries 1995: 318 as well as Hasselgård 2010: 79, 255 on English; on French, cf. Molinier & Levrier 2000: 218–237). This example is quite interesting as domain adverbials are not always classified in the same way in the literature and thus are not always considered to be possible CCs.

(67)   [VIEWPOINT_FR] *Paradoxalement, c'est* **sur le plan écologique** *que ces constructions en bois doivent encore progresser.*                 (lefigaro.fr, 9.12.2011)
'Paradoxically, it's from an ecological point of view that these wooden constructions must still make progress.'

### 3.2.4   *Information structure of adverbial clefts*
As shown in the literature, adverbial clefts are closely associated to what Prince 1978 calls *informative presupposition clefts* and illustrates on the basis of Example (68), which occurs in discourse-initial position. Hasselgård (2010: 157) points out that 90% of the *it*-clefts analyzed in her study are of the type found in (68).

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17.   This text is a French translation of a homily by St. John Chrysostom in Greek.

(68)  *It was about 50 years ago that Henry Ford gave us the weekend*

(ex. from Prince 1978: 898)

Based on their syntactic differences alone, one might think that adverbial clefts differ from other type of clefts, above all from subject clefts, on both semantic and pragmatic grounds. In this last section of the chapter, we will see that (a) adverbial clefts can have the same information patterns as subject clefts, but show a clear preference for a certain type of information structure and (b) cross-linguistically, it is possible to observe both differences and similarities in the distribution of information patterns in the three languages.

Similarly to subject clefts, adverbial clefts can have three different kinds of information structure:

i.   a New CC and a given CCL (Type A)
ii.  a Given CC and a New CCL (Type B)
iii. a New CC and a New CCL (Type C[18]).[19]

Here are some examples of cleft Types A, B, and C, extracted from our English subcorpus:

(69)  *Munro has a style but, like Chekhov's, it is transparent. Her stories flow like conversation, or gossip, but the ease of their telling belies their sophistication.* **It's only on reflection that you see the complexity of their construction,** *where gossip is overlaid with interpretation larded with commentary, prompting further interpretation and so on.* (guardian.co.uk, 11.11.2011)

(70)  *This is a piteous and exposing process, and one which places a moral burden on the reader.* **And it is here that Didion's lack of humility comes back to haunt her,** *for by burdening the reader she is also making herself vulnerable to judgment.* (guardian.co.uk, 11.11.2011)

(71)  *A spokesman said: "Regrettably it is the size and weight which negates their retention in the collection.* **It is with sadness that they and the other pieces are being released**; *we have held them for the last 11 years hoping to find a way of displaying them, but without success."* (guardian.co.uk, 09.11.2011)

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**18.** On this type of cleft, cf. also Hasselgård (2010: 155–159).

**19.** For the sake of simplicity, this information structure classification relies only on referential givenness, i.e. the information status of the CC and the CCL in terms of New and Given (or Inferable) information. As noted by Dufter (2009: 101, footnote 11), such typology runs into difficulties when it comes to occurrences which display a Given CC and a Given (or New) CCL, but whose CC is clearly heavily stressed and contrastive. In similar cases, an analysis based on relational givenness, i.e. the partitioning of the sentence in Focus-Background and/or Topic-Comment (cf. Gundel & Fretheim 2004) also becomes necessary. Due to space constraints, however, we cannot offer a fine-grained analysis of other levels of information structure.

In Table 8 we offer the quantitative data from our corpus of adverbial clefts in Italian, French and English:[20]

**Table 8.** Information structures of adverbial clefts (absolute frequencies and percentages; Fisher's exact test, $p = 0.021$)

|        | Italian    | French     | English   |
|--------|------------|------------|-----------|
| Type A | 3 (8%)     | 10 (23%)   | 7 (30%)   |
| Type B | 26 (70%)   | 25 (58%)   | 7 (30%)   |
| Type C | 8 (22%)    | 8 (19%)    | 9 (40%)   |

The data provided in Table 8 show that adverbial clefts are associated with different information patterns across the three languages analyzed. At the same time, Type A clefts are less common than adverbial *informative presupposition clefts* (i.e., Types B and C taken together). Adverbial *informative presupposition clefts* are clearly more frequent than adverbial *stressed-focus clefts* (Type A), not only in English but also in Italian and French (in Italian: 92% vs. 8%; in French: 77% vs. 23%; in English: 70% vs. 30%). This result confirms the data provided in Hasselgård 2010, albeit in our data we find a lower percentage of Type B and C adverbial clefts taken together (a fact that could be due to both the empirical data analyzed and to the working-definition of adverbial adopted in this study).

   Moreover, if we consider Type B and Type C separately, the behavior of the three languages analyzed is partly different (as signaled by the result of the significance test): Italian and French show a strong preference for adverbial clefts with a Given CC and a New CCL (Type B), whereas English prefers all-New clefts (Type C). The differences in the frequency of Type B and C clefts also suggest that adverbial clefts are employed differently in the three languages. For instance, Type B clefts are mostly used to fulfill textual *cohesive* functions (cf. Berretta 2002) since a Given-New cleft can link two parts/sections of a text by providing a *natural* progression from old to new information. This textual function is the most represented in the Italian section of the corpus (see examples (38), (55) and (56)) and the French one (see (39)).

   In English, on the other hand, all-New clefts are more widespread (see examples (61) and (71), the latter occurring in text-initial position). Their main function is

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20. In order to assess the information status of the CC and the CCL, we chose to consider the journalistic text and paratext (headlines, summary etc.) as independent textual units (cf. Ifantidou 2009: 702). This choice has been relevant only for a few examples of our corpus. Consider for instance the following occurrence *c'est dans sa ville de Bordeaux que le numéro deux du gouvernement fête ce matin cet anniversaire* (lefigaro.fr, 14.11.2011), 'it is in his native town of Bordeaux that the second-in-command of the government is celebrating this anniversary this morning'. Although *Bordeaux* has also been mentioned in the paratext before, we labeled the CC as New because it is its first appearance within the body of the article.

obviously not to provide discourse cohesion, but instead to "inform the reader of information that he or she could or should be reasonably expected to know" (Birner & Ward 2009: 1181), if we accept the idea that the propositional content of the CCL, albeit New, is presented in the discourse as *taken for granted* (Prince 1978). A more specific subgroup of Type C, see (71), is used instead to emphasize a particular emotion or feeling (Hasselgård 2010: 163; see also Patten 2012: 209), but it is not frequent in our corpus (see also § 4.). Finally, Type A clefts seem to be mainly used in English to mark a contrast (cf. *at school* vs. *at home* in (69)); this function is less common in the other two languages (especially in Italian).

As a way of conclusion, we would like to make some brief remarks on the degree of conventionalization associated with adverbial clefts in general and in the three languages examined here in particular. Since Type B and C adverbial clefts are said to have a weak specificational meaning, if any (cf., among others, Declerck 1988: 236), it is not surprising that many scholars have considered adverbial clefts more "grammaticalized" than subject clefts and on the verge of acquiring new functions, in particular textual (cf. Berretta 2002) and interpersonal functions.[21]

The conventionalization of adverbial clefts is evident when we consider Type B clefts with a non-contrastive CC. By virtue of their information structure pattern, 'Given-New', these clefts can acquire new textual functions, ranging from discourse connectives (associated with the CC) to paragraph regulators, thus being involved in the organization of both rhetorical and thematic relations of the text (on these issues, cf. Berretta 2002: 19; Wienen 2006; Roggia 2009: 144–147). Cleft adverbials with a clear textual function are often short and express a causal rhetorical relation (cf. It. *è per questo che* and Fr. *c'est pour ça que*[22]) or serve to encapsulate consistent portions of text to introduce a new macro-Topic (Roggia 2009: 147). In light of the text type analyzed in this chapter, the high frequency of Type B occurrences in Italian and French does not come as a surprise. More surprising at first is the fact that Type B clefts are not so frequent in English.[23] This is likely due to the competition with

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21. As Patten (2012: 216–217) has noted for English, "the historical development of the *it*-cleft involves a change in perspective from what the hearer or reader knows to how the speaker feels". In this type of cleft, we observe a shift from denotational to subjective meaning, in line with Traugott's 1989 account of grammaticalization based on *subjectification*.

22. On adverbial clefts used as connective in French, see Wienen (2006; in particular 202–217), Lahousse & Lamiroy 2015 as well as Roubaud & Sabio 2015.

23. The data discussed by Dufter (2009: 104) show a very different situation, since "cohesive" clefts are claimed to be more frequent in English and French than in Italian. However, one has to consider that (a) the text type examined in Dufter 2009 is very different from ours and (b) Dufter's cleft types do not correspond to ours neither syntactically nor from an information-structural point of view.

reversed pseudo-clefts (*that's why/how/when* etc., cf. § 3.2.3), which fulfill similar textual functions to those observed in the case of Type B clefts (on this point, see again Garassino 2014).

The conventionalization of adverbial clefts is also very clear in the case of certain subtypes of Type C adverbial clefts, specifically the one involving a CC expressing an emotion (joy, pride, happiness, sadness, regret etc.; cf. It. *è con piacere che*; Fr. *c'est avec plaisir que*; E. *it is with honor, pleasure, fear*, etc.). This type of highly routinized clefts serve to put emphasis "on the emotional response" of the speaker/writer to the speech act performed in the CCL and beyond (see Patten 2012: 209; on these clefts in Italian, also see Korzen 2014: 240) and are used as a rhetorical strategy to gain the attention of the audience (cf. Wehr 2010: 208). It should be noted that, in our corpus, this type of adverbial cleft occurs only rarely (we only found one instance in the Italian and one instance in the English corpus, see (71)). The rarity of this type of cleft in our corpus is chiefly due to the fact that it is typical of planned, formal speech, where it tends to occur at the beginning of new stretches of text and work as a discourse opener.[24] In our corpus of journalistic texts, this type of cleft only occurs in quoted speech.

To conclude, adverbial clefts can be related to different functional or semantic layers of the utterance (as outlined, e.g., in Hengelveld 1990):

i.   denotation, also called representational level (cf. adverbial clefts denoting a time frame or a location, which are typically Type A);
ii.  discourse level (cf. adverbial clefts referring to a point in the discourse, which are typically Type B)
iii. interpersonal level (cf. adverbial clefts specifying the emotional setting or tone of the message to come, which are typically Type C).

This distinction is important as it correlates with different functional properties of adverbial clefts. In particular, the focalizing strength and functional type of adverbial clefts, i.e. contrastive or non-contrastive clefts, seem to be related to the three levels outlined above: For purely semantic reasons, (adverbial) clefts working at level (i) are more likely than those working at levels (ii) and (iii) to express a contrastive focus. However, the presence of a contrast cannot be excluded a priori for types (ii) and (iii) either and is highly dependent on the context.

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24. Surprisingly, though, this type of cleft is also rare in the Italian speeches delivered at the European Parliament, i.e. in a text type where it should be expected to appear with the greatest frequency (cf. Korzen 2014: 269 on the basis of data drawn from the EUROPARL corpus).

## 4.    Concluding remarks

Our empirical study on adverbial clefts in Italian, French and English has shown that there are both striking differences and similarities in the use of these clefts across the three languages in the corpus (online news). As expected based on the literature available on the subject, we found that adverbial clefts are more frequent in French than in the other two languages. Somewhat surprisingly, Italian adverbial clefts are more frequent than their English counterparts. At the same time, if we consider the frequency of these forms in relation to the total number of clefts in each language, we find that adverbial clefts are the second most frequent type of clefts after subject clefts and occur with the same frequency in each language (they roughly amount to a quarter of all cleft occurrences).

Adverbial clefts in Italian, French and English are also similar as far as the syntactic category of the CC is concerned. In our corpus, the most represented CC is expressed by a PP; the least represented by an AdvP. On the other hand, while CCs realized as CPs are less common in Italian than in French and English, CCs realized as NPs are more common in Italian than in the two other languages. Looking at the syntactic categories that can function as CCs in adverbial clefts, we also notice that French seems more flexible than the other two languages, as all the possible syntactic realizations are attested in our corpus.

As far as the semantic category of the CC is concerned, there is again at first glance a high degree of homogeneity in our data. In all three languages, the most frequently occurring type of CC is the one expressing time. However, while in French and English we only find time position adjuncts, in Italian we also find duration adjuncts (a category that accounts for the higher number of cleft NPs in Italian). Another important outcome of our empirical study is that we found an occurrence of a cleft domain adverbial in the French subcorpus, which is a semantic category of adverbial that is not always considered to be cleftable.

Finally, we have shown that while adverbial clefts can have different information structures in the three languages, they are in fact tightly connected with *informative presupposition clefts*. This type of cleft is particularly frequent in Italian and French.

All in all, our study shows that French adverbial clefts differ from Italian and English clefts. Not only are French clefts more frequent, but they are also more flexible in terms of the syntactic and semantic categories that are allowed as cleft adverbial. This observation is even more striking if we consider that the Italian so-called *scisse spurie* could in fact be considered a separate type of cleft sentence (cf. Benincà 1978; Roggia 2009). These findings can be explained by the fact that French clefts are more grammaticalized than the clefts used in the other two languages (on these issues, cf. Dufter 2009 and Lahousse & Lamiroy 2012). In order to confirm this conclusion, more research is needed, particularly on French and Italian.

## Acknowledgements

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# Cleft sentences in the history of French and English

## A case of pragmatic borrowing?

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This paper addresses the question of whether certain types of cleft constructions found in earlier stages of English can be interpreted as instances of pragmatic borrowing from French. According to Prince (1988) this type of borrowing can be assumed if (i) a syntactic form in the recipient language is construed in an analogous fashion to a syntactic form in the source language; (ii) the discourse functions of the syntactic form in the source language are borrowed and associated with the syntactic form in the recipient language. Based on a corpus study of Anglo-French (AF) and Middle English (ME) we will show that both languages exhibited a number of different types of cleft constructions some of which seem to have had similar, and some seem to have had different functions. By identifying the nature of clefts in AF as being ambiguous between clefts and predicative constructions, we will discuss in how far this ambiguity could be seen as an accelerating factor of contact-induced change leading to pragmatic borrowing into ME.

## 1. Introduction

It is a well-known fact that in intense language contact situations which often include bilingualism or multilingualism, the borrowing of linguistic units from the source language into the recipient language is a common feature. In these contact situations borrowing may occur on all levels of language: phonology, the lexicon, morphology, syntax, and semantics. There is a plethora of literature on the topic from a contemporary perspective (e.g. Heine and Kuteva 2005, Matras 2009), and to a certain degree also from a historical perspective (e.g. Weinreich 1953, Thomason and Kaufman 1988, Blake 1992, Baugh and Cable 2005). However, what has much less been taken into account is the possibility that borrowing may occur on the pragmatic level. In her 1988 paper Prince investigated pragmatic borrowing in

Yiddish and stated that it should be included as a further type of borrowing in language contact scenarios. For her, one language may borrow the discourse function of a particular syntactic form from another language. More precisely, (i) a syntactic form S2 in L2 (where L2 is the recipient language) may be construed by speakers as "analogous" to a syntactic form S1 in L1 (where L1 is the source language), and (ii) the discourse functions of S1 in L1 may then be borrowed into L2 and associated with S2 (Prince 1988: 505). In his study of pragmatic borrowing from English into Norwegian, Andersen (2014: 17–18) defines the notion more explicitly: "The influx of English is manifested at the pragmatic level by a variety of phenomena whose common feature is that they do not contribute to the propositional content of utterances, but act as constraints on the interpretation process due to their subjective, textual, and interpersonal pragmatic functions. Pragmatically borrowed items carry signals about speaker attitudes, the speech act performed, discourse structure, information state, politeness, etc.". Pragmatic borrowing may be illustrated with the following example from English of Guernsey:

(1)  It was always by the bus we went, because h'm […].             (13.250)
     St.E. We always went by bus […].                    (Ramisch 1989: 116)
     Modern French: *C'est toujours par bus que nous (y) sommes allés.*

The syntactic construction is a cleft construction modelled on French, more precisely on Guernésiais, the variety of French spoken on Guernsey. Thus, the syntactic form of the cleft construction has either been influenced by or even been borrowed from Guernésiais. If the discourse functions of the Guernésiais cleft had also been borrowed into the variety of English spoken on Guernsey, pragmatic borrowing would have occurred. The term "pragmatic borrowing" comprises both scenarios: Andersen (2014: 18) states that pragmatic borrowing can be "direct", when forms from the source language are borrowed, or "indirect", when extant material "takes on new discourse functions as a result of external influence".

    In Present-Day English (PDE) a typical example of a cleft construction (CC) is (2) a.:

(2)  a.  *It was the knight that slew the king.*
     b.  *The knight slew the king.*

The sentence is introduced by *it* which in the literature has been defined as an expletive subject. It is followed by a form of the copula *be* which in turn is followed by a full noun phrase (*the knight*) with the function of the subject in the sentence. The clause introduced by *that* is structured like a restrictive relative clause: it contains a gap in subject position and modifies *the king* in the superordinate clause (for a discussion on the problems of defining *it*-clefts in English see Higgins 1979, Ball 1994b, Patten 2012). By comparing (2) a. with b. we clearly see that both sentences

contain the same proposition without a change in truth conditions: *the knight slew the king.* What distinguishes clefts from normal complex clauses and justifies the bipartition is information structure (IS): in a. we have a bipartite structure where the first part contains a highlighted element (*the knight*), which is also called the focus, and the second part which is a relative clause or relative-like clause. For Collins (1991: 2) CCs are "identifying constructions, expressing a relationship of identity between the elements realized as the highlighted element and the relative clause" (for other definitions see Lambrecht 2001, Ball 1994b, Patten 2012).

We will not go deeper into definitions of focus here, but our analysis will show that different types of foci appear in CCs or in CC-like structures. These types are also discussed by Krifka (2007: 30–34) and can be considered as variations of the idea "that focus in general indicates the presence of alternatives for interpretation" (*ibid*), introduced in a more formal framework by Rooth (1985) as *presence of alternatives.*

The example above from Guernsey English reflects the language contact situation with French (Guernésiais) which has been prevailing for hundreds of years on Guernsey and the other Channel Islands. Apart from this type of borrowing, other types can be found, and thus this contact situation provides interesting insights into the potential of structural borrowing between a Germanic and a Romance language. It therefore also serves well to predict which instances of borrowing might be expected in a historical language contact situation between the two languages, under the assumption that the role speakers play in situations of contact can be evaluated irrespective of time. The historical contact situation under scrutiny in this paper is the one that arose between Anglo-French (henceforth AF, cf. also the Anglo-Norman On-line Hub, 2001), and Middle English (ME) in medieval Britain. We will investigate in how far pragmatic borrowing between the two languages can be assumed by taking a closer look at cleft constructions. Since the phenomenon under investigation is defined by the borrowing of discourse functions from the recipient language that are then assigned to syntactic constructions of the source language we clearly deal with some kind of structural borrowing. The paper therefore seeks to challenge the long-held view that the influence of French on English only affected the lexicon without having effects on the structure of English.

The outline of the paper is as follows: In Section 2, we will briefly outline the language contact situation between Anglo-French and Middle English in medieval Britain. In Section 3 we will introduce the terminology and classification used to define CCs and we will discuss the different types of CCs found in Old and Middle French by focussing on their ambiguous nature. Further, we will provide a comparative, corpus-based empirical study and address the topic of language contact: we will show how potential cases of pragmatic borrowing in Middle English are linked to the ambiguity of the French constructions available (clefts and predicatives). Section 4 concludes.

## 2.   Language contact in medieval Britain

As mentioned in the introduction, the historical language contact situation under investigation in this paper resembles the contact situation between English and French on the Channel Islands. Both are actually the result of one and the same political event: the conquest of England by the Duke William I of Normandy in 1066. Due to the loss by King John of the Norman mainland to France in 1204 the Channel Islands remained attached to the English crown although they were still part of the former Duchy of Normandy. For centuries, the speakers of the islands have been retaining their native language Norman French which, however, has been more and more influenced by English in the course of time. The situation arising on the British island was different in so far as the contact situation between English and French can be limited to the time span between 1066 and approximately 1500 (cf. Rothwell 1968, 1975, 1993, 2001). This has to do with the fact that with the conquest, a diglossic situation arose and prevailed as long as French power was predominating. As soon as the French power ceased, English gradually took over again. To be more precise, during this time span Anglo-French was first spoken and written by the new ruling class. Gradually it gained the role of an official language over Anglo-Latin, whereas (the many varieties of) Middle English, which remained the language of the masses, developed from being a predominantly spoken language to becoming the acknowledged national language, both in speech and writing in the 15th century. A considerable number of different text types like glosses in dictionaries, didactic texts (cf. Hunt 1991), poetic works by authors like Chaucer and Langland, laws, wills and accounting records (cf. Trotter 2000; Ingham 2010) reflect this multilingual situation: not only instances of lexical borrowing can be found but also instances of code-switching reflecting a high command of both languages. In recent years, a number of authors have dealt with multilingualism in medieval Britain (cf. Trotter 2000, Schendl and Wright 2011, Sebba et al. 2012, Jefferson and Putter 2013) and the role Anglo-French actually played (see especially the many publications by Ingham). These papers have fortunately contributed to a more adequate perspective on this contact situation than the by now outdated and partly unfounded claim that contact between English and French was not intense at all and merely resulted in the massive importation of loan words. For example, Ingham (2009) states that

> Although a belief in the adversarial nature of language choices-with French a language identified with Norman masters and English identified with the oppressed classes-has long been a staple of English language history, it is becoming clear that the relationship between French and English in the later medieval period was more a matter of complementarity. The two languages represented not differing communities with opposed interests, but choices available to those who possessed bilingual competence. (Ingham 2009: 107)

> Thus, if English and French were both spoken languages in later medieval England, bilinguals having command of both might reasonably be supposed to have mixed the two, to some extent. (*ibid,* 113)

In (3), two instances of inter-sentential code-switching (in the sense of Poplack 1980, Sankoff 1981 and Myers-Scotton 1993) are presented, which illustrate the multilingual proficiency these writers (speakers) must have had. Example (3) displays Latin-ME code-switching in a. and AF-ME code-switching in b.:

(3)  a.  *Þou most supplante and forsake al maner vices, **non ore set corde.***
         'You must supplant and forsake every kind of vice, not just by word but in the heart.'  (sermon *De celo querebant,* I.375–376, MS Bodley 649, Halmari and Regetz 2011: 133)

     b.  *"O Thomas, je vous dy, Thomas! Thomas! This maketh the feend; this moste ben amended."*
         '"Oh Thomas, I tell you, Thomas! Thomas! The fiend is doing this, that must be changed."'  (*Canterbury Tales* III.1832–1833, Putter 2011: 290)

In the following section we will address the question of how likely it is that pragmatic borrowing plays a role in intense contact situations like those found on the Channel Islands and in medieval Britain. To do so, we will first take a look at the types of CCs found in Modern French and the assumptions made in the literature about their development before we present our findings from corpora of OF, OE and ME.

## 3.  Clefts in French and English

### 3.1  The development of French cleft sentences

In written French (modern and medieval), CCs are ambiguous (Prevost 2009: 3):

(4)  *C'  est Paul qui est tombé? Non. C'  est **Luc qui** est tombé.*
     DEM is Paul REL is fallen? no DEM is Luc REL is fallen.
     'Is it Paul who has fallen? No, it is Luc who has fallen.'

(5)  *Qu'est-ce qui se  passe? C'  est  **Luc qui** est tombé.*
     what  is it that REFL happens? DEM is Luc REL is fallen.
     'What is happening? No, it is Luc who has fallen.'

Only in (4) *Luc* is in the focus domain: the structure indicates possible alternatives for *Luc* as defined by Rooth (1985)–hence the contrastive reading–and *Luc* is prosodically marked by an H* accent. The example in (5) is a presentative structure that introduces *Luc* as a topic, the pitch accent normally falls on the verb. Lambrecht

(2001: 467) uses the term *canonical sentence* for such a "logically equivalent, syntactically unmarked, noncleft counterpart of a cleft sentence". Thus, the ambiguity pertains to a syntactic structure which can express

a.   a predicative main clause with a referential anaphoric pronoun, and whose predicate is modified by a relative clause. A predicative construction is composed of two propositions, as in (5).
b.   a cleft construction in which the pronoun is non-referential, and where the predicate is not the copula verb in the "main" clause, but the predicate of the "subordinate" clause, which predicates over the focussed constituent. A cleft construction forms one single proposition, as in (4).

This ambiguity is still more problematic for the interpretation of early French, due to insufficient evidence of prosodic structure and insufficient knowledge about the conventionality of IS markers. Ambiguity is crucial for the diachronic perspective and probably the reason for the controversial opinions about the development of French clefts: Whereas some authors (Marchello-Nizia 1999; Combettes 1999) claim that clefts developed in the 13th century, favoured by the loss of V2, and spread in the 14th century, others, like Bouchard et al. (2007: 4ss), show that clefts occur as early as the 12th century, but then *ce* is more often a subject complement (fr. *attribut*) than a subject. In the same vein, Rouquier (2007) claims that there are "safe" 12th century occurrences, but she is uncertain with regard to ambiguous earlier examples cited in her conclusion. The ambiguity between focus structure and predicative structure goes back to Latin. Löfstedt (1966: 263) suggests that "determinative" expressions, i.e. with overt or omitted anaphoric pronouns, were the origin of CCs, and many Latin constructions were ambiguous, as shown in (6):

(6)   *non ego sum, qui te dudum conduxi*
                                       (Plaut. Merc. 758, quoted in Löfstedt 1966: 263)
        a.   'I am not the one who recently brought you (together)' [cf. *non ego* is sum]
        b.   It is not me who recently brought you (together)'

This is corroborated by the fact that Latin often built clefts with demonstrative pronouns (*Hic est, qui fecit*) and interrogative pronouns (*quis est, qui fecit?*) (Löfstedt 1966: 262). Clefting of these pronouns was more frequent than clefting of nominal phrases. However, clefted nouns were more frequent in popular variants of Latin (e.g. Petronius, *ibid,* 267–8). Löfstedt also adds (in note 26) that the grammaticalization was less advanced in Old French (OF)[1] than in later periods. Nevertheless,

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1.   Throughout the article we will use the term Old French to refer to all varieties, including Anglo-French and Anglo-Norman, which have been attributed to this time span.

even in the earliest French occurrences, these structures could already have the informative function of modern clefts, i.e., as Lambrecht puts it, "express a simple proposition via biclausal syntax" (Lambrecht 2001: 466). Lerch cites the case of the *Vie de de Saint Alexis* (around 1050, v. 104) *ço fut granz duel qued il en demenerent* 'it was great grief that they for it showed' (Lerch 1934: 228, quoted by Löfstedt 1966: 258). The in-depth analyses provided by Rouquier (2007, 2012) and Wehr (2005, 2012) confirm the existence of OF cleft structures (and lookalikes), and both authors insist on the methodological problem of identifying focus clefts, i.e. the distinction between the different types of clefts in historical texts. Wehr (2012: 312) also notes that the frequent occurrences in direct speech seem to associate cleft structures with spoken language.

## 3.2   Types of cleft sentences in Old and Middle French

We analysed cleft-tagged constructions (CP-CLF)[2] in nineteen Old and Middle French texts taken from the syntactically annotated corpus *Modéliser le changement: les voies du français* (MCVF, Martineau 2009).[3] It conforms to the structure of the *Penn Parsed Corpora of Historical English* used below and thus allows us to compare our findings cross-linguistically.

First, we verified if the ambiguities mentioned in the previous section also exist in the earlier periods of French. We adopted a classification of CCs suggested by several authors. Most of them agree that *stressed-focus clefts* (Prince 1978) may be considered as the prototypical CCs. Collins (1991: 111) classifies them as "Type 1" and sets them apart from "Type 2" and "Type 3" whose controversial status comes from variation in form (e.g. pronouns other than English *it* or French *ce)* or information structure (e.g. the clefted constituent not being a focus, or another type of focus).

One example of a "Type 1" cleft in PDE is:

(7)   *Thankfully, it is not the politicians who can lay claim to the distinction of having caused the greater loss of life.* **It is the earthquake that** *merits this dubious honour.*
                                                                              (Collins 1991: 113)

(7) is clearly an example of contrastive focus, opposing *the politicians* and *the earthquake.* In OF Type 1 stressed focus clefts, the focus can be on subjects (8), adverbials (9) or objects (10). In (8), the dialogue occurs on the cemetery, and the fact that it is the father who lies in the grave is clearly focussed (twenty lines earlier

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2.   *CorpusSearch* queries included the expression (CP-CLF* exists).

3.   The oldest text was the *Chanson de Roland* (1080), the latest text was Commynes' *Mémoires* (1491).

the protagonists had tried to find out who is in the grave, and in the immediately preceding context, the dame calls her son to tell him the news). Note that just like in ModF, the pronoun is a demonstrative *ce*. In Type 1 clefts, it is non-referential.

(8) *"Beaus fiz, fet ele, avez oï / Cum Deus nus ad menez*
beautiful son says she have.2.PL heard / how God us has guided
*ici? / C'est vostre pere ki ci gist / Que cist villarz*
here? / DEM is your father who here lies / which this villain
*a tort ocist.*
has wrongly killed
'My beautiful son, she says, did you hear how God led us here? It is your father who lies here, whom this villain wrongly killed.'
(MARIEF_LAIS,.2411-2, MCVF, ca. 1165)

In (9), the manner adverbial *par poor de mort* is in focus: the reason for the flight is emphasized, and an anaphoric interpretation of the pronoun *ce* is excluded:[4]

(9) *Par Dieu, fait ele, ce fu par poor de mort que je m' en*
By God, says she, DEM was by fear of death that I REFL of-it
*afoï ça*
fled here
'By God, she says, it is for fear of death that I fled from there to here.'
(QUESTE,80.2824, ca. 1220)

(10) is an example of the Middle French period (ca. 1320–1500) with a pronominal indirect object (*toy* 'you') in a contrastive focus:

(10) *Ce n'est pas a toy, dit elle aussi, que de prinsault ce*
DEM not is NEG to you, says she also, that first of all this
*doulx message s' adresse, combien qu' il te*
sweet message REFL addresses, how much that it you.ACC
*touche beaucoup.*
touches much
'It is not to you, she also says, that this sweet message is addressed to first of all, even if it touches you deeply.' (CNN,99.2004, MCVF, ca. 1450)

In the MCVF corpus, 31% of the CP-CLF annotated structures were focus elements according to our interpretation of the context. Focussed subjects and adverbials occur since the 12th century, direct and indirect objects occur first in the *Cent Nouvelles Nouvelles*.

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4. A problem of focussed adverbials is the function of the subordinate clause. It could be analysed as an adverbial clause or as a relative clause modifying *ce* (Muller 2003).

Collins's Type 2 clefts correspond to Prince's (1978) "informative-presupposition cleft". The clefted element is a topic, and the subordinate clause adds a comment, which is normally discourse-new. Type 2 clefts are anaphoric, they often pick up adverbial topics. Collins's example is:

(11)   *Another city to suffer the terrible vicissitudes of fortune in 1985 was Mexico City.*
       ***It was here that*** *an earthquake of unrivalled intensity struck during the month*
       *of September.*                                                    (Collins 1991: 114)

Our Example (12) shows that arguments can also appear in Type 2 clefts.[5]

(12)   *Ces      nouvelles  vinrent  a    la   roine   et   a    messire  Jehan  de*
       These news       came    to   the  queen  and  to   sir       John   of
       *Hainnau  que  li   rois  et   li   Espensiers  estoient  pris,   et    que*
       Hainnau  that  the  king  and  the  Espensiers  were     taken,  and   that
       ***ce   estoient  chil   qui*** *waucroient  par   mer  en  la  barge.*
       this  were      those  who  strayed      across  sea  in  the  ship
       'The news came to the Queen and to Sir John of Hainnau that the King and
       the Espensiers were caught, and that they were those who strayed across the
       sea in the ship.'                                              (FROISSART,89.1085)

Finally, Collins's Type 3 clefts combine a focus cleft with a subordinate clause expressing new content (they could also be called thetic or "all focus"). They typically occur at the beginning of a text or a text part. Type 3 is not particularly important for our case, and the distinction between types 2 and 3 is sometimes difficult: in (14) it is not clear if the adverbial is focussed or not. It is, however, clearly a CC, because the monoclausal paraphrase is possible. For Collins, example (13) is of this type:

(13)   ***It was in mid-September that*** *a natural disaster of unrivalled intensity struck*
       *the capital city of Mexico. Thousands of people were killed and large sections of*
       *the city reduced to rubble.*                                   (Collins 1991: 114)

(14)   *Si acoillirent leur chemin tuit troi ensemble, si ont tant chevauchié qu'il vindrent*
       *vers le chastel as puceles,*
       'They started their journey, they rode so far that they arrived at Pucelles castle…'
       ***et   ce   fu   celui  jor  meïsmes  que*** *li   chastiaux  fu    conquis*
       and  this  was  that  day  same      that  the  castle       was  conquered
                                                                  (QUESTE,53.1893)

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5.   Note that most of the clearly anaphoric cases do not have a cleft tag (CP-CLF) in the MCVF corpus. A distinction similar to Collins's Type 1/Type 2 might be the criterion for the assignment of the tag, but the documentation of the corpus does not make any explicit statements.

In a further step, we compared our frequencies of CCs given in Table 1 to those in Dufter (2008). Our data indicate a decrease of CCs between 1100 and 1400, and an increase in the 15th century. These frequencies differ from Dufter's diachronic study who-lacking syntactic annotation in the corpora he used-queried the surface structures "demonstrative + *être* + XP + relative pronoun". He distinguishes different types of clefts and states that Type 2 clefts do not occur before 1550,[6] and that Type 2 clefts are responsible for the increase of clefts in modern periods. He thus argues against Kroch's 1989 compensation hypothesis by emphasising that that the true rise of clefts occurs late, between 1500 and 1900, a long time after French lost V2, null subject properties and word accent.

**Table 1.** Cleft sentences (CP-CLF*) in OF/MF (MCVF)

| period | $f_{abs}$ | $f_{rel}$ | Σsentences |
|--------|-----------|-----------|------------|
| 12c | 21 | 0,0012470 | 16841 |
| 13c | 11 | 0,0009131 | 12047 |
| 14c | 12 | 0,0004846 | 24764 |
| 15c | 40 | 0,0021974 | 18203 |
| all | 84 | 0,0011690 | 71855 |

One reason for the fact that Dufter's frequencies are quite different from our findings in the 13th and 15th century may be the CP-CLF annotation in the MCVF corpus. We already pointed out this methodological problem above. In our view, the CP-CLF annotation in the Penn corpora reflects a difficult and therefore not always reliable interpretation of the data. This methodological problem can only be overcome if we refrain from relying on the syntactic interpretation (with respect to information structure) of the Penn corpus annotation. We therefore generalized our query and also searched for predicative constructions with a relative clause which is not CP-CLF tagged, i.e. "(subject) + copula verb + predicative + relative clause", where the subject is a pronoun or empty. These constructions are formally identical to clefts, the difference lies in their interpretation, i.e. the demonstrative is anaphorical (see Section 3.1). We use the abbreviation PRED+REL for these constructions and give some examples. In (15), the relative clause determines the predicative.[7]

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6. We found earlier occurrences, e.g. Example (12).

7. The exact *CorpusSearch* query string for this variant is:

```
(IP* idoms NP-SBJ) AND (NP-SBJ idoms PRO)
AND (PRO idoms [CcÇçZz][eio]|[CcÇçZz][eio].)
AND (IP* idoms NP-PRD*) AND (IP* idoms !CP-CLF*)
AND (NP-PRD* idoms CP-REL*).
```

In (16), the relative clause is extracted from the position under the demonstrative pronoun. Both structures can also occur with empty subjects.

(15) *Ço    ert   [np-prd  uns   reis   [CP-REL  qu'il       ocist   en  Denemarche]].*
     that  was      a    king       which  he  killed  in  Denmark
     'It was a king that he killed in Denmark'       (ROLAND,114.1500)

(16) *[Cil   [*ich*-1]]  sunt   vassal  [CP-REL-1  ki   les   oz      ajusterent].*
     those        are  vassals       who  the  armies  prepared
     'These are vassals that have prepared the hosts'      (ROLAND,258.3549)

These "PRED+REL" queries added 141 occurrences to the 84 CP-CLF tagged examples. They have the same surface structure but were not interpreted as CCs by the annotators. As noted above, for us the PRED+REL structures are just as relevant for our case because they are formally identical to clefts. Below we will come back to the function they may have played in the contact situation (Section 3.4).

## 3.3 The informative presupposition it-cleft in Old English

In this section, we are going to take a look at CCs in earlier stages of English and pursue the question of whether these constructions could have been borrowed from French in medieval times when contact between the two languages was most intense. Generally, we assume that as a consequence of this intense contact situation, apart from lexical borrowing, structural borrowing (see Thomason and Kaufman 1988) was a consequence. As mentioned in the introduction, concerning the case at hand we follow Prince (1988) who stated that pragmatic borrowing must be included as a further type of borrowing in language contact scenarios.

In the following, we will present data from OE and ME and discuss two CCs that could be analysed as instances of pragmatic borrowing: First, the informative presupposition *it*-cleft (Collins's Type 2 cleft), and second, the pronoun *it*-cleft (not associated with a particular type).

The data were extracted from the *York-Helsinki Parsed Corpus of Old English Prose* (Taylor et al. 2003). The corpus is a 1.5 million word syntactically-annotated corpus of Old English prose texts. It is a representative corpus and comprises 100 text samples based on the Diachronic Part of the *Helsinki Corpus of English texts.*

To make results comparable we searched for CCs using the tag CP-CLF. We gained a total of 85 clefts in all types of clauses. Strikingly, of these 47 cases are found in one text, Bede's *Ecclesiastical History of the English People* completed in about 731. He had access to a number of Latin sources, for example Orosius's *Adversus Paganus* (Pilch and Tristram 1979, Mitchell and Robinson 2003). In the literature, Latin influence on Old English CCs has been discussed (Löfstedt 1966, Ball 1994a,

Filppula 2009), and our results mainly corroborate what is said in these papers. Moreover, the text showing the second highest frequency of CCs (8) is another text based on a Latin original, the *Cura Pastoralis* which in the late 9th century was translated into Old English by Alfred the Great (Pilch and Tristram 1979, Mitchell and Robinson 2003).

The construction which Bede abundantly uses is the informative presupposition *it*-cleft/Type 2 cleft, sometimes also called "time cleft" (see Filppula 2009: 272, and Goria 2013 on the development of "time clefts" in Latin).

(17) *þa   wæs  fram  Cristes  hidercyme  hundteontig &   fiftig &   six*
 then  was  from  Christ's  advent       hundred      and  fifty and  six
 *gear, þæt  Marcus, oþre    naman Antonius, se    wæs feowerteoþa*
 year  that  Marcus  further  name  Antonius who  was  fourteenth
 *fram  Agusto   þam  casere,   se  onfeng   Romwara  rice     mid*
 from  Augustus the  emperor  he  received Roman    empire  with
 *Aurelia   his  breðer.*
 Aurelius  his  brother
 'In the year of our Lord 156, Marcus Antonius Verus, the fourteenth from Augustus, was made emperor, together with his brother, Aurelius Commodus.'
 (Bede_1:4.32.1.248)

The sentence is introduced by the OE temporal adverb *þa* 'then', the subject is left out, the preterite form of the verb *beon* follows, then the heavy constituent *fram Cristes hidercyme hundteontig & fiftig & six gear* denoting 'time' follows, which in turn is followed by *þæt,* the subject *Marcus* and the rest of the sentence. Filppula (2009: 272) notes that "[f]rom the semantic and pragmatic point of view, 'time clefts' clearly belong to the class of 'informative-presupposition' clefts by virtue of the fact that the *that*-clause represents new information to the reader, with the introductory part defining the temporal setting within which the event or action described in the subordinate clause is said to take place" (for different interpretations see Ball 1991, 1994b, for a full account of impersonals in OE see Haugland 2006). These examples are quite similar to the Type 2 Example (13) quoted from Collins.

An example showing an adverbial expression (not referring to time) in initial position comes from the *Cura Pastoralis:*

(18) *For ðæm       wæs eac  ðætte Sanctus Petrus ærest towearp   ðæt*
 for  that-reason  was  also  that  S.      Peter  first  destroyed  that
 *ðæt  he  eft        timbrede.*
 that  he  afterwards timbered.
 'Therefore also St. Peter pulled down what he reconstructed.'
 Latin version: hinc est quod Petrus prius evertit, ut postmodum construat
 (CP:58.443.2.3158)

Here again, the subject is omitted (which is another fact that speaks in favour of Latin influence). The sentence is introduced by a PP *For ðæm* 'for that reason', which is followed by the preterite form of *beon* which in turn is followed by the adverb *eac* 'before'. *ðætte* 'that' is followed by the proper noun *Sanctus Petrus.* As in Example (17), the PP specifies the setting, here the cause for the event described in the subordinate clause which again is new to the hearer.

**Table 2.** Cleft constructions in the YCOE

| Construction | occurrences |
|---|---|
| *(hit)* + *beon* + Adv-Temp + *þæt …* | 59 |
| *(hit)* + *beon* + PP + *þæt …* | 9 |
| *(hit)* + *beon* + NP + *þæt …* | 11 |
| *(hit)* + *beon* + wh-constituent + *þæt …* | 6 |
| Total | 85 |

The main patterns of the CC found in the *YCOE* are provided in Table 2. Despite the fact that the constructions that we labelled as OE clefts have received different interpretations in the literature, their form, i.e. the syntactic construction occurring at this time, can be interpreted as *it*-clefts. Therefore, we take them as evidence to show that they were part of OE grammar.

## 3.4   The pronoun it-cleft in Middle English

The other type of CC which may be interpreted as an instance of pragmatic borrowing occurs in ME texts. The ME data were retrieved from the syntactically annotated *Penn-Helsinki Parsed Corpus of Middle English 2* (Kroch and Taylor 2000) comprising 55 text samples (approximately 1.2 million words) based on the Diachronic Part of the *Helsinki Corpus of English texts.* We divided ME in four periods along the lines of the designers of the corpus (based on the composition date, or the manuscript date if the composition date was unknown): M1 (1150–1250), M2 (1250–1350), M3 (1350–1420) and M4 (1420–1500).

Again, we used the CLF tag to identify CCs. For all periods, we found a total of 92 instances, which is only a slight increase if we compare the absolute number of instances (85) found in OE-which should be done with caution anyway. Although the absolute frequency seems to be stable on the surface, the frequencies of the different types of constructions changed.

The most striking change between the data from the YCOE and the PPCME2 is that in the latter corpus the pronoun *it*-cleft starts to occur and increases its token

frequency to 26% in M3 and M4 (see Table 3).[8] One example from Malory's *Morte Darthur* is given below:

(19) **'Hit was I,'** seyde Balyn, **'that** slew this knyght in my defendaunte;'
     "It   was I", said  B.,     "that slew this knight in my defense."
                                                           (MALORY,53.1762)

The sentence is introduced by the expletive *hit* (PDE *it)* followed by the preterite form of the verb 'to be'. The preceding context-Balyn answers the question: *Which of two knyghtes have done this dede?*-indicates that the first person singular pronoun *I* is a (contrastive or partial) focus, the following subordinate clause provides the background information.

Formally, a further example of the same type of CC is given in (20) from the *New Testament* according to the version of John Wycliffe:

(20) *and **he it is,**   **that** spekith  with thee.*       (NTEST,9,20J.940)
     'and it  is  him  that  speaks  with you.'

As the example illustrates the subject pronoun (here *he*) can also occur in first position preceding both the expletive and the finite form of the copula verb *be*. The preceding context of the example is:

(21) *He answerde,  and  seide,  Lord,  who  is  he,  that  Y  bileue    in  hym?*
     He answered  and said   Lord  who  is  he  that  I  believe  in  him?
     *And Jhesus  seide  to  hym,  And  thou  hast  seyn  him,  …*
     And Jesus   said  to  him  and  thou  hast  seen  him
     'He answered and said: "Lord, who is he, that I believe in him?" And Jesus said to him: "And you have seen him, …"'        (NTEST,9,20J.937–939)

The information status might be not as clear as in the previous example because the set of referents is not explicitly mentioned. The CC answers a preceding question–*who is he, that Y bileue in hym?*–but here the emphasis is not on a choice from a set of referents, but on the surprise expressed by the speaker. What we can say then is that the interpretation is closer to an informative presupposition (Type 2) interpretation.

According to Ball (1994a: 618ff) the example in (20) represents an early stage in the development of the pronoun *it*-cleft. Due to the loss of object clitics the order pronoun-*it-be* was replaced by the pronoun-focus *it*-cleft with the order *It + be + pronoun*. She notes that this order occurs in translations from French *(C'est celle qui …* 'It is she …') in Late Middle English times. What is important for us is that the

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**8.** Although this construction is completely absent in the YCOE, in her study Ball (1994a) provides three OE examples which all have the third person singular *he* in focus position.

form of this type of cleft, i.e. the occurrence of the pronoun in the focus position, seems to be a ME innovation as well as its information structural status of marking a topic (not just a focus). This insight will become relevant for the interpretation of our overall findings below.

The main patterns of ME CCs found in the *PPCME2* are given in Table 3.

**Table 3.** Cleft constructions in the PPCME2

| Construction | M1 | M2 | M3 | M4 | total |
|---|---|---|---|---|---|
| *(h)it + ben* + Adv-Temp + that … | 5 | 0 | 7 | 4 | 16 |
| *(h)it + ben* + wh-constituent + that … | 13 | 6 | 3 | 3 | 25 |
| *(h)it + ben* + NP + that … | 4 | 2 | 11 | 9 | 26 |
| *(h)it + ben* + pronoun + that … | 1 | 0 | 14 | 10 | 25 |
| Total | 23 | 8 | 35 | 26 | 92 |

If the increase of this type of CC were an instance of pragmatic borrowing, we would expect to find some pieces of evidence for its foreign origin, for example a correlation between higher frequencies of occurrence in ME texts based on texts of French and/or Latin origin. Table 4 lists the texts from M3 and M4 that exhibit this construction and provides some information as to the origin of the texts (if known). As can be seen, almost all of the ME texts (manuscripts) which exhibit this construction are based on a French and/or Latin original[9] (cf. the description of the texts in the Helsinki corpus, the PPCME2, and eLALME, McIntosh et al. 2013).

**Table 4.** Pronoun *it*-clefts in ME

| Text | Tokens | Origin |
|---|---|---|
| **M3 (1350–1420)** | | |
| Julian of Norwich's *Revelations of Divine Love* | 10 | (?) |
| The New Testament (Wycliffite) | 2 | Latin |
| Purvey's *General Prologue to the Bible* | 1 | Latin |
| English Wycliffite sermons | 1 | Latin |
| **M4 (1420–1500)** | | |
| Aelred of Rivaulx's *De Institutione Inclusarum* | 2 | French |
| Capgrave's Chronicle | 2 | Latin |
| Malory's *Morte Darthur* | 6 | French |

We noted above that OF *ce,* which would be the equivalent of the ME expletive, has the potential to be anaphoric. This means that a predicative interpretation can never be excluded ("predicative" implies "non-cleft", since the monoclausal paraphrase

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**9.**  But see the comments on Julian of Norwich's text in Patten (2012: 191).
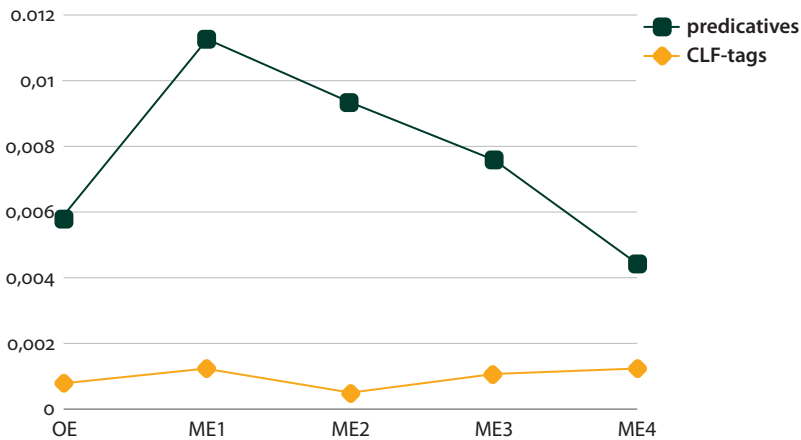
**Figure 1.** Diachronic variation of OE/ME PRED+REL *vs* clefts

defining the cleft status according to Lambrecht's definition quoted in the introduction would suppress the existential predication). For this reason, we decided not to rely on the syntactic annotation of the corpus, i.e., to only look for constructions marked with a CP-CLF tag, but again to include predicative constructions with a relative clause where the subject is a pronoun or empty: *(subject) + copula verb + predicative + relative clause.* We labelled this construction PRED+REL as we did for the French query. In Figure 1, we provide our results for CCs marked by CLF and predicative constructions labelled PRED+REL.

Our analysis shows that PRED+REL constructions had a significant frequency peak in the first ME period M1 and then steadily decreased from M2 to M4. A comparison of ME and OF reveals that the standard deviation of the average relative frequency of PRED+REL is much higher in ME texts, and that the standard deviation is also much higher (ø 0.78% ±0.98%) than in the OF texts (ø 0.26% ±0.26%). This clearly is an unexpected result under the assumption that predicative constructions had always been part of the grammars of both French and English. So how can we explain this finding? One possible explanation has to do with the identical form of clefts and predicatives. In both OF and OE/ME predicative structures were frequent, regardless of their IS status. The high relative frequencies in ME are caused by a limited number of texts which have a close relation to French or Latin texts, for example the *Ayenbite of Inwyt* which is a direct translation of the French work *La Somme le roi* (Gradon 1965).[10] Figure 2 shows that the texts with the highest frequencies (highest bar) of the PRED+REL construction are all influenced by French and/or Latin:

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10. The question of whether translation effects impact on language change is interesting and highly relevant, but at the same time an answer to it is obviously a very complex matter. One of
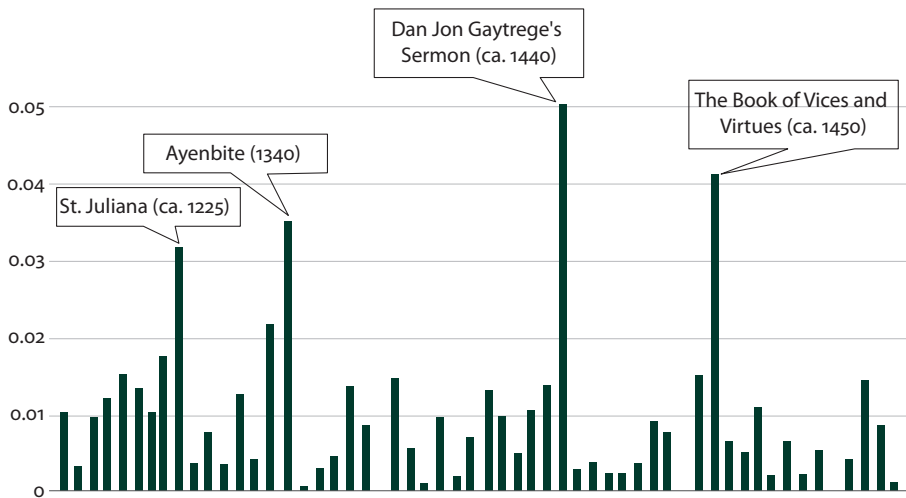
**Figure 2.** ME predicatives with relative clause: relative frequencies per text (bar chart)

**Table 5.** ME predicatives with relative clause: relative frequencies per text

| Predicatives with relative clause in ME | | | |
|---|---|---|---|
| Text | $f_{abs}$ | $f_{rel}$ | Origin |
| **M1 (1150–1250)** | 18 | 0.031690 | Latin |
| St. Juliana | | | |
| **M2 (1250–1350)** | 97 | 0.035183 | French |
| Ayenbite of Inwyt | | | |
| **M3 (1350–1420)** | 10 | 0.050251 | Latin |
| Dan Jon Gaytryge's sermon | 15 | 0.041209 | French |
| The Book of Vices and Virtues | | | |

A summary of the highest relative frequencies of these texts is provided in Table 5. The text *St. Juliana* from M1 is based on a Latin original and displays a relative frequency of 0.031, the *Ayenbite of Inwyt* from M2 is based on French as noted above

the studies dealing with this matter is Taylor (2008) investigating PPs with pronominal comple-
ments in biblical/nonbiblical OE texts both in translated (Latin) and nontranslated texts. She
identified two types of effects: either there is a direct effect (higher frequency of head-initial
PPs) in the nonbiblical translated texts when there's a matching Latin PP, or there is an indirect
effect (which she calls priming effect) in biblical translated texts regardless of whether there
is a direct connection to a matching PP in Latin. It seems to us that we might be able to draw
parallels to our study here concerning the acceleration effect we have described here which can
be interpreted as language change in the recipient language. To make definite claims, however,
further investigation is needed here.

and displays a relative frequency of 0.035. *Dan Jon Gaytryge's Sermon* from M3 was copied from a Latin original and shows a relative frequency of 0.050, and *The Book of Vices and Virtues* also from ME is based on a French original and has a relative frequency of PRED+REL constructions of 0.041. In texts of this type structures which looked like clefts and were semantically ambiguous started to increase. This situation might have led to the increase of *it*-clefts in English under the influence of French or Latin.

The two examples in (22) and (23) from the *Ayenbite of Inwyt* will serve to demonstrate the ambiguous nature of these constructions, in a. the ME version is given, in b. the version of the OF original:

(22)  a.  *þet oþer heaued of þe kueade beste: is enuie.* **þet is þe eddre / þet al / enu-enymeþ.**                    (AYENBI,26.408)

    b.  *Li seconz chiés de la beste d'enfer est envie:* ***c'est li serpenz qui envenime tout.***                    (SOMME-ch33-par2)

       'The second head of the evil beast is envy. That is the adder that all poisons.'

(23)  a.  *þanne he becomþ ribaud. holyer. and þyef and þanne me hine anhongeþ.* **þis is þet scot: þet me ofte payþ.**                    (AYENBI,51.907–9)

    b.  *puis devient ribauz et houliers et lerres, et puis le pent on.* ***C'est l'escot que il en paie sovent.***                    (SOMME-ch38-par28)

       'Then he became bawdy and lecherous and a thief and then man him crucified. This is that price that man often pays.'

The work is a treatise on Christian morality, the several vices and virtues are introduced and described one after the other. In (22) the nature of envy is the topic in the first sentence. In the second sentence introduced by þet, þet presumably is anaphoric, its function is the expression of a new predication– "envy is an adder". The occurrence of the definite article with *eddre*-note also the use of *c'est* in the French original-corroborates the topic interpretation. The same applies to (23) where the construction is introduced by þis.

Although an anaphoric interpretation of the demonstrative is likely, the construction as such very much resembles the Type 2 clefts.

A further piece of evidence for the occurrence of this construction due to French comes from Chaucer's (partial) translation of *Le Roman de la Rose*. The French work is a poem in the form of an allegorical dream vision by means of which the reader is taught about the art of love. The following extract is an allegorical treatment of *Covetise* 'greed' (from fragment A of the text). The left-hand column shows the text of the French original, the right-hand column Chaucer's translation into ME:

| | |
|---|---|
| *Après fu painte **Coveitise:*** | *And next was painted **Covetise,*** |
| ***C'est cele qui** les gens atise* | *That eggeth folke in many a gise,* |
| *De prendre et de noient donner,* | *To take and yeve right nought againe,* |
| *Et les grans avoirs aiiner.* | *And great treasoures up to laine.* |
| ***C'est cele qui** fait à usure* | *And **that is she, that** for usure* |
| *Prester mains por la grant ardure* | *Leneth to many a creature* |
| *D'avoir conquerre et assembler.* | *The lasse for the more winning,* |
| ***C'est cele qui** semont d'embler* | *So covetous is her brenning,* |
| *Les larrons et les ribaudiaus;* | *And **that is she** for pennies fele,* |
| *Si est grans péchiés et grans diaus,* | ***That** teacheth for to robbe and stele* |
| *Qu'en la fin en estuet main pendre.* | *These theeves, and these smale harlotes,* |
| ***C'est cele qui** fait l'autrui prendre,* | *And that is routhe, for by hir throtes,* |
| *Rober, tolir et bareter,* | *She maketh folke compasse and cast* |
| *Et besochier et mesconter;* | *To taken other folkes thing,* |
| ***C'est cele qui** les trichéors* | *Through robberie, or miscoveting.* |
| *Fait tous et les faus pledéors,* | *And **that is she that** maketh treachours,* |
| *Qui maintes fois par lor faveles* | *And she maketh false pleadours,* |
| *Ont as valés et as puceles* | *That with hir termes and hir domes,* |
| *Lor droites herites tolues.* | *Done maidens, children, and eke gromes, Her heritage to forgo:* |

<div align="center">*(from Chaucer's Romaunt of the Rose, edited by Kaluza 1891)*</div>

In the first line *Covetise* is introduced to the reader. In the following lines, it is referred back to 'greed' again and again by sentences introduced by "And that is she, that…" *(C'est cele qui …)*. As with the examples from the *Ayenbite of Inwyt* above, an anaphoric interpretation of the demonstrative is likely.

However, the examples also resemble the pronoun *it*-cleft in that the personal pronoun has the function of a topic and that the relative clause introduces new information. As a result, the structure is ambiguous because both interpretations are possible.

Overall, the discussion of the data provided in this section from a number of different sources has shown that the construction we labelled PRED-REL was semantically ambiguous enough to be interpreted as cleft sentences. This fact may then have had an acceleration effect in the process of pragmatically borrow cleft constructions.

## 4. Conclusion

In this paper we have investigated the assumption that in contexts of intense language contact pragmatic borrowing is likely to occur and that CCs borrowed from OF to ME may be a good candidate. In our corpus study we have shown that unmarked predicative constructions which we called PRED+REL are identical to CCs concerning their syntactic form, and that for methodological reasons we therefore must include them in our investigation. Moreover, we showed that PRED+RELs are anaphoric in character and hence resemble *pronominal* Type 2 clefts which start to occur in ME times. The results of our corpus study on OF and ME showed that in both languages both types of constructions existed with moderate frequencies. A striking result was the sharp increase of PRED+RELs at the beginning of the ME period which we brought into connection with the rise of the *pronominal* Type 2 cleft: based on the finding that ME translators of OF (and Latin) texts copied the Romance PRED+RELs which resembled the new Type 2 cleft we assumed that this might have led to the acceleration of the rise of CCs in ME times. This would also explain why a construction which is not very frequent in PDE could attain higher frequencies in ME.

We believe that our findings fit nicely with Prince's (1988) and Andersen's (2014) definitions of pragmatic borrowing. If we apply them to the rise of CCs in general, and of *pronominal* Type 2 clefts in ME especially, we come to the following conclusion: the syntactic form of the pronoun *it*-cleft of OF may have been construed by speakers of ME as analogous to native cleft constructions, and the discourse functions of this construction may then have been borrowed and associated with the ME pronoun *it*-cleft construction (for a different approach to the rise of clefts in English see e.g. Bettelou Los's contribution in Meurman-Solin et al. 2012). The prevalent PRED+REL construction may have been an accelerating factor in this process of contact-induced change.

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# Focus and language acquisition

# Developing strategies for encoding additive and contrastive relations in French and German child narratives

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Speakers of French and German differ in their preferred choice of information components for establishing contrastive and additive discourse relations. Whereas French speakers tend to relate and compare discourse entities to each other across utterances, German speakers prefer to relate and compare assertions. The current study explores at which age French and German children (ages 4, 7, and 10) acquire the preferred discourse organizational principles of their respective languages. In order to disentangle typical properties of children's discourse at a certain age from features reflecting the acquisition of language-specific preferences, the same set of elicited production data is compared across languages and age groups. Results show that despite common developmental trends, the principles underlying additive and contrastive discourse relations in German are acquired earlier than those in French. Whereas the relatively uniform German pattern can be seen as a continuation of earlier stages of acquisition, the French pattern is slightly more complex: There is more variation in the input and the prototypical integration of the relevant devices requires certain morpho-syntactic structures to be mastered first. From age 7 onward, child learners of both languages hone in on their target language's preferred discourse structure.

## 1. Introduction

Recent studies have argued that additive scope particles such as German *auch* ('also') and French *aussi* ('also'), though translation equivalents, have a different function for information organization in adult discourse (Dimroth et al. 2010; Benazzo & Dimroth 2015). Based on elicited production data, these studies show not only that *auch* is used more frequently than *aussi* in comparable contexts, but they also indicate differences concerning the information units that are typically selected for establishing an additive relation. Consider the following examples:

(1)   [context: Paul was sick.]
  a.   *Pierre aussi était malade.*
       Pierre also   was   sick
       'Pierre was also sick.'
  b.   *Peter war AUCH krank.*
       'Peter was also sick.'

Whereas French *aussi* is often associated with a focal discourse entity as in (1a), where it is juxtaposed with its associated constituent *Pierre*, the stressed variant of German *auch* represents a focus in itself (Reis & Rosengren 1997; Krifka 1998; Dimroth 2004; Féry 2012) and indicates an addition of assertions, rather than entities. Some authors (Krifka 1998; Dimroth 2004) argue that in a position and with an intonation as in (1b),[1] the particle's meaning contribution comes close to *verum focus* (Höhle 1992; Klein 2006), i.e. a focus on finiteness indicating that a particular predicate ('to be sick') is claimed to be indeed true for a topic under discussion ('Peter'). Dimroth et al. (2010) and Benazzo & Dimroth (2015) maintain that this phenomenon does not represent an isolated and idiosyncratic difference between French and German but goes hand in hand with other lexical and grammatical properties of these languages, encouraging speakers to select entities vs. assertions as preferred information units for establishing additive or contrastive links in discourse.

The eminent role that entities play for discourse cohesion in French is illustrated by the utterances in (2), below (from Dimroth et al. 2010). For specific contexts in oral story retelling (elicited production), French speakers tend to compare different protagonists to each other in order to establish additive or contrastive links. They produce utterances containing either a strong pronoun (the contrastive pronoun *lui* in (2a) and (2c)) or, more rarely, clefts as in (2b), both of which highlight the current entity with respect to the one previously mentioned.

(2)  a.   [context: Mr. Green's neighbor went to bed.]
          *Monsieur Vert dort **lui aussi** tranquillement*
          Mr. Green sleeps, him too, quietly.[2]
     b.   [context: same as (2a)]
          *Là **c'est monsieur vert qui** se couche et la lumière s'éteint*
          There it is Mr. Green who lies down and the light goes out.

---

1.   Capitals indicate a falling pitch accent.

2.   In order not to overburden the text, we do not always adhere to the Leipzig Glossing Rules when quoting examples from the transcripts. When nothing hinges on the exact wording of the original utterances, only a translation (in single quotes) is provided. When the meaning of the spoken language examples seems sufficiently clear, approximative glosses will be used without additional idiomatic translations (no single quotes).

c.   [context: Despite a fire in the house Mr. Blue's neighbor refuses to jump
out of the window.]
*L'incendie est déclaré chez monsieur bleu, donc **lui il** n'hésite pas, il saute*
The fire breaks out at Mr. Blue's, so him, he doesn't hesitate, he jumps

In similar contexts, German speakers tend to use the assertion component of their utterances to overtly indicate similarity to or difference from the assertion component of relevant previous utterances. "Assertion" refers to qualifying the occurrence (the 'taking-place') of a situation, e.g. (contrastive) expressions of modality or polarity such as negation, affirmative particles (*doch, schon, wohl*, roughly meaning 'indeed'), *verum focus*, but also additive particles like stressed *auch* in (1b), indicating an additional occurrence of a situation ('being sick'). The examples in (3) which were elicited with the same materials as the French ones in (2) illustrate the markings preferred by German speakers:

(3)   a.   [context: same as (2a)]
*Herr Grün (…) hat sich **AUCH** hingelegt und hat **AUCH** das licht ausgemacht*
Mr. Green (…) has also laid down and has also switched off the light.
b.   [context: same as (2c)]:
*der [= Herr Blau] hat sich dann entschieden, **doch** zu springen*
He has himself then decided indeed to jump
He then decided to jump.

Note in particular that the subject NP that was highlighted in the French examples in (2) is left implicit in the second clauses of (3a) and (3b).

Whereas the utterances in (2) seem to be felicitous answers to underlying wh-questions ("Who (else) is doing x?", those in (3) answer implicit yes-no questions like "What about y, is he doing x (as well)?". Neither of these questions corresponds to the one that was explicitly asked in order to elicit the narratives containing the utterances in (2) and (3). After showing some introductory scenes, the interviewer asked, "What happened then to the protagonists?". According to the *quaestio* model (cf. Klein & von Stutterheim 2002), such a discourse question influences information organization in the main structure of the resulting text. In our case it would push speakers to focalize the specification of events or situations happening to the protagonists at given times. Locally, however, speakers can deviate from the main discourse question, and this is where speakers of French and German seem to follow different sub-*quaestiones*.

Importantly, though, the means illustrated above are not the only possibilities of establishing additive or contrastive links in French and German. French *aussi*, for example, can also be integrated in a position resembling the one shown for German

in (1b)[3], and German *auch* can be juxtaposed with the subject NP as shown for French in (1a); compare (4a) and (4b) below.

(4)   [context: Paul was sick.]
    a.   *Pierre était aussi malade.*[4]
        'Pierre was also sick.'
    b.   *Auch Peter war krank.*[4]
        Also   Peter   was   sick
        'Peter also was sick.'

Thus, we are not dealing with hard constraints, but with preferences that are due to the availability of language-specific means that make one type of discourse organization particularly attractive. A coalition of morpho-syntactic properties (e.g. clefts, dislocations and strong pronouns, cf. Trévise 1986; Klein 2012) makes it comparably easy in French to organize stretches of discourse as answers to unspoken wh-questions, thereby using the domain of discourse entities in order to establish additive and contrastive links. The availability of other means (e.g. particular intonation contours and a number of contrastive assertive particles) encourages German speakers in the same context to set up their discourse as an answer to an implicit yes-no question instead.

    These results can be interpreted as a confirmation of Slobin's (1996) hypothesis known as "thinking for speaking", i.e. the correlation between the lexico-grammatical properties of a given language and the way its native speakers conceptualize (select, segment, organize, etc.) certain aspects of a given situation when mentally preparing its verbalization. Numerous independent studies have since revealed how some typological features – such as the degree of grammaticalization of aspect, the availability of specific anaphoric forms for spatial relations or the different lexicalization patterns for motion events – lead to crosslinguistic differences in the discourse organization preferred by adult speakers of different languages and how they are progressively developed by children. It has thus been shown that, although very young children's discourse reflects target-specific semantic distinctions in the domains of motion, space, and time, even school-aged children do not yet fully match adult preferences for their expression in discourse (Berman & Slobin 1994). A similar discrepancy is also found with respect to other aspects of discourse organization, e.g. the use of definite articles and pronouns for reference maintenance (cf. Hickmann 2003; Schimke et al. 2015), the encoding of space in motion events (cf.

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**3.**   Recall, however, that there is no systematic interaction with intonation in French.

**4.**   The third possibility, *Pierre était malade aussi*, will be discussed in more detail in Section 2.

**5.**   Note that *auch* precedes the associated NP, whereas *aussi* follows it.

Hickmann, Taranne & Bonnet 2009; Ji, Hendriks & Hickmann 2011), and perspective taking (e.g. the assignment of the subject role; cf. von Stutterheim et al. 2012).

Note, however, that such studies investigated how 'grammatical' markers influence the way in which information is presented and organized in adult and child discourse, whereas in our case the expression of additive and contrastive relations (by adult German and French speakers) relies on 'optional' cohesive devices that are stucturally non-obligatory. Given that we are dealing with relatively subtle and at the same time complex differences, the question arises as to how and when child L1 learners of French and German discover the discourse organization principles preferred by the adult speakers of the respective language for additive and contrastive relations, and to what extent language-specific differences play a role in the acquisitional process.

This question is linked to an ongoing debate on L1 acquisition about the relative impact of age-related cognitive factors. These are supposed to determine universal developmental features with respect to the influence of the specific linguistic structures that have to be learned in order to achieve an adult-like discourse organization. The comparison of child development in different languages contributes to disentangling such factors (cf. Berman & Slobin 1994; Hickmann & Hendriks 1999; Hickmann 2003; Watorek 2004).

On the basis of elicited oral production data, the current paper shows that French- and German-speaking children start to apply their target language's preferred way of presenting additive and contrastive relations as early as age 4 (German) and 7 (French). However, within each age group we also found similarities in how children carried out the narrative task. The findings are discussed with respect to language-specific factors that could be responsible for the observed age differences as well as language-independent factors (age-related cognitive development) that could be responsible for the similarities. In particular, with respect to additivity, we also discuss how the findings relate to recent theoretical accounts proposed in the literature.

The paper is organized as follows. Section 2 summarizes prior research on French and German that helps to characterize the children's learning task concerning the choice and integration of additive and contrastive markings. The set-up of the empirical study is explained in Section 3. Section 4 presents the results of the adult control groups, the child learners of German, and the child learners of French, as well as a cross-linguistic comparison of the developmental paths. A discussion and some conclusions are provided in Section 5.

## 2. The acquisitional task for children learning French and German: Background and research questions

Recent semantic accounts treat additive particles as *obligatory* triggers of presuppositions, i.e. markers that are compulsory as soon as their presuppositions are satisfied (Krifka 1998; Sæbø 2004; Amsili & Beyssade 2010; Eckardt & Fränkel 2012). Obligatory uses are often exemplified with stretches of discourse like (5) (from Krifka 1998). The presupposition is explicitly spelled out in the first sentence and the second sentence would therefore be incoherent without the additive particle.

(5)   *Peter ate pasta. Pia ate pasta too.*

In the introduction, we suggested that addition and contrast preferably operate on the assertion level in German, whereas they operate on discourse entities in French. We also mentioned that *auch* is used more frequently than *aussi*. The latter observation is not predicted by accounts treating the relevant particles as obligatory presupposition triggers. We assume that frequency differences are at least partly due to the language-specific preferences mentioned above. Contrasts on an utterance's assertive component are not readily expressed in French. A recent experimental study by Turco et al. (2012) suggests that *verum focus* is not impossible but dispreferred in French. The preferred alternative, i.e. focusing discourse entities, requires an information structure that is not easily compatible with the overall structure of a narrative discourse if the added constituent is the grammatical subject. If speakers of French do not switch to an underlying question like "Who did it?" and rather stick to "What happened to the protagonists?" they can use the protagonists as discourse topics encoded with non-contrastive or reduced forms. This, however, is not compatible with their preferred way of expressing contrast and addition. In contexts where marking addition feels compulsory, speakers of French frequently avoid *aussi* and instead opt for an explicit comparison of the relevant situations, using anaphoric descriptions of similarity, as in (6) from Benazzo & Dimroth (2015).

(6)   *M. Bleu saute par la fenêtre. M. Rouge **fait de même**.*
       'Mr. Blue jumps through the window. Mr. Red does the same.'

German speakers can solve the problem by using a stressed additive particle, thereby focusing the assertive value of their utterance as if they were answering an underlying yes-no question. Utterances with this information structure can more easily be integrated in a narrative discourse, in particular when no real contrast is needed on the entity (see Example (4a) in the introduction). As Reis and Rosengren (1997) and Féry (2012) have pointed out, a subject entity functioning as the added constituent can indeed be a completely ordinary topic (cf. Example (7) from Féry

2012, where the direct object functions as a contrastive topic, whereas the subject (= the added constituent) is expressed by the unstressed personal pronoun *er*).

(7)  [context: Mary ate rice and beans. Did Peter eat the same?]
    *BOHNEN$_{CONTR\text{-}TOP}$ hat er AUCH$_{FOC}$ gegessen.*
    Beans            has he also      eaten
    'He also ate beans.'

If this is true, the observed frequency differences are but a side effect of a more general difference in the preferred discourse organization displayed by adult speakers of German and French. Benazzo and Dimroth (2015) show that depending on the context, up to 40% of the additive scenarios shown to speakers of French elicited explicit comparisons of situations of the type exemplified in (6), whereas corresponding descriptions in German were barely used at all.

Depending on their position, *aussi/auch* have scope over different information units and can thus signal an entity-based or assertion-based addition. The relevant possibilities for scope marking are dependent on the syntactic integration of the relevant particles. In German, the situation is relatively simple:

(8)  [context: Bernd drank wine]
    a.  *Auch ELKE$_{FOC}$ hat Wein getrunken.*
        Also Elke      has wine drunken
    b.  *Später hat auch ELKE$_{FOC}$ wein getrunken.*
        Later has also Elke    wine drunken
    c.  *Elke hat AUCH$_{FOC}$ Wein getrunken.*
        Elke has also      wine drunken
    d.  *Später hat Elke AUCH$_{FOC}$ Wein getrunken.*
        Later has Elke also    wine drunken
        'Elke drank wine, too.'

Additive particles associated with a focal information unit are unstressed and placed in a position directly preceding the added constituent in initial position (8a) or in the so-called middle field following the finite verb (8b). Stressed (focused) additive particles, however, follow the added constituent in both positions (8c-d); see Reis & Rosengren 1997, and Féry 2012 for the relatively straightforward interaction between syntax and prosody (accent placement) in German.

According to Reis & Rosengren (1997), *auch* adjoins to all sorts of XPs.[6] If the particle's co-constituent is an NP as in (8a-b), it always corresponds to the focused constituent that is felt to host the added information. If the co-constituent

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**6.**  See Sudhoff (2008) for a comparison with alternative syntactic explanations.

is a predicative projection as in (8c-d), it often contains only given (and therefore de-accented) information. The particle carries focal stress and the 'added information' (*Elke* in 8a-d) is to be found outside of the syntactic scope of *auch*. The presence of new vs. given information in the particle's syntactic scope leads to slightly different utterance meanings. Reis and Rosengren (1997) suggest that *auch* means 'in addition/furthermore' when combined with new and focal information, as in (8a-b), whereas it means 'likewise' when combined with given predicative information, as in (8c-d). The latter structure corresponds to what we refer to as 'addition of assertions' in the current paper.

In French, an addition of entities can be expressed by placing *aussi* right adjacent to the affected NP constituent as in (9a), which can also be left-dislocated as in (9b). In combination with a pronoun copy of the affected NP, the particle can also follow the finite verb as in (9c-d). All variants signal an entity-based addition.

(9)  a.  ***[Monsieur Rouge aussi]* va   se coucher.**
         Mr.      Red    also   goes to bed
     b.  ***[Monsieur Rouge aussi]* il va   se coucher**
         Mr.      Red    also   he goes to bed
     c.  *Monsieur Rouge va   [lui aussi] se coucher.*
         Mr.      Red   goes him also    to bed
     d.  *Monsieur Rouge va   se coucher [lui aussi].*
         Mr.      Red   goes to bed      him also
         'Mr. Red goes to bed, too.'

When *aussi* directly follows the finite verb without being accompanied by a pronoun copy referring to the entity as in (10a), we take it to signal an addition of assertions instead. In cases like (10b) in which the particle occurs in utterance-final position, its scope is ambiguous and a classification as entity-based vs. assertion-based addition is impossible.[7]

(10)  a.  *Monsieur Rouge va **aussi** se coucher.*
          'Mr. Red goes also to bed.'
      b.  *Monsieur Rouge va se coucher **aussi**.*
          'Mr. Red goes to bed also.'

Next to the basic particles, both languages possess more elaborate and lexically transparent variants like *également*/*ebenfalls* ('likewise'), though these are syntactically more restricted. In order to contrast an entity with another one, speakers of

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7.  Note the different role of intonation in German vs. French. Contrary to German *auch*, the different placement of the French particle *aussi* is not signaled by an intonational change (Benazzo & Patin 2017).

both languages can either add adverbs of opposition like *hingegen/par contre* ('on the contrary'), or mark the referring expressions themselves for contrast. In the latter case, French has clear functional differences between clitic personal pronouns (e.g. *il*) and contrastive pronouns (e.g. *lui*). This is less ambiguous than German, where the functional distinctions between different sets of (personal) pronouns (e.g. *er, der*) are mediated by intonation and are less univocal markings of their referent's information status (Bosch et al. 2003; Schimke et al. 2015).

In the current study, we investigate whether the French preference for entity-based discourse relations also plays out in contexts in which two protagonists are involved in different actions at the same time, as in (11a-b).

(11)   a.   *M. Bleu va se coucher, M. Rouge par contre va au cinéma.*
             'Mr. Blue goes to bed, Mr. Red on the other hand is going to the movies.'
       b.   *M. Bleu va se coucher, tandis que M. Rouge va au cinéma.*
             'Mr. Blue goes to bed, while Mr. Red is going to the movies.'

In such contexts, we would expect more explicit markings of entity contrast in French than in German. We thus investigate the relative use of the following means in child and adult native speakers of both languages:

French:   *aussi* in different positions, *également*, lexical means relating entities to each other in additive and contrastive contexts (*là c'est x qui, x à son tour, x par contre, x comme y…*), strong pronouns (*lui*), clefts and dislocations (often in conjunction with additive particles or contrastive markers), contrastive connectors (*tandis que, pendant que…*), explicit comparisons of situations (*faire la même chose*, 'do the same thing').

German:   *auch* in different positions and with different stress patterns, *ebenfalls, ebenso*, lexical means relating entities to each other in additive and contrastive contexts (*x hingegen, x wie y…*), contrastive connectors (*während*), explicit comparison of situations (*dasselbe tun*, 'do the same thing').

We assume that the cross-linguistic differences in speakers' preferences for expressing additive and contrastive relations will reflect the linguistic means that are most easily available in a given language and that go well together with other structural properties (Carroll et al. 2004). When German speakers produce anaphoric links on the assertion level, they can rely on a system of assertion-based lexical markers and intonation. Focusing on the taking-place of an event (as if speakers were answering implicit yes-no questions), whenever the context allows it, is thus a rather natural perspective for that language. French speakers, in turn, readily exploit their language's rich repertoire of referential means, thereby targeting relations between entities and their particular information status.

Still, discourse always offers a choice, and neither German speakers nor French speakers were found to uniformly rely on one encoding strategy alone. Children thus face a complex task when learning to express addition and contrast in an adult-like way, as it implies not only (a) the capacity to construct a coherent discourse, but also (b) the choice of a preferential perspective in relating events and (c) the acquisition of alternative means of encoding it.

With respect to the first point (a), note that at least additive particles appear very early in L1: They usually belong to the first functional items produced by children, and their use in German (cf. Nederstigt 2003) and in French (cf. Gayraud 2004) varies according to language-specific properties. However, in both languages they are initially used in an exophoric way, i.e. with reference to the extra-linguistic situation. Just as with other anaphoric devices (cf. Hickmann 2003), it is only at later ages that these particles can be used endophorically, i.e. between discourse entities to reinforce discourse cohesion.

In the current study, we want to find out how children learn to structure a narration and make it coherent according to language-specific adult preferences. In order to do so, we analyse children's discourse at different ages – namely 4, 7 and 10 – which previous studies have indicated as important transition points in discursive competence (Hickmann 2003). It is well known that the structure of child narratives is influenced by age-related steps in cognitive development that are independent of the language to be learned (Berman & Slobin, 1994; Hickmann 2003): This is the case e.g. for the transition from the exophoric to endophoric use of anaphoric means, mentioned above. Therefore, when comparing children acquiring German and French, we expect similarities (due to their similar cognitive development). We also expect differences based on the language-specific structures being learned, which in our case include both various linguistic means (i.e. alternative means of expressing the same relation) and a language-specific preference for discourse organization. Our study thus addresses the following research questions:

i.   When do L1 learners of French and German (ages 4, 7, and 10) start to express additive and contrastive relations in connected discourse in an adult-like way?
ii.  For which linguistic means does development take place? Are some means used before others?
iii. Are there cross-linguistic similarities/differences between child L1 learners of the same age? In other words, is an assertion-related perspective easier or more difficult to acquire than an entity-based one?

## 3. The development of additive and contrastive discourse relations: Methods

The current investigation is based on data collected with the help of a picture story that was construed in order to elicit different discourse-cohesive means. Three groups of children per language (4-, 7-, and 10-year-olds) and two adult control groups were asked to tell the story to an adult interviewer. The bulk of the data was collected in the project "Construction du discours par des apprenants de langues, enfants et adultes" on first- and second-language acquisition of French, German, and Polish (cf. Watorek 2004). Information on the occurrence of items like *aussi*, *encore* ('still'), and *toujours* ('again/still') and their translation equivalents in child language can be found in Benazzo et al. (2004), though no distinction was made between their entity-based vs. assertion-based integration, and their use was not studied in relation with the marking of contrastive contexts.[8]

### 3.1 The stimulus

The picture story contained a variety of additive and some contrastive scenarios (cf. Dimroth 2002; see Eckardt & Fränkel 2012 for a similar procedure).

The stimulus consists of 30 hand-drawn images depicting everyday events that make up a story and are simple enough to be understood even by the youngest age group (4-year-olds). The first four images show the background scenario (the main road of a small village with a church, a café, and a store, plus a castle on a hill in the background), the protagonists (Mister Red and Mister Blue[9] named after the color of their suits), and a princess being held prisoner in the tower of the castle. These images are presented by an adult interviewer who introduces the story's setting and the protagonists. The subjects are then told that one day the princess is freed from the tower by either Mister Blue or Mister Red and that her father, the king, wants to give a reward to the benefactor. Subsequently, subjects are invited to tell the interviewer what happened to the two protagonists on the relevant day in order to help the king find out who the benefactor was. Table 1 summarizes the content of the relevant images.[10]

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**8.** Moreover, the data analyzed in Benazzo et al. (2004) included fewer German children.

**9.** Similar protagonists were later used for the construction of the video clip "The Finite Story" (cf. Dimroth 2012).

**10.** The episodes that have been left out here were geared toward eliciting temporal additive items like *still* and *again* that will not be analyzed in the current paper.

**Table 1.** Picture story stimulus

| Image | Situation | Comment |
|---|---|---|
| 01–04 | Village with castle on a hill in the background; princess held prisoner in a tower, Mister Red (R) and Mister Blue (B) | Interviewer introduces setting, tells subject that somebody has rescued the princess, introduces R and B as potential candidates |
| Interviewer formulates the task: "Either Mister Red or Mister Blue has rescued the princess. Her father, the king, wants to give a reward to the one who did it. Look and tell me *what happened*. This way we will find out who it was." | | |
| 05 | **R & B** in front of the church | |
| 06 | **B leaves** | |
| 07 | **R leaves** | additive relation with picture 06 |
| 08 | **R drinks an orange juice in a café** | |
| (…) | | |
| 20 | **R enters a hardware store** | |
| 21 | **R leaves the store with a ladder** | |
| 22 | **R walks toward the hill** | |
| 23 | **B comes back by bus** | |
| 24 | **B approaches the café** | |
| 25 | **B drinks an orange juice in the café** | additive relation with picture 08 |
| 26 | **B enters the hardware store** | additive relation with picture 20 |
| 27 | **B leaves the store with a ladder** | additive relation with picture 21 |
| 28 | **B walks toward the hill** | additive relation with picture 22 |
| 29 | **B walks uphill toward the castle** <br> **R stops next to an apple tree** | simultaneous actions: contrastive relation between protagonists within the picture |
| 30 | **B approaches the tower** <br> **R picks apples** | simultaneous actions: contrastive relation between protagonists within the picture |

The storyline thus contains a series of images depicting situations that first apply to one of the protagonists and later to the other one. The repetition of similar actions being done by different protagonists is meant to elicit additive particles like French *aussi* or German *auch* or, alternatively, contextually equivalent expressions like *également/ebenfalls* ('likewise'), *comme Mr. X/wie Herr X* ('like Mr. X'), *faire la même chose/dasselbe tun* ('do the same thing').

Images geared toward the elicitation of contrast markings are found at the end of the story. In the last two pictures, the protagonists are shown doing opposite things at the same time. Both are equipped with a ladder and thus potentially in a position to rescue the princess from the tower, but only one of them actually approaches the castle, whereas the other one stops next to an apple tree and uses the ladder to reach

the apples. Participants are thus meant to specify that the protagonists are involved in two different actions at the same time. As shown in Section 2, both languages have a variety of markings for this particular mixture of simultaneity and contrast (French: *alors que, tandis que, pendant que*; German: *während, derweil,* all roughly meaning 'while/whereas'). Entity-focused markings (e.g. French: *quant à, de son côté,* and contrastive pronouns; German: *seinerseits, hingegen*) are also expected.

## 3.2    Participants

Six groups of children (ages 4, 7, 10; L1 French or German) as well as two adult control groups participated in our study. All participants spoke standard varieties of the respective languages. Children were recruited through daycare centers and schools in Paris and Lyon for French, and in Kleve (northwest Germany) for German; adult participants were recruited through personal contacts. All children grew up in monolingual middle-class families. Table 2 indicates the number of participants in each subject group.

**Table 2.**  Participants across age groups and languages

|         | 4-year-olds | 7-year-olds | 10-year-olds | adult controls |
|---------|-------------|-------------|--------------|----------------|
| French  | 15          | 15          | 15           | 10             |
| German  | 10          | 10          | 10           | 10             |

## 3.3    Procedure

Participants were recorded individually at various places including daycare centers and schools for the children. Pictures were shown one at a time. Both the interviewer and participant had visual access to the pictures but the child was invited to tell the story for a fictitious third person. With the exception of hearer signals, the interviewer was told not to intervene in the subject's narrations. However, additional prompting was sometimes necessary, in particular with the younger children.

The data were transcribed in CHAT format and the retellings belonging to the selected additive and contrastive scenes (see Table 1) were subsequently analyzed. For each of the speaker groups our analysis shows in the first step whether the possible additive and contrastive relations were expressed at all. For additive contexts, we also indicate whether speakers used additive particles or lexical descriptions like 'do the same thing' in order to compare the current event to an earlier one. For particles, based on their position, we furthermore indicate whether they were targeting entities or assertions. For the contrastive relation, speakers do not have a

choice between two different information components. We will thus only note if the French tendency to focus on relations between entities leads to a higher frequency of contrast markings in comparison to German.

## 4.    The development of additive and contrastive discourse relations: Results

In the following, we will briefly show that the results from our control groups largely confirm our earlier findings for the expression and discourse embedding of additive and contrastive relations in German and French (Section 4.1). On the basis of the adult data, we then present developmental results for both languages separately (Section 4.2 for German and Section 4.3 for French) and show at which age and with which devices children hone in on the strategies specific to the language they are acquiring. In the last part (Section 4.4), we compare age-matched children from both languages in order to reveal similarities that may have to do with the development of cognitive abilities enabling more sophisticated narrations over time.

## 4.1    The target: Results from adult control groups

For all speaker groups, we provide a table showing which additive and contrastive devices each individual participant used when commenting on the relevant pictures (pictures 07, 25–28, and 29–30 respectively). The table illustrates the spectrum of lexical choices as well as individual differences. For the core additive particles (*aussi/auch*), we also indicate their syntactic integration in the utterance. The abbreviation "comp" indicates explicit comparisons between situations (e.g. *dasselbe tun*; *faire la même chose* 'do the same thing'). Given that there is a lot of variation, the individual constructions are listed below the tables. The more uniform comparative structure 'like x' (*wie x, comme x*) also counts as explicit comparison.

**Table 3.**  German adults. Means used for the expression of additive and contrastive relations

|  | CHR | ELK | HEL | INA | MAR | PAS | RAK | SAN | SUS | TOR |
|---|---|---|---|---|---|---|---|---|---|---|
| Addition | auch x | x auch | – | x auch | x auch | – | auch x | x auch | x auch | x auch |
|  | x auch | x auch |  | auch x | x auch |  | x auch | x auch | x auch | x auch |
|  | x auch |  |  | auch x | x auch |  | ebenfalls | x auch | x auch | x auch |
|  | x auch |  |  |  | x auch |  |  | x auch | x auch | ebenfalls |
|  |  |  |  |  | x auch |  |  |  |  | like x |
|  |  |  |  |  | comp$^x$ |  |  |  |  |  |
|  |  |  |  |  | comp$^{xx}$ |  |  |  |  |  |
| Contrast |  |  |  | *während* |  |  | *während* |  |  | *hingegen* |

x *jetz(t) macht der dasselbe* ('now he does the same')
xx *macht ihm alles nach* ('(he) imitates everything')

In Table 3, 'auch x' indicates that the additive particle is placed left adjacent to the affected NP, thereby expressing an entity-based addition as in Example (12) below. The structure 'x auch' indicates that the particle is in post-finite position and follows the subject NP, thereby expressing an assertion-based addition as in (13).[11]

(12)  **auch Herr Blau** *macht sich auf* (ina)
      also Mr. Blue sets off

(13)  a.  *jetzt geht er* **auch** *in das geschäft*
          now he goes also into the shop
      b.  **der macht ihm alles nach**,
          he imitates everything he does.
      c.  *der hat* **auch** *eine leiter gekauft*
          he has also bought a ladder
      d.  *und geht jetzt* **auch** *da hoch* (mar)
          and goes now also uphill

Example (13) contains a number of subsequent utterances containing *auch*. Utterances like (13d) illustrate that the subject NP, albeit the only information unit that is new in comparison to earlier utterances about the other protagonist, can be left out in an assertion-based perspective. The presence of three occurrences of *auch* in a row does not prevent the speaker from providing an explicit comparison of situations as well (13b). Lexical alternatives to the predominant particle *auch* are rarely attested. There are only two occurrences of *ebenfalls,* which is rather typical of a written register and always has wide scope (a left-adjacent position to NPs like in *ebenfalls Herr Rot…* is ungrammatical).

Contrastive relations are only rarely marked in German, and if so, they are often ambiguous between simultaneity and contrast (*während* 'while'). The only unambiguous case is (14). Most speakers, however, prefer a mere juxtaposition of utterances referring to the different entities without any marking of contrast (15).

(14)  *Herr Rot pflückt die äpfel*
      'Mr. Red is picking apples.'
      *Herr Blau* **hingegen** *geht weiterhin mit der leiter in richtung burg* (tor)
      'Mr. Blue on the other hand keeps walking with the ladder in the direction of
      the castle.'

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**11.**  Due to hesitations, false starts, etc. it is not always possible to determine whether the particle bears a pitch accent or not. Stress assignment on the particle in spontaneous spoken language is often less regular than predicted by the literature. In order to clearly distinguish stressed and unstressed variants, one would need the exact same utterances produced in contexts inducing a different scope for *auch*. For the analysis we therefore rely on position only.

(15)   *Herr Rot erntet mit seiner leiter äpfel*
         'Mr. Red is harvesting apples with his ladder.'
         *und Herr Blau geht richtung schloss* (sus)
         'and Mr. Blue walks in the direction of the castle.'

**Table 4.** French adults. Means used for the expression of additive and contrastive relations

|  | Bru | Egi | Fab | Hél | Lin | Mar | Nad | Nic | Sam | Tif |
|---|---|---|---|---|---|---|---|---|---|---|
| Addition | lui aussi | *aussi* | lui aussi | lui aussi | égalnt | x aussi | à son | aussi | égalnt | like x |
|  | à son tour | comp$^x$ | égalnt | lui aussi | égalnt | aussi | tour |  | égalnt | like x |
|  | à son tour | like x | like x | lui aussi |  | égalnt |  |  | comp$^{xx}$ |  |
|  |  |  |  | *aussi* |  |  |  |  |  |  |
| Contrast | R-disloc |  | alors | pendant |  | tandis |  |  | L-disloc | lui |
|  |  |  | que | que |  | que |  |  |  | alors que |

x *il repart dans la même direction qu'était parti M. Bleu* ('he leaves in the same direction that Mr. Blue had taken')
xx *Il fait exactement les mêmes choses* ('he does exactly the same things')

The additive French particle *aussi* is attested in different positions. In Table 4, 'x aussi' indicates that the particle is placed in preverbal position, right adjacent to the subject entity as in (16), thereby expressing an entity-based addition.

(16)   *M. Rouge **aussi** s'en va* (mar)
         'Mr. Red also leaves.'

The table also specifies when the particle immediately follows the strong pronoun *lui* anaphorically referring to the subject entity. *Lui aussi* is also clearly an entity-based addition, but this structure can be integrated at different syntactic placements (before or after the finite verb), as in (17).

(17)   a.   ***lui   aussi** il   a     pris    une  échelle*(hél)
              him  also    he  has  taken  a     ladder
              'he also took a ladder'
         b.   *et   se       dirige **lui   aussi** à       son   tour  vers le château*(bru)
              and heads   him    also   in   turn  for   the   castle
              'and now it is his time to walk up to the castle.'

'Aussi' without further specification means that the particle is placed after the finite verb, as in (18), thus expressing an assertion-based addition. This interpretation is further supported in (18) by the fact that the entity is not overtly realized (zero anaphora), as in the German Example (13d).

(18)   *(M. Bleu) sort de la quincaillerie avec une échelle*
         '(Mr. Blue) leaves the hardware store with a ladder.'
         *et monte **aussi** en direction du château* (nic)
         'and walks also up to the castle.'

By contrast, *aussi* in italics indicates that the particle is in utterance-final position, as in (19), and therefore belongs to the undecidable occurrences.

(19)   *il a fini par partir. les verres sont partis **aussi*** (hél)
          'He finally left. The glasses are gone, too.'

*Également* is a lexical variant of *aussi*, rather typical of a written or more formal register, but it is listed by itself as it shows much less mobility in the utterance.

The additive situation is frequently signaled by explicit comparisons between the protagonists' actions, which can be expressed by an anaphoric VP (equivalent to 'doing the same' and indicated in the table by 'comp'), or expressions like *comme x* ('like x') or *à son tour* ('in his turn') as in the example below, which are all clearly entity-based strategies.

(20)   *il se dirige vers la quincaillerie*
          'He walks up to the hardware store.'
          *et ressort exactement **comme M. Rouge** avec une échelle (…)*
          and comes out exactly like Mr. Red with a ladder
          *et se dirige **lui aussi à son tour** vers le château* (bru)
          and heads him also in turn for the castle
          'and now it is his time to walk up to the castle.'

The passage reported in (20) also illustrates the possible combination of such expressions with an additive particle.

Contrastive relations are frequently expressed in French and are marked by quite different means, i.e. conjunctions roughly equivalent to 'whereas/while', as in (21b), contrastive pronouns as in (21a), and other marked word orders which are coded in the table as R-disloc (right dislocation), as in (21c), or L-disloc (left dislocation), as in (21d).

(21)   a.   *(M. Rouge) s'est arrêté en chemin pour ramasser des pommes*
              '(Mr.Red) stopped on his way in order to pick up apples.'
              *et   M. Bleu **lui**   monte   la   colline avec  l'échelle*
              and   Mr. Blue  him  goes-up the hill       with a ladder
              *sur      l'épaule* (tif)
              on-his   shoulder
          b.   *donc M. Rouge est toujours en train de cueillir ses pommes*
              'So Mr. Red is still picking his apples'
              ***alors que** M. Bleu est en train de monter la colline* (tif)
              'whereas Mr. Blue is walking up the hill.'
          c.   *il se dirige en direction du château **M. Bleu!*** (bru)
              he heads towards the castle Mr. Blue

    d.   *M. Rouge a posé son échelle contre un pommier*
        'Mr. Red has put his ladder against an apple tree.'
        *et donc là il se situe à côté de l'échelle*
        'there he is standing next to the ladder.'
        *et **quant à M. Bleu** il a l'échelle sur l'épaule et il continue son chemin* (sam)
        'as for Mr. Blue, he holds the ladder on his shoulder and keeps walking along the way.'

Thus in (21), the same speaker first opposes the two entities with the contrastive pronoun *lui* (21a), then with the conjunction *alors que* (21b), whereas in (21c-d) the contrast relies on a right and left dislocation of the full NP, respectively. Contrastive pronouns and dislocations unambiguously highlight the contrast between entities.[12] As for the attested conjunctions, namely *alors que, tandis que, pendant que*, they can all express simultaneity, but in addition to this temporal value, *alors que* and *tandis que* add a contrastive meaning to the relation between the propositions they connect (cf. Guimier 2000). In the occurrences of our corpus, it is the lexical content of the relevant sentences that shows that the opposition is on both the entity and the action. The results of the German and French adult control groups are summarized in Table 5.

    The results for the adult control groups largely correspond to what was reported in Section 2. German speakers almost always mark the addition of assertions, thereby relying on the basic additive particle *auch* in the vast majority of cases. French speakers leave additive contexts more often implicit. When they opt for an overt marking, they either add entities or explicitly mark the situation as similar.[13] In accordance with prior results, contrasts between entities involved in different actions are marked more frequently and with more variable means in French.

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**12.** Some authors consider left dislocations to have a contrastive value, whereas such a value would not apply to right dislocations (cf. for ex. Delais-Roussarie et al. 2004). This interpretation is controversial, however: Klein (2012), for instance, shows how in given contexts right dislocation can also be contrastive in French. Independent of such controversies, it is clear that both left and right dislocations put a special emphasis on the dislocated constituent (cf. Riégel et al. 1994), which is, in our contexts, the protagonist entity.

**13.** Note that the category 'explicit comparison' contains expressions of the type 'do the same', i.e. a comparison of situations (not: assertions), as well as expressions of the type 'like x' that can be seen as belonging to the entity-based strategies. Because of the huge variation of forms, however, we refrained from splitting the category up accordingly.

**Table 5.** Frequency of strategies attested for the expression of additive and contrastive relations

| Relation | Marking | Strategy/ information unit | German adults | French adults |
|---|---|---|---|---|
| Addition | *aussi/auch* | entity-based | 4 | 6 |
| | | assertion-based | 23 | 2 |
| | | undecidable | – | 2 |
| | *également/ ebenfalls* | | 2 | 6 |
| | explicit comparison | | 3 | 9 |
| Contrast | conjunction / adverb | | 3 | 4 |
| | contrastive pronoun | | – | 1 |
| | dislocation | | – | 2 |

## 4.2 Development across age groups: German

In this section, we report which means for the expression of additive and contrastive discourse relations were used by German-speaking children. The selection and integration of the markers as well as their function closely interacts with or even directly depends on the discourse structure available at each developmental stage. Therefore, for each age group, we also briefly describe the more general properties of the children's narrations.

The discourse constructed by *the 4-year-old learners of German* was characterized by a large number of elliptical focus-only utterances. They were often preceded by wh-questions produced by the interviewer when the participant had difficulties providing the necessary information (cf. (22)). When the 4-year-olds managed to construct stretches of narrative discourse without the interviewers' prompting, they frequently used deictic local adverbs (mainly *und da* 'and there', as in (23)) or anaphoric temporal adverbs (mainly *und dann* 'and then', as in (24)) as topic in utterance-initial position (prefield).

(22)  Adult:  *und was macht der?*
             'What is he doing?'
       Child:  *trinkt was* (…)
             drinking something
       Adult:  *und wohin läuft der?*
             'and where is he going?'
       Child:  *den berg hoch* (flo)
             the hill up

(23)   ***und da*** *kommt der blaue wieder nach hause. (…)*
and there comes the blue back home
***und da*** *fährt der Herr Blaumann in einen bus.*
and there goes Mr. Blueman in a bus
***und da*** *setzt sich der Herr Rot neben die kirche* (lou)
and there sits down Mr. Red next to the church

(24)   ***und dann*** *war der weggelaufen.*
and then he had run away
***und dann*** *war der Herr Blau gekommen.*
and then had Mr. Blue arrived
***und dann*** *standet der hier* (vic)
and then stood he here

Reference to persons is either achieved through full NPs (*der rote, der blaue*; *(der) Herr Rot, (der) Herr Blau*) or through pronouns (mainly *der*) that are often used deictically. This invites multiple clarification questions that are not always successfully answered, as in (25).

(25)   Child:   *und da fährt der auto.*
and there drives he (in a) car
Adult:   *wer denn?*
who?
Child:   *der* (chr)
he

As with the adults, Table 6 lists all additive and contrastive expressions attested in the relevant contexts.

**Table 6.** 4-year-olds. Means used for the expression of additive and contrastive relations

|  | ANI | CHR | CHS | FLO | JUL | LAR | LOU | MAR | SUS | VIC |
|---|---|---|---|---|---|---|---|---|---|---|
| Addition | x auch | – | wieder | wieder | wieder | x auch | wieder | wieder | x auch | x auch |
|  |  |  | wieder | wieder | wieder | comp$^x$ | x auch | x auch | x auch |  |
|  |  |  | wieder | wieder | wieder |  | x auch |  |  |  |
|  |  |  | comp$^{xx}$ | wieder | wieder |  |  |  |  |  |
|  |  |  |  | wieder |  |  |  |  |  |  |
| Contrast | – | – | – | – | – | – | – | – | – | – |

x *das haben wir schon mal* ('we had this already')
xx *jetzt schon wieder was ich eben erzählt habe* ('now again what I have just said')

As seen in Table 6, nearly all German-speaking 4-year-olds explicitly express additive relations between the utterances in their narrations. There is, however, a relatively limited number of occurrences of *auch* (*ebenfalls* is not attested) in comparison to

the unexpected occurrences of the temporal adverbial *wieder* ('again') that will be commented on below. All uses of *auch* are located in the middle field (to the right of the finite verb) and follow the subject NP that can be in initial position as in (26), or precede the particle in the middle field as in (27). Note that according to Leray (2009), this position corresponds to the most frequent one in monolingual children up to 3;9 as well as in adult informal speech.

(26) Adult: *und was ist dann passiert?*
'and what happened then?'
Child: *der rote war **auch** weggelaufen* (vic)
the red (one) had also run away

(27) *jetzt will   er **auch** hoch zum    schloss gegangen* (lou)
now wants he also  up    to-the castle gone
'Now he also wants to walk up tot he castle.'

The same position is attested for all occurrences of the temporal adverb *wieder* that appear in contexts in which an additive marking was expected. In adult language, *wieder* can have a restitutive or repetitive reading (it is unstressed in the former and stressed in the latter case). Judging from the meaning of the predicates with which the adverb is combined, the repetitive reading seems to be intended by the child speakers. In its repetitive reading, *wieder* marks an additive relation between two time spans for which the same situation is claimed to hold. Reference to a new time span is the only information unit that changes, whereas all other aspects (entity, event specification) are maintained.

For the 4-year-olds, however, *wieder* seems to be appropriate whenever aspects of events are repeated – independent of the fact that the entity performing them is a different one. In Example (28), the child lists events that happened to Mr. Blue in pictures 24–28. Similar events were reported earlier for the other protagonist, Mr. Red, but not yet for Mr. Blue, so that for adult speakers *wieder* is infelicitous in this context.

(28) a. *da läuft er **wieder***
there he is walking again
b. *immer laufen und schlafen*
always walking and sleeping
c. *da trinkt er was **wieder***
there he is drinking something again
d. *da läuft er **wieder***
there he is walking again
e. *immer trinken laufen schlafen*
always drinking walking sleeping

f.  *da läuft er **wieder***
    there he is walking again
g.  *da holt er **wieder** eine leiter*
    there he gets again a ladder
h.  *da geht er hoch **wieder*** (flo)
    there he goes uphill again

For the child speaker, *wieder* apparently marks the repetition of a situation inde-pendent of the agent, or, on a more abstract level, the repetition of a similar picture. The infinitival utterances in (28b) and (28e) are compatible with both interpreta-tions. The availability of two highly frequent and salient (stressed!) items that occur in similar positions in the German input and share an additive meaning component might contribute to the children's difficulties in figuring out the adult-like use of *wieder* and *auch*.

Next to *auch* and *wieder,* addition is sometimes expressed through an explicit comparison of situations. Note, however, that the 4-year-old speakers in both cases took a discourse-external perspective and were providing meta-comments on the speech situation involving first-person deictic pronouns ('we had this already'; 'now again what I have just said').

Whereas additive relations are marked frequently and consistently (albeit not always in an adult-like way), contrastive relations are not marked in the narrations of the 4-year-olds at all. Reference to the potentially contrastive entities in pictures 29 and 30 (cf. Table 1) is achieved via lexical NPs (*(der) Herr Rot* vs. *(der) Herr Blau*) but the forms do not differ from the ones attested in earlier episodes of the stories. The corresponding utterances specifying the actions accomplished by the two entities are juxtaposed without any indication of a contrast. The entity-based strategy for contrast marking is thus never used in the 4-year-olds' narrations. There is one example, however, in which an assertion-based strategy is used. In (29), instead of specifying the action performed by Mr. Blue, the child indicates with an elliptical negated utterance that a claim with the same assertive value as the one before (affirmative) cannot be made with respect to this entity.

(29)  Adult:  *der rote der pflückt schon äpfel ne? (…)*
              'The red (one) is picking apples, right?'
      Adult:  *und der blaue?*
              'And what about the blue (one)?'
      Child:  *der blaue **nicht*** (chs)
              the blue (one) not

The distribution of additive markings produced by the 4-year-old learners of German corresponds to the assertion-based strategy preferred by the adult speakers.

The absence of entity-based contrastive markings at the end of the stories equally follows the adult tendency to avoid linguistic effort devoted to signaling contrasts between entities.

*The 7-year-old learners of German* show a different overall organization of their discourse. The speakers needed less prompting from the interviewer. They produced longer stretches of uninterrupted discourse and were more flexible in their use of anaphoric chains referring to temporal intervals and/or entities (the protagonists). The discourse of the 7-year-olds was still largely organized around deictic (*jetzt* 'now') and anaphoric temporal adverbs (*und dann* 'and then') occurring in utterance-initial position. Reference to entities, however, was much less ambiguous. Deictic pronouns were rare and the occurrence of anaphoric ones was appropriately restricted to contexts of reference maintenance. Rather than being under-explicit, like the younger children, the 7-year-olds were sometimes over-explicit, e.g. using lexical NPs even for cases of reference maintenance in subsequent utterances, as in Example (30).

(30)  ***der Herr Rot*** *geht da was trinken*
       'Mr. Red goes and has a drink.'
       *und* ***der Herr Rot*** *trinkt da wieder was* (lin)
       and Mr. Red drinks again something

The frequency of additive markers is exactly the same as in the younger age group. There is again only one child that does not use additive particles at all. As shown in Table 7, however, the 7-year-olds no longer produce *wieder* in contexts in which *auch* is the appropriate particle in adult language.

Table 7.  7-year-olds. Means used for the expression of additive and contrastive relations

|            | CAN    | DAV    | HAN    | JAK    | JOE  | KLE | LIN    | LUI    | NYA    | VAN    |
|------------|--------|--------|--------|--------|------|-----|--------|--------|--------|--------|
| Addition   | x auch | x auch | x auch | x auch | x    | –   | auch x | x auch | x auch | x auch |
|            |        |        | x auch | wieder | auch |     | auch x |        |        | x auch |
|            |        |        | x auch | x auch | x    |     | x auch |        |        | x auch |
|            |        |        |        |        | auch |     | x auch |        |        | like x |
|            |        |        |        |        |      |     | x auch |        |        | like x |
| Contrast   | –      | –      | –      | –      | –    | –   | –      | –      | –      | –      |

The 7-year-olds clearly followed the adult model in opting for an assertion-based strategy for marking additive relations. They sometimes produced chains of additive utterances, where the topical associated constituent can be expressed by zero anaphora, as in (31). One participant, however, produced two occurrences of *auch* with narrow scope over the subject NP that were not attested in the data of the younger children (cf. (32)).

(31)  *und dann geht er **auch** in den laden*
and then goes he also into the shop
*und holt **auch** (ei)ne leiter*
and gets also a ladder
*und trägt die **auch** den berg hoch* (lin)
and carries it also up the hill

(32)  *und dann rennt der Herr Blau weg*
'Then Mr. Blue runs away.'
*und dann rennt **auch der Herr Rot** weg* (lin)
and then runs also Mr. Red away

In the productions of the 7-year-olds, we also find explicit comparisons of situations that do not involve an extra-discursive perspective. Both occurrences of *wie x* ('like x') were produced by one speaker and both appear in combination with the additive particle *auch*. The combination is not completely redundant, since either the explicit comparison (33) or the *auch*-clause (34) spell out extra details of the situation.

(33)  *jetzt geht der **auch** dahin,*
now goes he also there
***wie Herr Rot** geht der ins eisenwarengeschäft* (van)
like Mr. Red goes he to-the hardware-store

(34)  *jetzt macht der **wie Herr Rot**,*
now does he like Mr. Red
*der geht bestimmt **auch** dahin* (van)
he goes surely also there

Nothing changes with respect to the expression of contrast. The 7-year-olds do not adapt the forms of their NPs/pronouns to the contrastive context encountered in pictures 29/30 (cf. Table 1). Apart from unspecific connectors like *aber* ('but', cf. (35)), contrastive adverbs and specific conjunctions are not attested.

(35)  *der Herr Rot wollte äpfel holen.*
'Mr. Red wanted to get apples.'
***aber** der Herr Blau rennt weiter* (han)
'but Mr. Blue keeps running.'

Whereas the discourse structure of the 7-year-olds has clearly developed toward a more explicit (sometimes even over-explicit) and unambiguous presentation of the relevant information, there is not much change in the overall pattern of assertion-based addition.

The *10-year-old L1 German speakers* rely less on temporal anaphors in initial position (*und dann*) as a backbone for discourse coherence. They use varied means

signaling reference change and reference maintenance in the domain of entities. Example (36) documents a sophisticated use of lexical NPs, zero anaphora and pronouns, showing again that the assertion-based strategy with post-finite *auch* (36d) allows the speaker to leave the maintained subject referent implicit, even though it is the only new information unit in comparison to the utterance to which an additive relation is established (36a).

(36)  a.  *der Herr Rot sitzt im cafe und trinkt limo*
          'Mr. Red is sitting in the café and drinking lemonade.' (…)

      b.  ***Herr Blau** kommt (…) wieder angefahren*
          'Mr. Blue comes back again.'

      c.  *Ø läuft richtung schloss*
          walks in the direction (of the) castle

      d.  *und Ø trinkt **auch** bei dem cafe eine limo*
          and drinks also at the café a lemonade

      e.  *dann geht **der auch** in das eisengeschäft*(tom)
          then goes he also in the hardware-store

Table 8 shows that additive relations are regularly marked. Again, there is only one participant who leaves this relation unmarked altogether and only one participant who reverts to an entity-based strategy (*auch x*) once in a while.

Table 8. 10-year-olds. Means used for the expression of additive and contrastive relations

|          | ANN    | FLO    | GIA    | KAR    | LEO | LUK    | MAT    | MAX    | TOM    | VAL    |
|----------|--------|--------|--------|--------|-----|--------|--------|--------|--------|--------|
| Addition | x auch | x auch | x auch | x auch | –   | auch x | x auch | x auch | x auch | x auch |
|          | wieder | x auch | x auch | x auch |     | auch x | x auch | x auch | x auch | x auch |
|          | x auch | x auch | x auch |        |     | x auch |        | like x | x auch | x auch |
|          |        |        |        |        |     | x auch |        |        | x auch |        |
|          |        |        |        |        |     | x auch |        |        |        |        |
| Contrast | –      | –      | –      | –      | –   | –      | –      | –      | –      | –      |

In the vast majority of cases, *auch* is integrated in a way that signals an addition of assertions and not entities. Explicit comparisons of situations are clearly dispreferred. The only Example (cf. (37)) is not used as a replacement for *auch* (in order to avoid repeating the same particle too often), but rather complements it.

(37)  *er rennt **auch** den schlossweg hinauf genau **wie Herr Rot***(max)
      he runs also the path-of-the-castle uphill exactly like Mr. Red

Like the younger L1 learners of German, the 10-year-olds refrain from marking contrastive relations. We again find one Example (cf. (38)), however, in which a participant seems to answer an underlying yes-no question, thus forcing the content

of the relevant picture into an assertion-based perspective. Overt contrast markers targeting entities do not occur.

(38)   *Herr Rot hat äpfel gepflückt.*
'Mr. Red has picked apples.'
*und Herr Blau **tut das nicht**(leo)*
'and Mr. Blue does not do that.'

Putting the observations for German together across age groups yields a rather homogeneous picture (cf. Figure 1).
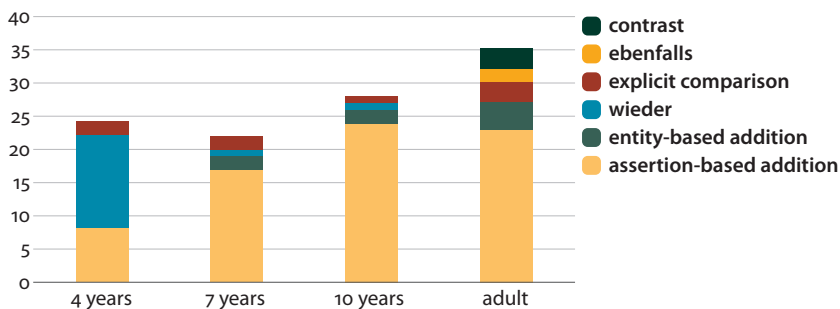


**Figure 1.**  Means for signaling addition and contrast in L1 learners and adult speakers of German

The developmental tendencies for the expression of addition and contrast can be summarized as follows. At the age of 4, children are still struggling to find out the exact meaning of *auch* as opposed to the competing additive particle *wieder* ('again'). Apart from that, they are already comparable to the older age groups in their clear preference for an assertion-based strategy. From 4 years onward, German speakers clearly prefer additions of assertions. Entity-based additions become slightly more frequent with age, but remain the dispreferred option across all age groups. The same goes for explicit comparisons of situations: there is a development from discourse-external to discourse-internal comments, but overall the strategy is attested with very low frequency among all age groups. The adult speakers furthermore show some lexical variation (*ebenfalls* instead of only *auch*) and some contrast markings. With the exception of *wieder,* which is frequently attested in the youngest children and (nearly) disappears in all the older age groups, there does not seem to be any qualitative change in the preferred way of setting up additive relations: the overall assertion-based pattern emerges early and is kept in all age groups.

## 4.3    Development across age groups: French

The productions of the *4-year-olds* consisted of very simple utterances. Most children tended to comment on each picture separately instead of linking them to construct a story. At this age, the children often did not signal the informational status of the entities mentioned: some participants used either a pronoun or a full NP for both reference maintenance and change. As a result, 50% of the participants produced ambiguous referential expressions, which demanded the adult's intervention to specify the relevant protagonist. The deictic anchoring of their retellings is illustrated in the examples below: note the spatial deictic *là* ('there') in (39), as well as the deictic use of third-person pronouns in (40).

(39)   Child:   *y a un monsieur qui va par là (=Mr. Blue)*
'There's a man who goes that way.'
*y a un monsieur qui va par là (=Mr. Red)*
'There's a man who goes that way.'
*et après il vient encore*
'After that he comes again.'
*et puis il boit son jus son truc*
'And then he drinks his juice, his thing.'
Adult:   *c'est qui?*
'Who is it?'
Child:   *Monsieur Rouge* (Axe)
'Mr. Red.'

(40)   Child:   *ils sont à côté de l'église*
'They are next to the church.'
Adult:   *et après?*
'And then?'
Child:   *il est à côté de l'église*
'He is next to the church.'
Adult:   *et c'est qui? Monsieur Rouge?*
'And who is it? Mr. Red?'
Child:   *oui Monsieur Rouge* (Cla)
'Yes, Mr. Red.'

The following table reports all means used to express additive and contrastive relations. Recall that for the French Tables (9)–(11) 'x aussi' corresponds to the particle in pre-verbal position (entity-based addition), 'aussi' without italics indicates a position after the finite verb (assertion-based addition), and *aussi* in italics signals that the particle is in utterance final (ambiguous) position. As we shall see, the evolution in the use of the particles reflects the development observed for reference to entities.

**Table 9.**  4-year-olds. Means used for the expression of additive and contrastive relations

| | AXE | ART | CAR | CEC | CLA | KEV | LEN | LOL | LUC | MEL | NIC | PAU | QUE | TIP | TRA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Addition | – | – | *aussi* | – | – | – | aussi<br>aussi<br>x aussi[x]<br>aussi<br>*aussi*<br>*aussi* | – | – | *aussi* | – | – | – | aussi | – |
| Contraste | – | – | lui+<br>R-disl.[xx] | – | – | – | – | – | – | – | – | – | – | – | – |

x *et après Bleu même aussi parta à la boutique* ('and then Mr. Blue even also went to the shop')
xx *Contrastive pronoun + dislocation: il coupe l'arbre lui!* ('he cuts the tree, him')

The expression of additive relations is not very frequent in the production of this age group, but when it is marked, all subjects use *aussi* (nine occurrences in total). It is noteworthy, however, to highlight the unequal distribution of the particle: only four out of 15 subjects produced *aussi*, and six of its overall nine occurrences were produced by just one child.

Markings of iteration like *encore* ('again') or the iterative prefix *re-* are present in the retellings of this age group but, contrary to the German children of the same age, they are not attested in the additive contexts. The interpretation of the additive utterances is nonetheless not always straightforward. They may be considered ambiguous for two different reasons: either *aussi* is associated with an extra-discursive entity (exophoric use), or its position allows for different readings.

The first case is illustrated in (41). The excerpt makes reference to two distinct pictures, the first one showing the departure of Mr. Blue and the second one Mr. Red's leaving in the opposite direction. The child, however, does not signal linguistically the change of entity occurring in the second utterance with respect to the previous one (the third-person singular pronoun *il* is used deictically), the relevant referent is therefore not identifiable.

(41)   *le monsieur (=M. Bleu) il s'en va*
        the monsieur he goes away
        *il (=M. Rouge) s'en va **aussi*** (Typ)
        he goes away too

The additive particle is also associated with deictic expressions in other contexts of the story, i.e. in relation to pictures that are not part of the current analysis. In (42), for example, the child uses *aussi* with a spatial deictic adverb referring to the picture in order to state a similarity between the two consecutive pictures.

(42)  *là il est allongé – là **aussi*** (Luc)
       there he is lying down – there too

These occurrences of *aussi* reflect the main features of child discourse at this age, namely the use of deictic expressions referring directly to individual pictures, and the weak distinction of informational contexts.

In addition to the occurrences where *aussi* is associated with deictic items (exophoric use), utterances may be ambiguous because of the particle's position. The most common placement attested across subjects is the utterance-final one,[14] which is compatible with different readings. For instance, *aussi* in (43) could be used to mark an addition of entities (*il*= Mr. Blue in addition to Mr. Red), an addition of activities ('buy a ladder' in addition to 'going to the shop'),[15] as well as an addition of assertions (cf. also Example (3)).

(43)  *après il va dans le magasin*
       after he goes to the shop
       *il va acheter une échelle **aussi*** (Mél)
       he will buy a ladder too

The same ambiguity holds for most of the occurrences of *aussi* produced by the following child (cf. (44)).

(44)  a.  *M. Rouge parta **aussi*** (…)
           Mr. Red left also
      b.  *M. Bleu boiva **aussi** un verre* (…)
           Mr. Blue drank also a glass
      c.  *après Bleu même **aussi** parta à la boutique*
           after Blue even also went to the shop
      d.  *et il prenda **aussi** une échelle*
           and he took also a ladder
      e.  *et M. Bleu monta **aussi** pour cueillir des/*
           and Mr. Blue also went uphill for picking/
      f.  *et **aussi** M. Bleu prena l'échelle/ avait pris l'échelle*
           and also Mr. Blue took the ladder
      g.  *pour **aussi** monter un arbre* (Len)
           to also climb a tree

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**14.** Note that this position can coincide with the one after the finite verb, as in (38) *il s'en va aussi*. As a matter of fact, this is the case for half of the occurrences that were considered assertion-based.

**15.** It cannot be excluded that the addition concerns the utterances 'I say X … and I also say Y'.

Various syntactic placements are attested – including an utterance-initial placement of the particle, as in (44f), that is not allowed in French for additive *aussi* – and, with the exception of (44c), they are all structurally ambiguous.

Given the main features of child discourse at this age, it does not come as a surprise that just one child out of 15 sets an explicit contrast between the actions of the two protagonists. In (45), Mr. Blue's going to the castle is thus opposed to Mr. Red's cutting the tree via the use of a strong pronoun referring to the latter, which is moreover placed in utterance-final position (right dislocation).

(45)   Child:   *et après il arrive au château*
                     'After he arrives at the castle'
                     *il coupe l'arbre lui!*
                     he cuts the tree, him
                     'This one cuts a tree!'
          Adult:   *Monsieur Rouge?*
                     'Mr. Red?'
          Child:   *oui Monsieur Rouge* (Car)
                     'Yes, Mr. Red.'

The strong pronoun is certainly contrastive but its deictic use makes it difficult to identify the change of entity that occurs between the first two utterances, as shown by the adult's intervention.

The ambiguities attested in the 4-year-olds' productions are overcome in the retellings of the **7-year-olds**. At this age, the protagonists are clearly identified, sometimes in an over-explicit way: the use of the pronoun is restricted to the maintenance of the reference, as in (46), whereas a full NP (often accompanied by the clitic pronoun) may still be used not only for reference change but also for reference maintenance, as in (47). The deictic use of third-person pronouns has almost disappeared.

(46)   **M. Rouge il** *s'en va vers la colline*
          Mr. Red he goes towards the hill
          *et alors là* **il** *va chercher une échelle*
          and now/there he goes to get a ladder
          *et après* **il** *va vers la colline*
          and then he goes towards the hill
          **M. Bleu** *revient…* (Bas)
          Mr. Blue comes back…

(47)   **le M. Bleu il** *rentre dans le magasin d'outils*
          the Mr. Blue he goes into the shop
          **le M. Bleu il** *sort avec une échelle*
          the Mr. Blue he comes out with a ladder
          **le M. Bleu il** *va vers le château* (Jus)
          the Mr. Blue he goes toward the castle

The children's discourse is more structured and needs less prompting from the adult interviewer. In comparison to what we found for the 4-year-olds, the overall frequency of additive and contrastive markings has increased slightly: as shown in Table 10, five subjects signal the additive contexts (for a total of 14 markings) and two signal the contrastive ones.

**Table 10.** 7-year-olds. Means used for the expression of additive and contrastive relations

| | BAS | BLA | CÉC | COR | DAP | HUG | JUS | LUC | MAA | MAT | MÉL | OCÉ | RAF | SAL | SON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Addition | – | like x | – | – | x aussi<br>x aussi<br>lui aussi<br>lui aussi<br>*aussi*<br>like x | – | – | – | | – | x aussi | lui aussi<br>aussi<br>aussi<br>lui aussi<br>lui aussi | – | – | like x | – |
| Contrast | lui | – | | – | – | | – | – | lui<br>pendant | – | – | | – | | – | – |

In this age group, *aussi* is still the most frequent means attested in the additive contexts, but its occurrences are concentrated in the production of only three subjects. In contrast to the structural ambiguities observed in the 4-year-olds' additive utterances, most of the occurrences at the age of 7 clearly mark an addition of entities. The scope of the particle is signaled either by its syntactic placement in preverbal position, just after the full NP as in (48), or by the presence of a contrastive pronoun anaphorically referring to the protagonist, as in (49). Note that the structure *lui aussi* is essentially placed in a detached position at the beginning of the utterance (as is the case for 'full NP *aussi*'), the only occurrence attested in post-verbal position being the second one reported in (49).

(48)  *M. Bleu i(l) part*
      Mr. Blue he leaves
      *M. Rouge **aussi** i(l) part* (Mat)
      Mr. Red also he leaves

(49)  *lui **aussi** a pris une échelle*
      him also has taken a ladder
      *et il est allé lui **aussi** au château* (Mél)
      and he has gone him also to the castle

In the additive contexts, children of this age group also establish direct comparisons between the actions of the two protagonists with expressions like *comme* x ('like x', cf. (50)), which can alternate with additive particles, as in (51).

(50)  *M. Rouge maintenant il part **comme M. Bleu** mais de l'autre côté* <sub>(Bla)</sub>
        Mr. Red now he leaves like Mr. Blue but to the other side

(51)  *lui **aussi** il part*
        him also he leaves
        *il prend une échelle **aussi***
        he takes a ladder too
        *il va vers le chemin **comme son frère*** <sub>(Dap)</sub>
        he goes to the pathway as his brother

At the same time, they also sporadically contrast the protagonists that are simultaneously engaged in different actions by using the strong pronoun *lui*, which refers anaphorically to the subject entity expressed by a full NP in the same sentence.

(52)  a.  *M. Rouge va prendre des pommes*
             Mr. Red goes picking apples
             *et M. Bleu **lui** (…) il suit le chemin* <sub>(Bas)</sub>
             and Mr. Blue him he follows the path
             *M. Bleu va vers la direction du château*
             Mr. Blue goes toward the castle
             *et M. Rouge **lui** pendant ce temps-là cueille des pommes* <sub>(Luc)</sub>
             and Mr. Red him meanwhile picks apples

The retellings of the *10-year-olds* show a further evolution concerning reference to entities. On the one hand, reference maintenance is expressed either by a pronoun or occasionally (three speakers out of 15) by zero anaphora, as in (53). Full NPs have disappeared in this informational context.

(53)  *M. Rouge il va à droite*
        Mr. Red he leaves to the right
        *Ø fume une cigarette et Ø prend le bus* <sub>(Gwe)</sub>
        smokes a cigarette and takes the bus

On the other hand, the different actions of the protagonists are quite often related and contrasted by the strong pronoun *lui,* as in (54a), and connectors expressing opposition (*tandis que, alors que*) or simultaneity (*pendant que*) as in (55b-c), which are attested in several contexts of the story, in addition to the contrastive ones analyzed (pictures 29 and 30).

(54)  a.  *M. Rouge est en train de cultiver des pommes*
             'Mr. Red is growing apples.'
             *M. Bleu **lui** il va vers le château* <sub>(Bra)</sub>
             Mr. Blue him he goes toward the castle

b.   *M. Bleu est parti d'un côté*
'Mr. Blue has left in one direction.'
***tandis que*** *M. Rouge est resté sur place* (Cam)
whereas Mr. Red has stayed in place

c.   *M. Rouge il cueillit des pommes*
Mr. Red he picks apples
***pendant ce temps*** *M. Bleu il continue à avancer* (Nic)
during this time Mr. Blue he continues to move forward

The 10-year-olds' increasing use of contrastive relations is striking (cf. Table 11) in comparison to the production of the 7-year-olds where contrastive relations were expressed by only two children. The longer stretch of discourse reported in (55) illustrates the use of these different means in succession.

(55)   *M. Rouge appuie son échelle contre un pommier*
'Mr. Red puts his ladder against an apple tree'
*où il y a des belles pommes rouges*
'where there are beautiful red apples.'
***pendant que*** *M. Bleu arrive*
'While Mr. Blue is arriving'
***M. Bleu lui*** *monte vers le château (…)*
Mr. Blue he goes up toward the castle
*il s'approche*
he is approaching
***tandis que*** *M. Rouge a cueilli des pommes* (Luc)
whereas Mr. Red has picked apples

**Table 11.**  10-year-olds. Means used for the expression of additive and contrastive relations

|  | AXE | ALE | ALX | AMA | BAS | BRA | CAM | EME | GWE | JOH | LUC | MÉL | NIC | SAR | SYL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Addition | – | – | like x | – | – | lui aussi | *aussi aussi* | lui aussi | – | – | – | – | lui aussi aussi aussi comp like x | *aussi* like x | – |
| Contrast | – | – | – | – | – | lui | pendant que | lui | – | – | lui tandis que pendant que | – | pendant ce temps | – | lui |

As for the additive contexts, there is just a slight increase in the number of partici-
pants signaling an additive relation (6 out of 15), either by *aussi* or by expressing the
similarity between the two situations (*like x* 'do the same') as in (56), but the pro-
portion of markings slightly decreases with respect to the 7-year-olds' productions.

> (56)　*et il fait la **même** chose **comme M. Rouge***
> 　　　he does the same thing like Mr.Red
> 　　　*il achète une échelle*
> 　　　he buys a ladder
> 　　　*il se dirige **aussi** vers le château* (Nic)
> 　　　he goes also toward the castle

*Aussi* is still the preferred means for additive relations. The main change in its use
concerns a greater mobility of the *lui+aussi* combination in the utterance. In contrast
to the 7-year-olds' occurrences where *aussi* is mostly placed in a detached position
at the beginning of the utterance, in the case of the 10-year-olds it may appear in
different syntactic positions, but it is preferentially integrated after the finite verb, as
in (56), and optionally accompanied by the contrastive pronoun, as in (57).

> (57)　*après il va voir vers le magasin d'outils*
> 　　　after he goes to look towards the hardware store
> 　　　*et Ø en sort **lui aussi** avec une échelle* (Eme)
> 　　　and comes out him too with a ladder

The occurrences (and distribution) of *aussi* at this age seem very similar to the ones
attested in adults. The comparison between the two groups, however, reveals some
important differences. Firstly, all adult subjects explicitly mark at least once either
the addition of entities or the similarity between the protagonists' actions, whereas
only a third of the children do so. Secondly, the adults resort to more diversified
means for both relations: in addition to explicit comparisons (*comme x*), *aussi* alter-
nates with the additive particle *également* or expressions like *à son tour*, as in (58).

> (58)　a.　*il en ressort avec une échelle sur le dos*
> 　　　　　he comes out of it with a ladder on his back
> 　　　　　*et se dirige lui **aussi à son tour** vers le château* (Bru)
> 　　　　　and heads him also in turn for the castle
> 　　　b.　*il va **également** acheter sa petite échelle* (Lin)
> 　　　　　he goes likewise to buy his little ladder
> 　　　　　*il repart dans la **même** direction qu'était parti M. Bleu* (Egi)
> 　　　　　He leaves in the direction that was taken by Mr. Blue.

Likewise, adults use some more diversified means for contrastive relations (namely right and left dislocations) and signal this relation much more frequently: 70% of the adult subjects mark it at least once versus only 40% of the 10-year-olds. The development attested in the means used for additive and contrastive relations is represented in Figure 2, which reports the frequency of the means attested in each age group compared to the adult group.
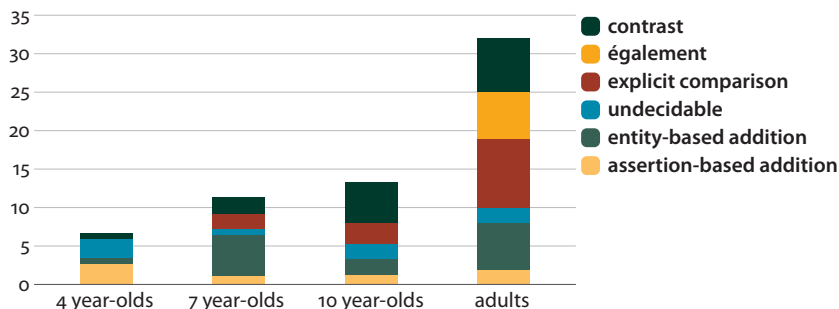


**Figure 2.**  Means for signaling addition and contrast in L1 learners and adult French speakers with children's (*N* = 15) means calculated in proportion to the adults' group (*N* = 10)

Besides an overall increase in both additive and contrastive markings, the comparison across age groups shows different lines of development for French. At the age of 4, children mostly use *aussi* in structurally ambiguous positions or with unidentifiable referents; the same holds for the sporadic marking of contrast (*lui*). From 7 years on, when entity reference is unambiguously expressed, the child orients to the entity-based strategy in both contexts but via different means. In the additive contexts, the scope of *aussi* over the entity is signaled either by its syntactic position or its combination with a strong pronoun; at the same time, children start exploiting a similarity strategy by establishing direct comparisons between the protagonists ('like x'). In the contrastive contexts, they first use strong pronouns (this time with discourse identifiable referents) and later conjunctions expressing simultaneity and opposition. Adults furthermore use a greater variety of means for both relations (lexical variation for additive relations and a more flexible word order for contrastive ones), and they substantially differ from children regarding the frequency of such markings.

## 4.4   Cross-linguistic comparison

The cross-linguistic comparison of children's development in German and French reveals, as expected, both similarities and differences within and across the three age groups.

At 4 years, the narrations produced by L1 learners of German and L1 learners of French are similar with respect to the role of deictic anchoring (German *da*, French *là*, deictic use of pronouns) which often leads to ambiguous reference in the domain of entities. In both languages, children in that age group are only partly able to construct narrative sequences without the help of the adult interlocutor. Children seem to comment on each picture separately. Language-specific differences concerning the overall frequency and the preferred strategy, however, arise with respect to the expression of additive relations.

The 4-year-old speakers of German show some confusion regarding the choice of lexical items (*wieder* vs. *auch*). In the narrations of the 4-year-old speakers of French, occurrences of the relevant counterparts (*toujours, encore*, the verbal prefix *re-*) are not attested in these contexts. This suggests that we are not dealing with an age-related (cognitive) limitation that would force children to concentrate on the repetition of similar situations while ignoring the differences. The difficulties rather seem to be caused by the variety of highly frequent (stressed) German particles that share a preferred structural position (middle field) and have semantic overlap (*wieder* adds otherwise equal assertions relating to different time spans, *auch* adds assertions that differ in another information component – the entity in our case).

The 4-year-old speakers of French, in turn, are confronted with an additive particle (*aussi*) which, unlike its German counterpart, is not very frequent and does not have an easily distinguishable dominant position (and way of integration). In continuity with the distribution attested for younger children (cf. Gayraud 2004; Leray 2009), additive particles at this age are placed in different syntactic positions but most occurrences are actually utterance final (these are the undecidable cases and comprise half of the assertion-based ones in which the final position coincides with the one after the final verb). Their scope is structurally ambiguous and thus highly context dependent. As a result, French-speaking 4-year-olds do not confuse *aussi* with other particles, but they produce only very few additive markings. Given that they do not yet manage context integration in an adult-like way, the intended scope of *aussi* is often unclear. Despite these differences, both in German and in French basic additive particles seem to be the easiest means to relate the actions of the two protagonists across utterances. Discourse-internal explicit comparisons ('like x') are absent at that age, and contrasts between entities are mainly left unexpressed.

At the age of 7, children are able to construct more cohesive narrations in both languages. In particular, reference to entities becomes much less ambiguous, albeit

sometimes over-explicit. Note that in both languages it is in this age group that explicit comparisons between the protagonists are similarly expressed by structures equivalent to 'like x'. Concerning the expression of addition and contrast, in the German data we attest the disappearance of *wieder* in contexts requiring *auch* and a consolidation of the assertion-based strategies for addition. There are still no contrast markings in the data of the 7-year-olds.

The French data of this age group are characterized by a shift to an adult-like dominance of the entity-based strategy for additions (explicit comparisons between protagonists, clear indications of scope for *aussi*) and the emergence of contrast markings, which are also entity-based (use of strong pronouns). Both developments seem to be related to the functional use of contrastive pronouns, becoming a productive means for discourse organization at this age.

The retellings of the 10-year-old speakers of both languages show a further differentiation of informational contexts, an increasing variety of syntactic structures, and coherence markings across utterances. With respect to the marking of addition, the German 10-year-olds do not differ from the 7-year-olds. They consolidate the assertion-based strategy with an increasing number of occurrences of post finite *auch*. Markers of contrast between entities (e.g. *hingegen*) that were attested, albeit rarely, in the adult retellings are still missing in the 10-year-olds' productions.

In the corresponding age group in French, we instead observe a consolidation of the entity-based strategy. The frequency of markings for additive relations slightly decreases, but the frequency of contrast markings (*lui* + conjunctions of opposition/simultaneity) increases, albeit without reaching the adult frequency values.

Development toward the language-specific patterns shown by the adult speakers of both languages involves an increase of the overall number of markings and some lexical diversification in French. The developmental trend in German is more uniform from the beginning. With the exception of a limited number of contrast marking plus more flexibility in the use of the assertion-based vs. the entity-based strategy of addition, the 10-year-olds look quite adult-like in the relevant domain.

Due to the preference for entity-based markings, the development of additive and contrastive relations in French is clearly related to the development concerning reference to entities across age groups (note the availability of contrastive pronouns as a grammaticalized means to contrast entities). This link is not evident in German, where no qualitative changes in the preference and implementation of an assertion-based strategy are observed across age groups.

A comparable picture of the development in both languages can be obtained by considering the different types of markings that were distinguished in Figures 1 and 2a/b above in terms of the strategy they belong to. The relevant cross-linguistic differences are shown in Figure 3 where *aussi/auch* with scope over the subject entity, the structure 'like x', and explicit contrast markings were counted as entity

based, whereas post-finite *aussi/auch*, *wieder,* as well as *également/ebenfalls* (same position) were counted as assertion based. Expressions relating to the similarity of a situation ('x does the same') that could not be categorized as belonging to one of the above-mentioned strategies as well as the undecidable cases for French *aussi* are counted separately.
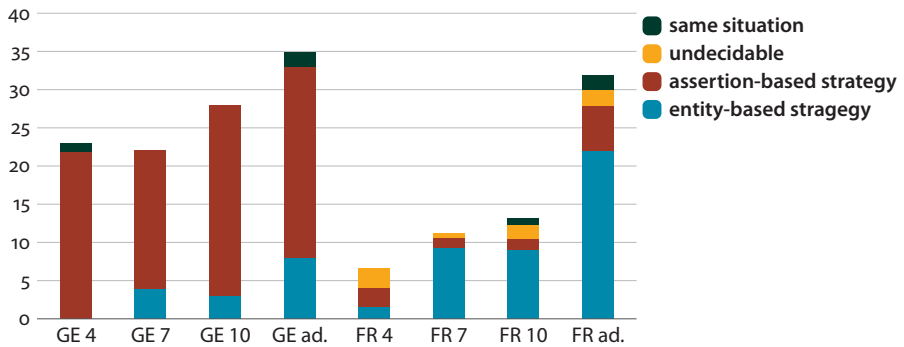


**Figure 3.**  Frequency of strategies in German and French across age groups, with French children's (*N* = 15) means calculated in proportion to the other speaker groups (*N* = 10)

A comparison of the figures clearly shows the language-specific preferences for an assertion-based (German) vs. an entity-based (French) strategy. It can also be seen that the German preference is already in place by the age of 4, whereas the preferred strategy for French, due to its dependency on the development in the domain of entity reference and the availability of contrastive pronouns, only comes into place at the age of 7. From the age of 7 onward, child speakers of both languages clearly differ from each other as they hone in on the preferences displayed in the adult input.

## 5.   Discussion and conclusions

In this paper, we first summarized findings from cross-linguistic comparisons that investigated the expression of addition and contrast in speakers of different languages. The results of these studies as well as the analysis of the data from the control groups in the current study show that adult native speakers of German and French prefer different information units for the establishment of additive or contrastive links in discourse. In accordance with other grammatical properties of the respective languages, German speakers prefer an assertion-based strategy, whereas French speakers prefer an entity-based strategy for the expression of the relevant relations. The strategy that speakers rely on can be determined by the way they integrate specific grammatical and lexical means in their utterances (word order,

types of pronouns, particles in different positions, prosody) and it has an impact on how speakers organize information in order to make their discourse coherent.

On this basis, we wanted to find out when L1 learners of German and French (ages 4, 7, and 10) start to express additive and contrastive relations in an adult-like way and whether some of the available means were used earlier than others. In other words, we asked at what age children find out about the overall tendency preferred in their language and start to construct their discourse accordingly. In addition to that, we also focused on cross-linguistic similarities in the way speakers of given age groups structure their discourse – similarities that might be due to the children's cognitive development across age.

In accordance with earlier studies adopting a comparative approach (Berman & Slobin 1994; Hickmann 2003), we found that there were indeed common developmental trends in discourse structure that were independent of the languages spoken. In particular, we observed far-reaching qualitative changes between 4-year-old and 7-year-old speakers concerning deictic and anaphoric means for the expression of reference to times, places, and entities that play an important role in the emergence of connected discourse (cf. for example the transition from the exophoric to endophoric use of *auch/aussi*). In addition to the acquisition of the target-like means, children around that age also learn to consistently take the listener's knowledge into account when signaling change or maintenance of reference.

There are, however, also clear signs of early language-specific differences between child L1 learners of the same age. Even if previous studies (Gayraud 2004; Leray 2009; Hulk 2003; Nederstigt 2003) already observed the early emergence of a language-specific distribution of additive particles in French- and German-speaking children, the use of comparable elicited data obtained via the same stimulus makes further differences concerning both their frequency and their discourse function visible. A clear preference for the assertion-based strategy in German can be observed as early as age 4, an age at which learners of French produced only very few overt markings, the majority of which could not be assigned to one or the other strategy in a straightforward way. The entity-based strategy shown by French adults clearly emerged at the age of 7. From this age onward, both learner groups clearly developed in the direction of the respective target preferences.

The organization of additive utterances in the German adult narrations is comparably uniform so that children can derive the preferred positions already at the age of 4. Children of that age group are struggling with the semantic boundaries of the particles *auch* and *wieder,* but an analysis of the particles' position reveals that they are systematically placed in the middle field, following the subject entity. Longitudinal data from much younger L1 learners of German show that the acquisition of stressed *auch* regularly precedes the acquisition of unstressed *auch* (Nederstigt 2003; Höhle et al. 2009). The integration of *auch* in early child language

does not require the core grammatical structure to be in place, as *auch* appears before the acquisition of finiteness marking (cf. Penner et al. 1999; Dimroth 2009 about a bootstrapping function of *auch* for the acquisition of finiteness in German).

Supported by the saliency of the stressed particle and high input frequencies, learners of German can thus stick to their initial pattern for the expression of addition and elaborate on it only marginally, e.g. by adding more sophisticated lexical variants like *ebenfalls* or by choosing an entity-based integration of *auch* ('also x…') once in a while. Traces of the assertion-based tendency to conceptualize discourse wherever possible as an answer to an implicit yes-no question were also observed in contexts involving a contrast between entities. Other than that, these contexts were left unmarked by all German-speaking children and nearly all adults.

The acquisition task faced by the L1 learners of French is more difficult by comparison. Even if adult production globally displays a dominant entity-based strategy, this is realized through a variety of means that differ according to context. In the additive contexts, the alternation is between marking explicit comparisons and using additive particles with lexical variants and different positions; in the contrastive contexts, the use of marked word orders and conjunctions of opposition is differentiated. Both contexts share the possible use of strong pronouns, but their presence is optional. The syntactic mobility of *aussi* is reflected in the production of the youngest French children; similarly strong pronouns may be present already at 4, but they are used deictically. Children's orientation toward an entity-based strategy depends on (and is geared by) the development of specific means for reference to entities, namely the functional use of strong pronouns, and the mastery of this aspect of discourse construction takes more time.

Thus, it is not conceptually easier or more difficult to acquire an entity-based vs. assertion-based perspective. The complexity lies rather in input differences: frequency, prosodic saliency, and a clearly dominant position in the German input accelerate the acquisition of German *auch* and the adoption of the corresponding assertion-based discourse perspective, whereas the French entity-based integration seems to be relatively delayed because of the diversity of means (including grammaticized ones) that are typically used by adult French speakers. The current study therefore contributes to the clarification of the interplay of linguistic and cognitive factors in L1 acquisition. Moreover, it shows that the *thinking for speaking* effect detected in adult speakers is also subject to progressive development in children. Even if the relevant optional items are spontaneously produced quite early in L1, it takes children a relatively long time to use them in an adult-like way as cohesive devices for discourse construction.

On their slightly more cumbersome way toward the target pattern, monolingual French children do not initially overextend the assertion-based organization, however. This is different for bilingual children. Evidence from the parallel acquisition

of French and German (Leray 2009) or French and Dutch[16] (Hulk 2003) indicates that the post-finite position in which particles follow the associated constituent (cf. the examples *Peter war AUCH krank/ Pierre était aussi malade* from the introduction) are overused in French under the influence of German/Dutch. At the same time, the bilingual children do not transfer any of the French positions into German. Although it cannot be ruled out that language dominance[17] also played a role for the bilingual children, our findings are supported by monolingual German children's early acquisition of assertion-related *auch* and bilingual children's tendency to transfer this dominant pattern into French. The robustness of the pattern in early child language is reflected in the discourse preferences that are already visible in German speakers at the age of 4.

The findings also confirm a tendency in French, but not in German, to explicitly mark that two situations are similar or identical (*faire la même chose*). In Section 2 we referred to an account by Reis & Rosengren (1997) who propose slightly different meaning contributions for stressed ('likewise') and unstressed *auch* ('in addition/furthermore'). According to this proposal, the meaning of stressed *auch* highlights similarities and not differences and thus comes rather close to the lexical descriptions attested in French. Further research must show whether both solutions can be explained with a joint underlying principle.

## Acknowledgements

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**16.** Concerning syntax, prosody, and information structure, the Dutch additive particle *ook* behaves very much like German *auch*.

**17.** The discrepancy in favor of German may be due to differences in language dominance: French is probably the bilingual children's weak language, as they live in Germany or the Netherlands.

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# Focus, prosody, and subject positions in L3 Spanish

## Analyzing data from German learners with Italian and European Portuguese as heritage languages

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This paper investigates the acquisition of focus-induced word order variation by German learners of L3 Spanish, thereby comparing monolingual learners and multilinguals who speak Italian or European Portuguese (EP) as a heritage language in addition to their dominant language. Special attention is given to the position of focused subjects ($[_F S]$) in non-complex declaratives. In accordance with Rothman's (2010, 2011) Typological Primacy Model (TPM), we hypothesize that the multilingual learners behave more target-like than the monolinguals given that Italian and EP are typologically closer to Spanish than German and pattern with the target language with respect to the post-verbal position of $[_F S]$ in sentences lacking an overt object determiner phrase (DP). Based on elicited production data and a grammaticality judgment task, it is shown that the multilingual learners have only a slight advantage over the monolinguals, depending on their metalinguistic knowledge. This suggests that the predictions made by the TPM do not necessarily hold for the special case of foreign language learning by heritage speakers.

## 1. Introduction

Over the past two decades, research on third language (L3) acquisition, i.e. learning a further foreign language after a first one, has considerably increased. A central goal of the models proposed in the recent literature is to disentangle possible sources of cross-linguistic influence (CLI) or transfer (Odlin 2003) in a setting that involves more than two linguistic systems and is thus more complex than 'classic' foreign language learning, where the learner's L1 system is assumed to be the only possible source of influence. In settings of L3 acquisition, three transfer scenarios are possible, namely (1) transfer from the learners' L1 to the target language (L3),

but no transfer from L2; (2) transfer from the first foreign language (L2) to the L3, but no transfer from L1; and (3) transfer from both the L1 and the L2 to the L3. A fourth, at least logically possible scenario would imply no CLI at all. If not only transfer from L1 or L2 to L3 is considered, but also possible influences from L3 on the two languages previously acquired are taken into account, the possible ways in which the three languages might interact are even more numerous. Bear in mind that not only linguistic but also extra-linguistic factors such as the learners' attitudes towards their languages, their language learning motivation, and degree of metalinguistic awareness, as well as quantitative factors such as language use and the amount of input in L2 and L3, etc. must be considered. Thus, it is apparent that settings of L3 acquisition are characterized by a considerable increase of complexity as compared to the 'classic' situation of foreign language learning (see Peukert 2015: 4f).

Some recent L3 studies have highlighted the privileged status of transfer from L1 to L3, assuming that the native language of L3 learners in some way blocks their access to the L2 system for the purpose of L3 acquisition. This view is consistent with the Fundamental Difference Hypothesis (FDH; Bley-Vroman 1989), according to which adult foreign language learners have no direct access to Universal Grammar (UG), which is only fully accessible to L1-acquiring children. A recent example of empirical research supporting this view is Hermas (2014) who investigated the acquisition of the null-subject parameter in L3 English after L2 French by native speakers of Arabic. Using an acceptability judgment task, he found that the source of transfer is the L1 (rather than the L2). Other studies have claimed that the degree of cognitive similarity is higher between two explicitly learned systems, i.e. L2 and L3, than between L3 and the implicitly acquired L1, and consequently attribute more impact to L2 than to the native language regarding transfer effects in L3 learning (see e.g. Bardel & Falk 2012). The Cumulative-Enhancement Model (CEM) was proposed by Flynn et al. (2004) based on an empirical study of the acquisition of relative clauses in L3 English by bilingual learners with a Turkic L1 (Kazakh) and a Slavonic L2 (Russian). It postulates that all previously acquired languages, regardless of their status, might influence the learning of further languages. The Typological Primacy Model (TPM, see e.g. Rothman 2010, 2011), finally, also assumes potential influence from any language previously acquired, but attributes more importance to the language that is typologically closer to the target language. Thus, (positive or negative) transfer to L3 from L1 is predicted to occur when the native language shares certain structural properties with the L3; in turn, transfer from L2 to L3 is more likely to occur when L2 and L3 are typologically similar.

Building on the insights of both the CEM and the TPM, it is reasonable to expect that learners of L3 Spanish might benefit from their knowledge of a typologically close language such as Italian or European Portuguese (EP) when acquiring a

structural property that has no exact counterpart in their L1 (in our case German). One should keep in mind, however, that research on L3 acquisition has largely concentrated (firstly) on 'classic' foreign language learners who successively acquire a further foreign language after a first one (e.g. Rothman 2010, 2011; Cabrelli Amaro et al. 2015) and (secondly) on the learning of a foreign language (L3) by bilingual (L1/L2 or 2L1) learners (Flynn et al. 2004). The case of multilingual learners who speak a heritage language (HL, see Valdés 2000; Montrul 2016) in addition to their dominant language (which is also the language of instruction) has only been addressed in a few recent studies. In addition, the sparse research on the acquisition of the syntactic properties of a foreign language in this particular group of speakers has concentrated on L3 English: Sağın Şimşek (2006) and Kupisch et al. (2013) looked at German learners speaking Turkish as a heritage language and found hardly any transfer from the HL to the foreign language in the realm of word order and article use. Siemund and Lechner (2015) investigated the acquisition of determiners and subject-verb agreement by German/Vietnamese and German/Russian learners (Russian and Vietnamese being their heritage languages). They identified a certain advantage for multilingual learners of English as an additional language, at least regarding the younger children (up to age 12). To our knowledge, the acquisition of L3 Spanish by learners speaking a variety from the Romance group as an HL in addition to the language of the environment has received only scant attention.[1] The present contribution aims to fill a research gap in this respect and reports on a pilot study investigating the acquisition of the post-verbal position of focused subjects ($[_F S]$) in L3 Spanish by multilingual learners who speak Italian or (European) Portuguese as an HL in addition to their dominant language (German). The paper is organized as follows. In a first step, we give an overview of the information-structural category of focus and focus-induced word order variation, with special attention given to the position of focused subjects in Spanish, Italian, EP, as well as non-native Spanish (Section 2). In Section 3, we present our empirical study before discussing the results in the context of the question of how to represent variable learner grammars (Section 4). Section 5, finally, offers some concluding remarks and mentions possible directions for further research.

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1.    It is worth pointing out, however, that a few recent studies investigated phonological learning in this group of learners. On the acquisition of speech rhythm of L3 English and French by multiple learners who speak Mandarin Chinese or Turkish as an HL, see Gabriel et al. (2015a, 2015b); for the same phenomenon in L3 Spanish acquired by multilingual German/Turkish learners, see Gabriel & Rusca-Ruths (2015).

## 2. Focus and focus-induced word order variation

Apart from the well-established dichotomies *theme-rheme* and *topic-comment* (see e.g. Casielles-Suárez 2004; Gabriel 2007: 19–54; Krifka 2008; López 2009; Dufter & Gabriel 2016), much of the recent literature relies on the so-called *focus-background articulation* (FBA) to capture the information-structural component of an utterance. Seen from this angle, the shared assumptions of speaker and hearer constitute the *background* (or presupposition), which contrasts with the *focus*, i.e. the sum of the non-presupposed information, as outlined by, e.g., von Stechow (1991) and Krifka (2008). Following the definition proposed by Krifka, which is based on central assumptions of alternative semantics (Rooth 1985, 1992), focus "indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions" (Krifka 2008: 247). These alternatives may refer either to the form of the expression (called "expression focus" in Krifka's terminology)[2] or its denotation, leading to a set of alternative interpretations. Among the various subtypes of denotation focus (see Krifka 2008: Section 3 for an overview), we concentrate on narrow focus on the subject with either a presentational or contrastive reading (presentational or information focus vs. contrastive focus), as shown in the Spanish examples given in (1).[3]

(1) a. Sp. *¿Quién compra el periódico? Lo compra* [$_F$ *MaRÍa*].
        'Who buys the newspaper? MAry buys it.'
    b. *Julia compra el periódico, ¿verdad? No.* [$_{Fc}$ *MaRÍa*] *lo compra.*
        'Julia buys the newspaper, right? No. MAry buys it.'

It is well known that languages differ with respect to the linguistic means they use to mark focus. While morphological focus marking is rather rare among the languages of the world,[4] most languages signal focal prominence primarily by prosodic and syntactic means. These languages including all the languages of our sample, i.e. the target language (Spanish), the two heritage languages (Italian and EP) and the dominant language (German) differ as to how the prosodic and syntactic components

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**2.** This is the case for linguistic corrections as in e.g. *It's kiLOmeter in English, not kiloMEter*, where misplacement of word stress is corrected by the interlocutor.

**3.** Here and in the following, the focused constituent is marked through labeled bracketing with subscripted $_F$ standing for information focus and $_{Fc}$ for contrastive focus. Capitalization indicates the position of nuclear stress, i.e. the perceptually most salient stress position in the Intonation Phrase (IP).

**4.** For an example of morphological focus marking, see the West Atlantic language Wolof, which uses bound morphemes attached to verbal clusters that indicate the focal status of an argument (see Rialland & Robert 2001: 897). In Spanish, focus marking on the word level is restricted to free morphemes such as the focus-sensitive particles *solo* 'only', which requires the focus interpretation of the XP in its scope (see e.g. Kovacci 1999). We will not consider this issue in the following.

of grammar interact in the expression of focus. In the remainder of this section we concentrate on the prosody/syntax interface in Spanish (2.1), Italian, EP, and German (2.2), with special attention given to focused subjects in simple declarative sentences.

## 2.1 Focused subjects in Spanish

Spanish makes use of both syntactic and prosodic strategies to signal narrow focus on the subject ($[_F S]$), which may either appear pre-verbally in its canonical position, i.e. $[_F S]VO$ or $[_F S]V$, as in (2), or clause-finally, i.e. $VO[_F S]$ or $V[_F S]$, as in (3). While the latter structure is produced with a neutral intonation contour involving regular tonal declination and right-most phrasal stress, the former involves shifting of the nuclear accent to the left edge of the Intonation Phrase (IP) and usually displays post-focal deaccentuation, i.e. the focal constituent is followed by a low flat contour. Scholars working within a framework of formal syntax (mainly relying on speakers' or the author's intuitions) have claimed that focused constituents are obligatorily placed in IP-final position, at least with a non-contrastive reading. It is consequently assumed that some syntactic movement operations compulsorily apply to achieve IP-final placement of $[_F S]$; see the seminal work by Zubizarreta (1998, 1999), couched within a Minimalist framework, as well as Costa (2001a, 2001b), Gutiérrez-Bravo (2002, 2005, 2006) and Samek-Lodovici (2001, 2005, 2006), who address the topic from an optimality-theoretic perspective. In this vein, only the structures given in (3) are well formed (√), whereas the examples in (2) are considered ungrammatical (*).

(2) Sp. *¿Quién compra el periódico?*
   a.  ($_{IP}$ $[_F$ *MaRÍa*] *compra el periódico*.)  *$[_F S]VO$
   b.  ($_{IP}$ $[_F$ *MaRÍa*] *lo compra*.)  *$[_F S]Cl+V$

(3) a.  ($_{IP}$ *Compra el periódico* $[_F$ *MaRÍa*].)  √$VO[_F S]$
   b.  ($_{IP}$ *Lo compra* $[_F$ *MaRÍa*].)  √$Cl+V[_F S]$

Other scholars, by contrast, have claimed that Spanish has recourse to both stress shift (as in 2) and IP-final placement of $[_F XP]$ (as in 3). See e.g. Casielles-Suárez (2004), Domínguez (2004) and Olarrea (2012: 605) for the more syntactic side, as well as several studies on Spanish intonation such as Toledo (1989: 226), García Lecumberri (1995: 246, 341), Cabrera Abreu & García Lecumberri (2003: 35), Face (2001, 2002) or Hualde (2002: 106, 2005), where $[_F S]VO$ structures are used to exemplify the prosody of focus without referring to the alleged ungrammaticality of such constructions. A schematized representation of the intonational contour of (2a) is given in Figure 1. This involves the insertion of a low intermediate phrasal boundary (L-) at the right edge of the *in situ* focused constituent $[_F$ *MaRÍa*] and post-focal deaccentuation or at least compression (resulting in a low flat F0 contour).
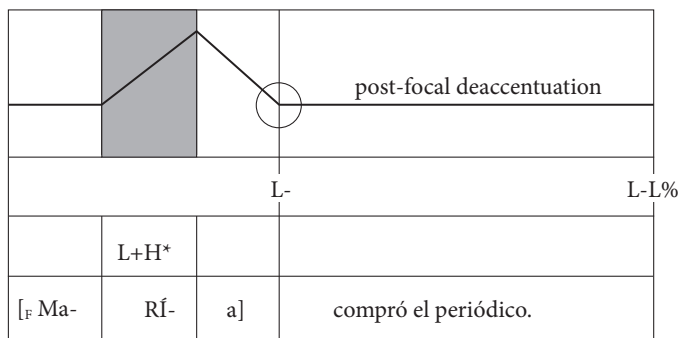
**Figure 1.** Schematized F0 contour of (2a)

The assumption that prosodic marking of *in situ* focused subjects is not restricted to a contrastive interpretation has been corroborated in recent empirical work, based on both elicited and natural data from several Spanish varieties. See Gabriel (2007) for a cross-dialectal perspective, Gabriel (2010) on two Argentinean varieties, Muntendam (2013) on Andean Spanish, Hoot (2012, 2016) and Uth (2014) on different varieties spoken in Mexico, as well as Heidinger (2013, 2015), Vanrell & Fernández Soriano (2013), and Feldhausen & Vanrell (2014) on Peninsular Spanish.[5] Taken together, the distribution of the pre- or post-verbal position of the neutrally focused subject can be summarized as follows: Across varieties, speakers of Spanish prefer the pre-verbal subject position in constructions with a transitive verb and a full object DP (2a, repeated as 4a, for convenience), whereas the post-verbal subject position is preferred when the object is realized as a clitic pronoun (3b, repeated as 4b) and in constructions with unaccusative (4c) and unergative (4d) verbs.[6]

(4)   a.   Sp. ($_{IP}$ [$_F$ *MaRÍa*] *compra el periódico.*)          √[$_F$ S]VO
      b.         ($_{IP}$ *Lo compra* [$_F$ *MaRÍa*].)                √Cl+V[$_F$ S]
      c.         *Llegó* [$_F$ *MaRÍa*]                        √V[$_F$ S]
                'MAry arrived.'
      d.         *Duerme* [$_F$ *MaRÍa*]).                    √V[$_F$ S]
                'MAry is sleeping.'

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5.   For an instructive summary of the recent controversy around the position of focused subjects in Spanish, see Uth (2014: 89–91).

6.   Note that in constructions with unaccusative verbs, the post-verbal subject position does not depend on information structure and is preferred with a whole-focus interpretation; see e.g. 'What happened?' [$_F$ *Llegó MaRÍa*] 'Mary arrived' or [$_F$ *Salió el SOL*] 'The sun came out'. Regarding these constructions in non-native Spanish, see Lozano (2006) and Section 2.3 below.

Note that the structures exemplified in (4) are strongly preferred by the speakers across varieties, but their respective counterparts are not completely ruled out. For example, Gabriel (2010) conducted an elicited production experiment with each 25 speakers from Buenos Aires and Neuquén (northern Patagonia). He found that both varieties strongly prefer [$_F$ S]VO (production rate: 100% for the Patagonian speakers and 95% for the speakers from the capital), but VO[$_F$ S] occurs at a percentage of at least 5% in the Buenos Aires data and thus cannot be considered ungrammatical. However, when the object is realized as a clitic pronoun, the distribution is reversed, at least for the Buenos Aires speakers, who produce Cl+V[$_F$ S] in 73% of the cases. The Neuquén speakers, finally, did not show any preference at all for the pre- or post-verbal position of [$_F$ S] in sentences involving cliticization of the object; both Cl+V[$_F$ S] and [$_F$ S]Cl+V were produced at a ratio of 50% each. Uth (2014), who employed a refined version of Gabriel's (2007, 2010) methodology (see Section 3.2) to elicit structures with narrowly focused subjects from speakers of Mexican (Yucatán) Spanish, obtained comparable results, although constructions with preverbal focused subjects were generally produced to a lesser extent (see Uth 2014: 99f).

In addition, it has been shown in empirical work that there is no clear-cut distinction between information (or presentational) and contrastive focus, since both syntactic options (i.e. clause-initial *in situ* focus on the subject or phrase-final focus obtained via some syntactic movement operation) may occur under both conditions.[7] However, there is a tendency to resort to cleft constructions in the case of contrastive focus (Gabriel 2007, 2010). Furthermore, contrastiveness tends to be prosodically more salient, as has been shown, e.g., for Buenos Aires Spanish by Feldhausen et al. (2011). This study found a categorical contrast between a low flat contour (L*) and a steep rise and fall within the temporal limits of the accented syllable (L+H*+L 'low-high-low') for presentational vs. contrastive focus in clause-final nuclear position.

Summing up, Spanish cross-dialectally displays more variability than suggested in formal work such as e.g. Zubizarreta (1998, 1999), although clear preferences (e.g. towards *in situ* focused subjects in constructions containing a full object DP) can be identified in empirical data. In the following, we briefly outline the distribution of post- and pre-verbal focused subjects in the remaining languages addressed in our contribution, i.e. Italian, EP, and German (Section 2.2), before we briefly turn to focus-induced word order variation in non-native Spanish (Section 2.3).

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**7.** As for non-clefted declaratives, Adli (2011: 134) used gradient acceptability judgments obtained from speakers of Peninsular Spanish to show that contrastively focused objects may occupy different syntactic positions, albeit with different degrees of acceptability and a strong preference for prosodic marking *in situ*.

## 2.2  Focused subjects in Italian, EP, and German

Both Italian and EP largely pattern with Spanish regarding the use of post-verbal subjects. As in Spanish, subjects preferably occur post-verbally in constructions with unaccusative verbs, irrespective of whether the sentence conveys a whole focus reading (5a, 6a) or the subject is narrowly focused (5b, 6b).

(5)  a.  It.  [$_F$ *È arrivato GIANni*].
            'Gianni arrived.'
      b.        *È arrivato* [$_F$ *GIANni*].
            'GIANni arrived.'

(6)  a.  EP  [$_F$ *Chegaram as caDEIras*].        (Mensching & Remberger 2006: 175)
            'The chairs arrived.'
      b.        *Chegaram* [$_F$ *as caDEIras*].
            'The CHAIRS arrived.'

Again as in Spanish, both Italian and EP show a strong tendency towards post-verbal placement of the focused subject ([$_F$ S]) in clauses that lack a full DP object, as demonstrated with the clitic right and left dislocation structures in (7) and (8a). Note that in EP the focused subject also occurs post-verbally in constructions with null objects, as shown in (8b).

(7)  It.  *Lo ha comprato* [$_F$ *VeROnica*], *il giornale*.        (Bocci 2013: 31)
            'VeROnica bought it, the newspaper.'

(8)  a.  EP  *Esse bolo, comemo-lo* [$_F$ *NÓS*].
                                        (Hundertmark-Santos Martins 1998: 363)
            'This cake, WE eat it.'
      b.  EP  Context:  *Quem comeu a tarte?*        (Ambar 1999: 27)
                            'Who ate the cake?'
                        *Comeu* [$_F$ *a JOAna*].
                            'JOAna ate (it).'

In contrast to Spanish, in Italian post-verbal subjects are at best marginally acceptable when the object is realized as a full (lexical) DP:

(9)  It.  ʾ*Spinge l'arbitro* [$_F$ *RoNALdo*].        (Belletti 2001: 71)
            'RoNALdo shoves the referee.'

However, Italian allows for VO[$_F$ S] ordering when the linear stretch consisting of the verb and the following object(s), i.e. the entire VP, expresses a typical action in a given extra-linguistic context, such as placing the ball on the penalty spot in a soccer game:

(10) It. *Mette la palla sul dischetto del rigore* [$_F$ *RoNALdo*].       (Belletti 2001: 71)
'RoNALdo puts the ball on the penalty spot.'

According to the literature, EP differs from Italian in that presentational focus on the subject also entails a change in the canonical SVO word order in simple declarative clauses with a full (lexical) object DP, yielding either OV[$_F$ S], as shown in (11a), taken from Ambar (1999), or VO[$_F$ S] as in (11b), taken from Costa (2000):

(11)  a.  EP  Context: *Quem comeu a tarte?*
'Who ate the cake?'
*A tarte comeu* [$_F$ *a JOAna*].       (Ambar 1999: 27)
'JOAna ate the cake.'
  b.      Context: *Quem é que partiu a janela?*
'Who broke the window?'
*Partiu a janela* [$_F$ *o PAUlo*].       (Costa 2000: 197)
'PAUL broke the window.'

However, Costa (2000: 197) does not completely exclude other linear orderings such as [$_F$ S]VO or V[$_F$ S]O in this context and notes that some speakers do not accept VO[$_F$ S] or accept it only with longer subjects.

German, finally, allows for post-verbal subjects in verb-second (V2) main clauses (Haider 2010: 1–5), as shown in (12a, b), but lacks any surface-identical counterpart of Spanish VO[$_F$ S] or Cl+V[$_F$ S], see (11c).

(12)  a.  Ger. *Die Zeitung       kauf-t       [$_F$ MaRIa].*
the  newspaper  buy-3SG  Mary.
'[$_F$ MAry] buys the newspaper.' / 'It is [$_F$ MAry] who buys the newspaper.'
  b.      *Die Zeitung       ha-t       [$_F$ MaRIa] ge-kauf-t.*
the  newspaper  AUX-3SG  Mary       PTCP-buy-PTCP
'[$_F$ MAry] has bought the newspaper.'
  c.      **Kauf-t     {die Zeitung /   sie}   [$_F$ MaRIa].*
buy-3SG   the newspaper  it     Mary

Based on the mere structural differences and similarities between the languages of our sample, it is reasonable to expect positive transfer from Italian or EP to the target language, Spanish. This assumption coincides with the typological closeness of these languages, all of them belonging to the Romance family, and is in accordance with the TPM as briefly outlined in Section 1. However, no positive transfer is expected from German to Spanish. In a next step, we give an overview of empirical work on subject positions in non-native Spanish.

### 2.3 Subject positions in non-native Spanish

Only few studies have investigated focus-induced word order variation in Spanish learner data (Hertel 2003; Lozano 2006; Zubizarreta & Nava 2011).[8] It is nevertheless generally accepted that (1) "the acquisition of subject realization and subject inversion in Spanish is a challenging area for L2 speakers" (Domínguez 2013: 162); that (2) there is a gap between production and acceptance, in that learners' acceptance of post-verbal subjects is higher than the production rates (Hertel 2003, Domínguez 2013); and that (3) production and acceptance of post-verbal focused subjects in learners increase as a function of proficiency. In her study on the acquisition of post-verbal subject position by English learners of L2 Spanish, Hertel (2003) has shown that transfer of the English SV ordering to L2 Spanish occurs at a rate of 100% in the data produced by the beginners. Advanced learners, by contrast, produce post-verbal focused subjects (linear ordering: $V[_F S]$) in constructions with unaccuatives at a higher rate (53%) than in structures involving unergative verbs (36%; Hertel 2003: 291). Increase in target-likeness in advanced learners as compared to low proficiency L2 speakers has also been evidenced in Domínguez' (2013) study, which showed that advanced English learners of L2 Spanish produce and accept post-verbal subjects to a higher extent than beginners, regardless of whether the subject is narrowly focused or not (Domínguez 2013: 151, 160). These findings suggest that word order regularities that depend on information-structural categories such as focus are harder to acquire than syntactic properties that are unequivocally linked to the lexicon (as is the case, e.g., for unaccusatives). This view is corroborated by Lozano (2006: 145), who states that "interlanguage grammars of English learners of Spanish converge with the grammars of native speakers when formal properties are involved, yet they diverge (in particular by showing optionality) with discursive focus". The question of how such individual learner grammars that increasingly converge with the grammar of the target language may be accounted for in a framework of formal syntax will be briefly addressed in Section 4, below. The following section, however, is devoted to the presentation of our pilot study.

## 3. Empirical study

In a first step, we present our research questions and hypotheses (Section 3.1), before outlining the data collection (Section 3.2.1) and providing information on the participants of the study (Section 3.2.2). Section 3.3 presents the results of our study, which are discussed in Section 3.4.

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**8.** Regarding the acquisition of non-canonical word order in Italian as a foreign language, see Bettoni & Di Biase (2011).

## 3.1 Research questions and hypotheses

The main goal of our study was to investigate how bilingual learners with Italian or EP as an HL perform in L3 Spanish regarding the syntactic expression of focused subjects as compared to monolingual German learners. As Romance null-subject languages, Italian and EP are closely related to Spanish with respect to morpho-syntactic typology and pattern with the target language in exhibiting post-verbal focused subjects. German, on the other hand, is a Germanic language that behaves quite differently in many respects, particularly with respect to word order, as pointed out in Section 2.2. We therefore supposed that multilingual learners with Italian or EP as an HL should have an advantage over German monolinguals with regard to the syntactic encoding of focus on the subject in L3 Spanish. The leading question was whether the heritage speakers produced and/or accepted structures involving post-verbally focused subjects in a more target-like manner than monolingual learners of L3 Spanish. Based on Hertel's (2003) and Domínguez' (2013) insights, we assume that all learners are more likely to accept post-verbal subjects than to produce them. Our hypotheses were thus as follows:

H1  Multilingual learners who speak Italian or EP as an HL in addition to German, their dominant language, produce post-verbal $[_F S]$ in L3 Spanish in a more target-like manner than monolingual German learners do.

H2  Multilingual learners who speak Italian or EP as an HL in addition to their dominant language, German, accept focused post-verbal $[_F S]$ in L3 Spanish to a higher extent than monolingual German learners do.

H3  All learners are more likely to accept than to produce post-verbal subjects.

## 3.2 Methodology

In the following, we outline our methodology, thereby presenting the data collection (3.2.1), before providing the reader with the detailed information on the speakers (3.2.2).

### 3.2.1 *Data collection*
Three different types of data were collected, including both linguistic and extra-linguistic materials. The linguistic part of the data collection followed the methodology applied by Gabriel (2007, 2010);[9] the collection of socio-demographic and further metalinguistic data in the second part was based on semi-structured interviews roughly along the lines of Kvale (2007).

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9.  For an alternative (and more sophisticated) data collecting procedure, see Uth (2014).

In a first step, the participants were presented with two short picture stories (taken from Gabriel 2007, 2010) as PowerPoint$^{TM}$ files that were captioned as shown in Figure 2.



María compra el diario en el kiosco.

Después se lo da a su hermano.

Blancanieves secuestra a Tarzán …

… y se lo entrega a los siete enanitos.

**Figure 2.** Visual stimuli (picture stories) with captions used in the elicited production task

As shown in the captions, the two picture stories contained both a transitive verb (*comprar* 'to buy', *secuestrar* 'to kidnap'; left panel) and a ditransitive verb (*dar* 'to give', *entregar* 'to hand over'; right panel). The second story (lower panel) involves an animate direct object, thus requiring differential object marking (DOM) with *a* in Spanish (as opposed to the participants' heritage languages, Italian and EP). After familiarizing themselves with the picture stories and the vocabulary used in the short captions,[10] the participants were asked various questions that targeted different information-structural readings. An example is given in (13):

(13)  a.  Sp.  *¿Quién compra el periódico en el kiosco?*
             'Who buys the newspaper at the kiosk?'
      b.     *Es Natalia la que compra el periódico, ¿verdad?*
             'Natalia buys the newspaper, doesn't she?'

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**10.** Several participants were not familiar with the exact meaning of the verb *secuestrar* 'to kidnap'.

Whereas in (13a) information focus is set on the subject, the focus on the subject is contrastive in (13b), since learners have to correct the erroneous information suggested by the context. Some of the possible answers, expressing both presentational and contrastive focus on the subject and displaying different linear orderings (Cl+V[$_{F/Fc}$ S], [$_{F/Fc}$ S]VOPP) and construction types (e.g. non-complex declarative, cleft sentence), are given in (14).

(14)  Sp.  *Lo compra* [$_{F/Fc}$ *MaRÍa*]. / [$_{F/Fc}$ *MaRÍa*] *compra el periódico en el kiosco.* / *Es* [$_{F/Fc}$ *MaRÍa*] *la que compra el periódico.* / [$_{F/Fc}$ *MaRÍa*] *lo compra.* / …
'MAry buys the newspaper.'

The speakers were asked to avoid answers consisting of one constituent only, but otherwise to phrase their answers as they wished (regarding both lexicon and word order). The data were transcribed and systematized according to the syntactic strategies used by the speakers to express the relevant information structure required by the context. For the present purpose, seven questions are considered to target the subject [$_{F/Fc}$ S] and four involve a contrastive focus reading. The remaining 22 questions with focusing constituents other than the subject served as distractors.

In a second step, the learners were presented with a Grammaticality Judgment Task (GJT). They were asked to choose one of two answers to a given question and indicate whether the dispreferred structure was acceptable to them or not. An example is given in (15), showing the (hypothetical) answer of a learner who prefers [$_F$ S]VO over VO[$_F$ S] (see ticked box), but considers the latter ordering grammatical (indicated with √).

(15)  Sp.  ¿Quién compra el periódico?                    target: [$_F$ S]
      ☐ *Compra el periódico María.*                    √ VO[$_F$ S]
      ☒ *María compra el periódico.*                    [$_F$ S]VO

Seven out of twelve items are relevant for our purpose, as they target the subject and the proposed answers contain both pre- and post-verbal subjects. In two cases, the focus involves a contrastive interpretation; the remaining five items serve as distractors.

In a third step, non-linguistic data were collected. First, the participants filled in a questionnaire on their social background and language learning biographies. Then a semi-structured interview (Kvale 2007) was conducted focusing on the learners' attitudes towards their languages as well as their individual degree of metalinguistic awareness. Here, one of the main questions was whether they knowingly transferred syntactic structures such as VS from their HL to the foreign language, i.e. Spanish, thus revealing possible interrelations between the participants' linguistic and meta-/non-linguistic knowledge.

#### 3.2.2   *Participants*

Three groups of participants were tested, each comprising five learners of L3 Spanish. At the time of the data collection, all subjects were students of Spanish at Hamburg University, except for one male participant who had just obtained his university degree. The speakers were aged between 20 and 34 years and had all grown up in northern Germany. They were all native speakers of a northern close-to-standard dialect of German and had no knowledge of any Low German variety (e.g. *Plattdüütsch*). All speakers had learned English as a first foreign language (L2) at school; Spanish was acquired as a third (and in some cases fourth) foreign language.

The first group of speakers consisted of five Italian heritage speakers. Two of them were born in Italy but had come to Germany in early childhood; the remaining three participants were born and raised in families of Italian origin in northern Germany. The second group comprised five heritage speakers of EP; all of them were born and raised in Germany and had not spent more than a few weeks in Portugal. All heritage speakers had acquired Italian/EP from birth on; German was acquired either from birth on or since pre-school age. All heritage speakers had thus grown up as bilinguals. Nevertheless, all of them affirmed that German was doubtlessly their stronger (i.e. dominant) language. The third group was a control group comprising five German monolinguals.

All participants had started studying Spanish at school; the amount of language instruction at school varied from 2 to 5 years. However, any differences that might have arisen from this were obviously leveled during their university studies, since all speakers were highly fluent in their oral production in L3 Spanish at the moment of the recordings. Moreover, all of them had some basic knowledge of a further Romance language, which they had acquired either at school (in the case of French) or during their university studies (in the case of Italian, Portuguese, and Catalan).

#### 3.3   Results

The analysis of the data obtained from the elicited production task showed that the learners from all groups use post-verbal subjects only marginally. In only one out of 45 possible cases (2.2%) was a post-verbal subject produced to express presentational focus in a construction containing a full DP object (produced by a monolingual German learner, D02):

   (16)  Sp.  Context:  *¿Quién compra el periódico?*
                       'Who buys the newspaper?'
                       *Compra el periódico* [$_F$ *MaRÍa*].        (speaker D02)
                       'Mary buys the newspaper.'

Furthermore, in two cases one speaker used a pseudo-cleft (ordering: wh relative + *ser* 'to be' + DP), i.e. a construction which patterns with VO[$_F$ S] in that the relative clause precedes the copula sentence and the focused subject occupies the right-most position of the clause. Both instances of pseudo-clefts stem from the same participant, an Italian heritage speaker (I04):

(17) a. Sp. Context: *¿Quién compra el periódico?*
'Who buys the newspaper?'
*Quien compra el periódico es* [$_F$ *MaRÍa*]. (speaker I04)
'Who bought the newspaper is Mary.'

b. Context: *¿Quién le da el periódico a su hermano?*
'Who gives the newspaper to their brother?'
*Quien le da el periódico a su hermano es*
[$_F$ *MaRÍa*]. (speaker I04)
'Who gives the newspaper to their brother is Mary.'

In the case of contrastive focus, post-verbal subjects were used in two out of 60 answers (3.3%); the relevant occurrences were produced by an Italian heritage speaker (I05) and a monolingual German learner (D04).

(18) a. Sp. Context: *Es Natalia la que compra el periódico, ¿verdad?*
'It's Natalia who buys a newspaper, isn't it?'
*No, lo compra* [$_F$ *MaRÍa*]. (speaker I05)
'No, Mary buys it.'

b. Context: *Julia le da el periódico a su hermano, ¿verdad?*
'Julia gives the newspaper to her brother, doesn't she?'
*No, lo da* [$_{Fc}$ *MaRÍa*] *a su hermano.* (speaker D04)
'No, Mary gives it to her brother.'

The results from the grammaticality judgment task proved to be more revealing. In this second test, all learners behaved in a more target-like manner than in the production task. With a full lexical DP object, 85% of the learners preferred [$_{F/Fc}$ S] VO over VO[$_{F/Fc}$ S], but 60% of them also accepted the reverse ordering as being grammatical. As for the constructions with clitic objects, 63% of the participants preferred Cl+V[$_{F/Fc}$ S] over [$_{F/Fc}$ S]Cl+V; 30% of the learners who preferred [$_{F/Fc}$ S] Cl$_O$+V also considered Cl+V[$_{F/Fc}$ S] as grammatical. This largely corresponds to the distribution found in native production data in earlier studies by Gabriel (2007, 2010) (see Section 2.1 above). The results for the individual speakers and items are given in Table 1.

**Table 1.** Results of the Grammaticality Judgment Task (GJT) by individual learners and items. Learners' judgments are indicated with ☞ (= grammatical and preferred), √ (= grammatical, but dispreferred), and * (= ungrammatical). GER/EP: EP heritage speakers; GER/ITA: Italian heritage speakers; GER: German monolinguals

| Test item and information structure | GER/EP | | | | | GER/ITA | | | | | GER | | | | | ☞ | √ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | P01 | P02 | P03 | P04 | P05 | I01 | I02 | I03 | I04 | I05 | D01 | D02 | D03 | D04 | D05 | in % | |
| **(1)** | | | | | | | | | | | | | | | | | |
| Compra el periódico María. VO[$_F$ S] | * | * | * | √ | * | √ | √ | √ | √ | * | √ | √ | √ | √ | √ | 0 | 66 |
| María compra el periódico. [$_F$ S]OV | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | 100 | 0 |
| **(2)** | | | | | | | | | | | | | | | | | |
| No. Compra el periódico María. VO[$_{Fc}$ S] | * | * | * | √ | * | * | * | √ | √ | * | √ | √ | ☞ | √ | √ | 7 | 46 |
| No. María compra el periódico. [$_{Fc}$ S]OV | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | √ | ☞ | ☞ | ☞ | 93 | 7 |
| **(3)** | | | | | | | | | | | | | | | | | |
| A Tarzán lo secuestra Blancanieves. O,Cl+V[$_F$ S] | ☞ | √ | ☞ | √ | ☞ | √ | ☞ | √ | √ | √ | √ | ☞ | ☞ | √ | √ | 40 | 60 |
| Blancanieves secuestra a Tarzán. [$_F$ S]VO | √ | ☞ | √ | ☞ | √ | ☞ | √ | ☞ | ☞ | ☞ | ☞ | √ | √ | ☞ | ☞ | 60 | 40 |
| **(4)** | | | | | | | | | | | | | | | | | |
| Lo compra María. Cl+V[$_F$ S] | ☞ | √ | ☞ | √ | √ | ☞ | ☞ | ☞ | ☞ | √ | √ | ☞ | √ | ☞ | ☞ | 60 | 40 |
| María lo compra. [$_F$ S]Cl+V | √ | ☞ | √ | ☞ | ☞ | √ | √ | √ | √ | ☞ | ☞ | * | ☞ | √ | √ | 40 | 53 |
| **(5)** | | | | | | | | | | | | | | | | | |
| Le da el periódico a su hermano María. VdOiO[$_F$ S] | √ | * | √ | * | * | * | * | √ | √ | * | * | * | √ | √ | √ | 0 | 46 |
| María le da el periódico a su hermano. [$_F$ S]VdOiO | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | ☞ | 100 | 0 |

**Table 1.** (*continued*)

| Test item and information structure | GER/EP | | | | | GER/ITA | | | | | GER | | | | | ☞ | √ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | P01 | P02 | P03 | P04 | P05 | I01 | I02 | I03 | I04 | I05 | D01 | D02 | D03 | D04 | D05 | in % | |
| **(6)** | | | | | | | | | | | | | | | | | |
| La que secuestra a Tarzán es Blancanieves. $V[_F\,S]$ | √ | √ | ☞ | √ | √ | √ | ☞ | √ | ☞ | √ | √ | √ | √ | √ | ☞ | 26 | 73 |
| Blancanieves es la que secuestra a Tarzán. $[_F\,S]V$ | ☞ | ☞ | √ | ☞ | ☞ | ☞ | √ | ☞ | √ | ☞ | ☞ | ☞ | ☞ | ☞ | √ | 73 | 26 |
| **(7)** | | | | | | | | | | | | | | | | | |
| Se lo da María. $Cl+Cl+V[_F\,S]$ | ☞ | * | * | √ | ☞ | ☞ | ☞ | ☞ | ☞ | √ | √ | ☞ | ☞ | ☞ | ☞ | 66 | 20 |
| María se lo da. $[_F\,S]Cl+Cl+V$ | √ | ☞ | ☞ | ☞ | √ | * | √ | √ | √ | ☞ | ☞ | √ | √ | √ | √ | 33 | 60 |

However, if we look at the results by learner groups, some clear-cut differences may be observed, see Table 2.

**Table 2.** Results of the Grammaticality Judgment Task (GJT) by learner groups

| | | GER/EP | GER/ITA | GER |
|---|---|---|---|---|
| object = lexical DP | preference for $[_{F/Fc}\,S]VO$ | 84% | 88% | 84% |
| | rejection of $VO[_{F/Fc}\,S]$ | 44% | 28% | 8% |
| object = clitic | preference for $Cl+V[_{F/Fc}\,S]$ | 40% | 80% | 70% |
| | rejection of $Cl+V[_{F/Fc}\,S]$ | 20% | – | – |

The numbers given in Table 2 reveal that the German/Italian learners behave in a slightly more target-like manner than the German monolinguals regarding their higher preference for $Cl+V[_F\,S]$. The difference, however, is rather small (80% compared to 70%). In turn, the Italian heritage speakers behaved in a less target-like manner regarding the rejection of post-verbal focused subjects in constructions with a full lexical object DP (28% compared to only 8% of monolingual German learners). This might reflect the fact that in Italian $VO[_F\,S]$ is only marginally grammatical in a limited set of constructions (see Section 2.2, above). In the context of the acquisition of Spanish $VO[_F\,S]$, knowledge of Italian thus might be a disadvantage, in contrast to the case of the post-verbal focused subject in constructions with clitic objects, where Italian syntax can be transferred word-by-word to the foreign language, yielding the target-like result $Cl+V[_F\,S]$. Surprisingly, the German/EP learners behaved in the least target-like manner in this respect, as they preferred

Cl+V[$_F$ S] in only 40% of the cases. In addition, their behavior was fairly inconsistent: For instance, one and the same learner (P03) prefers *Lo compra* [$_{F/Fc}$ *María*] over [$_{F/Fc}$ *María*] *lo compra*, but considers *Se lo da* [$_{F/Fc}$ *María*] ungrammatical. With two of the context questions, only one of the five German/EP learners accepted answers containing a post-verbal subject. In addition, they erroneously considered Cl+V[$_{F/Fc}$ S] to be ungrammatical in 20% of the cases. With another context question, however, three learners from this group marked O,Cl+V[$_F$ S] (left-dislocated object) as their preferred answer (which qualifies as target-like). These results indicate that the EP heritage speakers are highly insecure regarding the expression of focused subjects in their L3 Spanish.

To summarize, German and German/Italian learners largely abstain from producing post-verbal subjects (only 3% of V[$_F$ S] in the production data), but they are familiar with them and know that they are part of the grammar of Spanish, as revealed by their judgments in the GJT. The German/EP learners, on the other hand, did not produce a single instance of V[$_F$ S] and their judgments were quite inconsistent. Getting back to our hypotheses, these are only partially confirmed by the results of the production and judgment tasks: Multilingual learners who speak Italian or EP as an HL in addition to their dominant language do not produce post-verbally focused subjects in L3 Spanish to a higher extent than monolingual German learners do, i.e. H1 is not confirmed. H2, however, is partially confirmed, since the German/Italian learners perform in a slightly more target-like manner than the German monolinguals concerning the acceptance of post-verbally focused subjects in constructions with clitic objects. H3, finally, is confirmed since all learner groups behave in a more target-like manner in the acceptability judgment task than in the production data, though to a different extent. Here, again, the German/EP learners behaved in a less target-like manner as they were least accepting of post-verbally focused subjects. In the following section, we discuss the results presented so far in the context of the extra-linguistic data and current theories of L3 acquisition.

### 3.4   Discussion

Our tests have shown that learners of all groups, i.e. German monolinguals as well as Italian and EP heritage speakers, largely abstain from producing post-verbal subjects in their L3, Spanish, as the production rates of (target-like) V[$_F$ S] were low for all learners. This might be due to certain insecurities with regard to the pragmatic implications of word order variation. Thus, instead of using post-verbal subjects, learners have recourse to linear orderings such as SVO and SV, which they perceive as unmarked and consider to be at least 'suitable' in any pragmatic context. All in all, the findings support Domínguez' claim that acquiring focus-induced word order variation in a foreign language is a challenge for the learners.

However, the target-like results of both the German and the German/Italian learners in the GJT have to be explained (95 % acceptance of $V[_F S]$). The bilingual group was expected to achieve more target-like results due to potential positive transfer from the HL Italian (as opposed to the German monolingual learners who have no recourse to a comparable linguistic background). Possibly, this can be explained by the fact that the German monolingual learners were all in the third year of their studies and consequently may have had more metalinguistic knowledge at their disposal. Furthermore, some of them had studied abroad and their oral proficiency in Spanish was quite high. The German/Italian learners' target-like performance in the GJT might be explained by their potential recourse to their HL Italian. Interestingly enough, the semi-structured interviews revealed some insecurity with regard to the question of linguistic registers. One learner from the German/Italian group affirmed:

(19)   *Manchmal benutze ich schon das Subjekt hinter dem Verb auf Italienisch, wenn ich mit meiner Mutter oder mit Freunden rede, aber ich würde das nicht auf Spanisch machen, weil das ist ja so umgangssprachlich und das gehört nicht zur offiziellen Wortstellung.*                                (speaker I05)
'I sometimes use post-verbal subjects in Italian when I'm talking to my mother or friends, but I wouldn't do that in Spanish, because that's so colloquial and isn't the official word order.'

The extract from the interview reproduced in (19) indicates that this learner has a fair command of information-structurally driven word order variation in spoken Italian, but avoids applying the relevant structures (in this case: VS) in Spanish for fear of erroneously transferring colloquial syntax from a (presumably unsystematically acquired) HL to the L3. This speaks in favor of increasing metalinguistic knowledge regarding the HL in foreign language instruction to facilitate positive transfer.

Furthermore, the complete lack of post-verbal subjects in the German/EP learners' production data needs to be accounted for, especially since this result sharply contradicts those of the German/Italian learner group. A possible reason might be that the two groups of heritage speakers differ with respect to their heritage language proficiency, in particular regarding the use of post-verbal subjects.

To also control for this factor, we ran a second production experiment with the multilingual learners in their heritage languages. All learners from the German/Italian group and three learners from the German/EP group were tested again, using the same picture story in an Italian or Portuguese translation (with seven questions targeting the subject, three of them with a neutral focus interpretation and four with a contrastive focus interpretation; see Section 3.2.1, Figure 2).

Interestingly, this *a posteriori* data collection shed some light on the different behavior of the two groups of heritage speakers. The German/Italian learners

produced at least some instances of post-verbally focused subjects, albeit the frequencies were quite low: Three instances of Cl+V[$_{F/Fc}$ S] out of 35 possible cases were produced by learners (I01) and (I03), see (20).

(20)  a.  It.  Context:  *Chi compra il giornale al chiosco?*
              *Lo compra* [$_F$ *Maria*].                (speakers I01 and I03)
      b.       Context:  *Anna dà il giornale a suo fratello.*
              *Lo dà* [$_{Fc}$ *Maria*] *a suo fratello.*           (speaker I03)

In accordance with our expectations for Italian (see Section 2.2), they did not produce a single instance of VO[$_F$ S]. Regarding the German/EP learners, the picture changes insofar as no single construction involving a post-verbally focused subject was produced in the Portuguese data, neither with a clitic object nor with a full lexical object DP, thus sharply contrasting the literature on the expression of focus in EP (see Section 2.2). Instead of using focus-induced word order variation in simple declaratives (i.e. VO[$_{F/Fc}$ S] or Cl+V[$_{F/Fc}$ S]), all heritage speakers preferred cleft constructions and prosodic focus marking *in situ* (i.e. [$_{F/Fc}$ S]VO or [$_{F/Fc}$ S]Cl+V).

To sum up, we can state that the German/Italian learners produced at least some V[$_{F/Fc}$ S] constructions in their heritage language, which might serve as a basis for positive transfer to L3 Spanish. The German/EP learners, by contrast, did not make use of word order variation to signal focus on the subject in the Portuguese production data at all, which might explain why they did not produce a single instance of Cl+V[$_{F/Fc}$ S] or VO[$_{F/Fc}$ S] in their L3 Spanish either.

All things considered, the fact that our hypotheses were only partially confirmed by the results of our pilot study shows that knowledge of a further language that structurally patterns with the target language does not automatically guarantee successful foreign language learning. This especially holds for the case of heritage languages which were often unsystematically acquired by the speakers and are restricted in use to familiar and colloquial contexts. Our findings suggest that current models of L3 acquisition, such as Flynn et al.'s (2004) Cumulative-Enhancement Model (CEM) or Rothman's (2010, 2011) Typological Primacy Model (TPM; see Section 1, above), can hardly be applied to the learning setting investigated in the present study due to the lack of comparable preconditions. While the CEM was developed to account for foreign language learning in speakers who live in a bilingual environment such as Kazakhstan, where Russian/Kazakh bilingualism is explicitly promoted by teaching both languages in school education,[11] the TPM aims at explaining the learning of a further foreign language after a first one. None

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11. A recent example of a study investigating a comparable learning setting is Slabakova & García Mayo (2015), on the acquisition of information-structurally triggered word order variation in L3 English by Basque/Spanish bilingual learners in the Basque Country.

of these settings entirely corresponds to the special situation of our learners, whose linguistic background comprises a language that is typologically close to the target language, but who have never received any explicit instruction in their HL. As suggested by recent studies on foreign language learning in heritage speakers (see e.g. Gabriel et al. 2015a, b; Gabriel & Rusca-Ruths 2015, and Section 1, above), extra-linguistic factors such as the learners' attitudes towards their languages and their individual degree of metalinguistic and multilingual awareness are presumably more important in facilitating positive transfer from an HL to a foreign language than mere typological closeness. This suggests that in addition to gathering linguistic data from the learner's heritage languages, studies on L3 acquisition in heritage speakers need to emphasize the collection of extra-linguistic data, both through semi-structured interviews and special tests such as think-aloud protocols (Osburne 2003) which aim to assess the learner's individual degree of metalinguistic and multilingual awareness.[12]

The following section focuses on the question of how to represent the learner's variable interlanguage grammars in a formal model of grammar.

## 4. Representing interlanguage grammars

As is well known, formal models of grammar such as Minimalist syntax allow for deriving focus-induced word order variation by assigning information-structural features such as [±F] (standing for focus vs. non-focus) to the relevant constituents and by assuming obligatory syntactic movement operations that yield, e.g., a structure involving rightmost placement of [$_F$ S]. A possible derivation for VO[$_F$ S] from underlying SVO through so-called p(rosodically motivated)-movement, adapted from Zubizarreta (1998: 127), is sketched in (21).

(21) a.  [[$_{+F}$ *María*] [$_{-F}$ *compra* [$_{-F}$ *el periódico*]]].
        (assignment of [±F] to each single constituent)

   b.  [$_{TP}$ *Compra+v+T* [$_{vP}$ *María* ~~*compra v*~~ [$_{VP}$ ~~*compra*~~ *el periódico*]]].
        (intermediate step: raising of V+v to T, yielding VSO)

   c.  [$_{TP}$ *Compra+v+T* [$_{vP}$ [$_{VP}$ *el periódico*]$_i$ [$_{vP}$ *MaRÍa* v ~~*compra*~~ [$_{VP}$ t$_i$]]]].
        (left-adjunction of VP to vP)

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**12.** A possible way of gathering more data on the participants' metalinguistic knowledge could involve applying Osburne's (2003) methodology of think-aloud protocols from the phonological to the grammatical domain by asking the participants to explain their choices made in a production or judgment task and to explicitly compare the structures investigated to those of their heritage languages.

In such an account, no syntactic variability is admitted, since VO[$_F$ S] compulsorily results from the derivation, whilst [$_F$ S]VO is ruled out and thus considered ungrammatical. Optional use of competing structures as regularly occurs in empirical data produced by both native speakers and foreign language learners (see sections 2.1 and 2.3, respectively) is *a priori* excluded and thus cannot be accounted for. Optimality Theory (OT, Prince & Smolensky 2004 [1993]), at least in its original form, is no exception in this respect, since each specific constraint ranking unequivocally yields one (and only one) optimal (and hence grammatical) candidate. Syntactic variability is categorically excluded, in the same way as it is in derivational models. An example, adapted from Gutiérrez-Bravo (2002), is given in Table 3, were the structure presenting a clause-initial focused subject is excluded due to the violation of the high-ranked constraint NSR ('Nuclear Stress Rule'), militating against the non-rightmost position of nuclear (or: sentential) stress.[13]

**Table 3.**  OT tableau for *Me regaló la botella de vino* [$_F$ *MaRÍa*], adapted from Gutiérrez-Bravo (2002: 51)

|  | NSR | SUBJ | STAY |
|---|---|---|---|
| (1)    [$_F$ MaRÍa] me regaló la botella de vino. | *! |  | ** |
| (2) ☞ Me regaló la botella de vino [$_F$ MaRÍa]. |  | * | * |

To capture the variable interlanguage grammars (Selinker 1972) of our learners and especially to account for the intra-speaker variability encountered in our data (see Section 3.3), we propose an analysis based on the model of Stochastic Optimality Theory (StochOT, Boersma & Hayes 2001). This model allows for the integration of optionality in the grammar by assuming overlapping constraints, situated on a continuous ranking scale (CRS) from which the actual constraint ranking is derived at the moment of the evaluation process (see Figure 3, below). Different degrees of overlap of the different constraints reflect individual speakers' preferences for competing forms. In addition, it is assumed that the position of constraints on the CRS may be readjusted in accordance with the input the speaker receives, which accounts for possible changes in adult speakers' grammars. An adequate representation of an interlanguage grammar has to account for (at least) two main properties, i.e. (1) optional variability in the data (intra-speaker variation) and (2) gradual convergence towards the grammar of the target language, thus yielding higher rates of target-like productions in the advanced learner data. The gradual overlap of constraints and

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**13.**  Gutiérrez-Bravo's Subj constraint stipulates that the subject XP be located in its canonical (i.e. clause-initial) subject position (violated by candidate (2)). Stay militates against any syntactic movement operation and is thus violated by both candidates, since both involve the raising of the verb to T.

their potential readjustment on the CRS included in Boersma & Hayes' (2001) model thus seems to offer an adequate representation of developing grammars. The following constraints are needed to account for the different stages of the learner grammars.

(22)  a.  STRESSFOC (SF): The focused constituent [$_F$ XP] bears nuclear stress.
      b.  STAYOBJECT (SO): Full lexical object DPs stay in their VP-internal base position.
      c.  FULLINTERPRETATION (FI): "Parse lexical conceptual structure. Failed by expletives and auxiliary *do*" (Grimshaw & Samek-Lodovici 1998: 194).
      d.  ALIGNFOCUSRIGHT (AFR): The right edge of the focused constituent [$_F$ XP] is aligned with the right edge of an Intonational Phrase (IP).

The constraint ranking SF » SO » FI » AFR (depicted in Figure 3, upper panel) accounts for the initial state of learner grammar: The constraint ALIGNFOCUSRIGHT (AFR), which requires that the focused XP be placed at the right edge of an Intonational Phrase (IP), occupies a low position on the CRS and may thus be violated without ruling out the relevant structures. Based on such a grammar, the learners are consequently not expected to produce any structure involving a clause-finally focused subject. However, as shown in the data collected from the GJT (see Section 3.3), the learners are well aware of the fact that focused subjects may occur post-verbally, although they hardly produce such orderings. Since we know from other studies (see Section 1) that production of information-structurally triggered syntactic variants increases as a function of proficiency in the foreign language, an adequate model of grammar must account for this fact. This can be done by assuming readjustment of the constraints SO, FI, and AFR via promotion of AFR, as sketched in the lower panel of Figure 3.
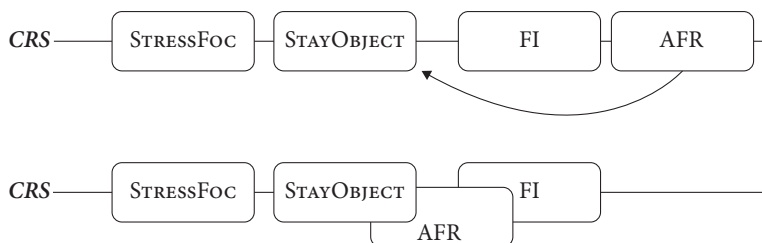


**Figure 3.** CRS representing the initial state of the learner grammar (upper panel) and the grammar of advanced learners (lower panel)

The promotion of AFR yields the constraint hierarchy depicted in the lower panel of Figure 3, i.e. SF » SO » AFR » FI, with the constraint SO overlapping with the AFR, which in turn overlaps with FI on the CRS. The higher position of AFR accounts

for the higher rate of post-verbally focused subjects in advanced learner data; the overlapping of SO/AFR and AFR/FI represents the (target-like) preference of [$_F$ S] VO over VO[$_F$ S] and Cl+V[$_F$ S] over [$_F$ S]Cl+V, respectively.[14] Note that the constraint StressFocus shows no overlap with any of the other constraints discussed here and thus always occupies the highest position in the ranking. Any mismatch between focus and nuclear stress as in, for instance, [$_F$ *María*] *compra el peRIÓdico* or *Compra el peRIÓdico* [$_F$ *María*] (where the subject constituent is focused, but nuclear stress hits the object) is consequently ruled out, regardless of the linear ordering of the constituents.

Let us briefly examine the slight advantage of the German/Italian learners over the two other groups regarding the acquisition of target-like placement of [$_F$ S] (see Section 3.3). We can assume that learners who speak a heritage language such as Italian in addition to their dominant language might benefit from the Italian constraint ranking stored in their linguistic knowledge when readjusting the constraints of their L3 Spanish grammar. This view is supported by evidence from neurolinguistics, since it has been recently shown that speakers, who acquired more than one language in early childhood (so-called early bilinguals), behave differently from late bilinguals regarding their neural correlates of speech production in a further language (see Wattendorf et al. 2014).[15] Additional evidence comes from a recent study on the acquisition of English as a foreign language by monolingual speakers of Farsi and (early) bilingual Farsi/Kurdish learners, attesting a significant advantage for the (early) bilingual learners (see Yeganeh 2013). However, it is important to keep in mind that heritage speakers are special in that their competence in the HL may vary considerably from speaker to speaker. Possible differences include varying degrees of first language attrition or incomplete acquisition of the HL (see Schmid 2011 for further discussion), as well as varying degrees of metalinguistic and multilingual awareness. Thus, these learners do not form a homogeneous group of participants, which means that more extra-linguistic data is required to better account for their variable and sometimes inconsistent behavior in both the production task and the GJT. This suggests that the predictions made by common models of L3 acquisition such as the CEM and the TPM do not necessarily hold for the special case of foreign language learning under the specific conditions of heritage speakers.

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**14.** Cl+V[$_F$ S] (rather than [$_F$ S]Cl+V) is selected when FI is dominated by AFR (partial constraint ranking: AFR » FI); [$_F$ S]VO is preferred over VO[$_F$ S] when SO occupies a higher position than AFR (partial constraint ranking: SO » AFR).

**15.** Wattendorf et al. (2014) used functional Magnetic Resonance Imaging (fMRI) to investigate possible positive effects of early multilingualism on the organization of the cortical language network during sentence production in highly proficient trilingual speakers.

## 5.   Concluding remarks

In the present contribution, we addressed the question of whether bilingual learners of L3 Spanish who speak Italian or EP as a heritage language in addition to their dominant language (German) have an advantage over monolingual German learners due to possible positive transfer of the post-verbal (focused) subject position from Italian or EP to the target language (Spanish). Our preliminary results, based on both production and acceptability judgment data as well as extra-linguistic data (taken from semi-structured interviews), suggest that all learners have certain insecurities with respect to the pragmatic implications of word order variation and tend to recourse to what they perceive as being the unmarked linear ordering of Spanish (i.e. SV, SVO, SVOPP). However, the German/Italian bilingual learners perform in a slightly more target-like manner than the German monolinguals in the production task (using pseudo-clefts involving clause-final [$_F$ S]) and accept post-verbal [$_F$ S] to a higher extent than monolingual learners do. Interestingly, the use of post-verbally focused subjects in L3 Spanish seems to be related to the explicit metalinguistic knowledge of the learner's heritage language (see Section 3.4). We conclude that a heritage language such as Italian or EP, which exhibits structures that pattern with those of the target language, Spanish, does not necessarily guarantee a better performance in the foreign language, but neither does it present a disadvantage. Our results thus only partly corroborate the insights of Rothman's (2010, 2011) Typological Primacy Model (TPM) and suggest that heritage speakers learning a foreign language (i.e. those who learn an additional foreign language (L3) after a first one (L2)) differ from 'classic' learners and from bilingual (2L1) learners of a foreign language. Based on the assumption that positive transfer from a heritage language can only occur if the specific feature (in our case: the post-verbal position of [$_F$ S]) forms part of the learner's heritage grammar, the multilingual learners were also tested in their heritage language (Italian or EP). All things considered, and well aware of the sparseness of evidence from our preliminary data, we generally recommend that metalinguistic awareness with respect to all the languages belonging to the learner's linguistic repertoire needs to be promoted to facilitate positive transfer in foreign language learning.

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# Index

What are the linguistic means for expressing different types of foci such as (narrow) information focus and contrastive focus in Romance languages, and why are there such differing views on such a presumably clear-cut research subject? Bringing together original expert work from a variety of linguistic disciplines and perspectives such as language acquisition and language contact, this volume provides a state-of-the-art discussion on central issues of focus realization. These include the interaction between prosody, syntax, and pragmatics, the typology of word order and intonation languages, the differentiation between focus and related notions such as contrast and presupposed modality, and the role of synchronic variation and change. The studies presented in this volume cover a broad range of Romance languages, including French, Italian, Portuguese, and different varieties of Spanish. Moreover, the book also offers new insights into non-Romance languages such as English, German, and Quechua.

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