



HAL
open science

Reconsidering a Focal Typology: Evidence from Spanish and Italian

Timothy L. Face, Mariapaola d'Imperio

► **To cite this version:**

Timothy L. Face, Mariapaola d'Imperio. Reconsidering a Focal Typology: Evidence from Spanish and Italian. *Italian Journal of Linguistics / Rivista di linguistica*, 2005, 17 (2), pp.271-289. hal-00380688

HAL Id: hal-00380688

<https://hal.science/hal-00380688>

Submitted on 4 May 2009

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Reconsidering a Focal Typology: Evidence from Spanish and Italian

Timothy L. Face, University of Minnesota, USA

**Mariapaola D'Imperio, *Laboratoire Parole et Langage*, CNRS UMR
6057, France**

Contact Information:

Author to Contact: Timothy L. Face

**Address: Dept. of Spanish and Portuguese Studies
University of Minnesota
51 Folwell Hall
9 Pleasant St. SE
Minneapolis, MN 55455
USA**

E-mail: facex002@umn.edu

**Phones: (612) 625-1328 – office
(763) 862-5173 – home**

Reconsidering a Focal Typology: Evidence from Spanish and Italian

1. Introduction

Much work has been done on focus (and the related concepts of topic, comment, theme and rheme) in Spanish and Italian, with the majority concentrating on the ways in which word order is used to convey the interpretation of a grammatical element as the focus of the sentence (e.g. Bolinger 1954, 1954-1955; Contreras 1978, 1980 for Spanish and Antinucci and Cinque 1977; Benincà, Salvi and Frison 1988 for Italian).¹ However, in traditional accounts of focus in these two languages, intonation has received very little consideration. A typical treatment is that of Bolinger (1954-1955) who, in a footnote in his article “Meaningful word order in Spanish” says that he has left intonation out of his account “in order not to complicate matters” (56).

Despite the recognition by Bolinger and some other scholars that intonation is likely to be involved in conveying narrow focus, there remains a widely accepted division between languages that mark narrow focus through word order (without necessarily changing intonation pattern) and those that mark it through intonation alone (i.e. without a focal word order

¹ The discussions of ‘focus’ in this paper deal with narrow focus as opposed to broad focus (Ladd 1980). The discussions of narrow focus apply both to contrastive and non-contrastive narrow focus.

per se). Even in a book dedicated to intonation, this belief is evident: Ladd (1996:191) claims that in word order languages sentences like *The COFFEE machine broke* generally invert the subject and verb, resulting in, for example, *S'è rotta la CAFFETTIERA* in Italian, with the focal word occurring at the end of the utterance. Ladd goes on to say that “Word order modifications in languages like Spanish and Italian may indirectly achieve the accentual effects that English accomplishes directly by manipulating the location of the nuclear accent” (191). This type of statement not only maintains the traditional division between word order languages and intonation languages in the marking of narrow focus, but it also makes one wonder at how one way of marking narrow focus is more “direct” than the other. What is more, a number of Romance languages appear to use special tunes to express narrow as opposed to broad focus (e.g. Grice, 1995 for Palermo Italian; D’Imperio 2000, 2002 for Neapolitan Italian; Sosa 1999 for American Spanish; Frota 1995 for European Portuguese).

There are two types of evidence that lead us to reconsider the traditional division between languages that mark narrow focus with word order and those that mark it with intonation. The first is that native speakers of Spanish and Italian have the intuition that they can emphasize a particular word of an utterance without manipulating word order. The second type of

evidence comes from our recent experimental studies (e.g. Face 2001, 2002a, 2002b, 2002c, 2003 for Castilian Spanish and D'Imperio 1999, 2000, 2001, 2002, 2003 for Neapolitan Italian; see Section 2.2) that have begun to look at the ways in which intonation is used as a marker of narrow focus in these two languages. Of particular interest to the issue of a typology based on word order and intonational marking of focus is that the intonational markers of narrow focus found in these studies do not simply accompany changes in word order. Rather they are used independently of word order to mark narrow focus in cases where the canonical broad focus SVO word order is employed.

While intonation is used in Spanish and Italian to mark narrow focus, it is also important to point out that the traditional view is not without foundation. Both Spanish and Italian also use changes in word order to mark narrow focus, but the interaction of word order and intonation is different in the two languages. Therefore we propose a revision of the word order vs. intonation focal typology that is less rigid and that more adequately accounts for the differences between Spanish and Italian on the one hand and English on the other, and that also deals with the differences between Spanish and Italian. The varieties of the two Romance languages we will focus on are respectively the Castilian variety for Spanish and the Neapolitan variety for

Italian since both have been extensively covered by recent experimental literature.

The remainder of the paper is organized as follows: Section 2 presents a discussion of narrow focus marking in Spanish and Italian, examining first the traditional studies of word order and then the more recent studies of intonation. Section 3 considers the implications of the intonational marking of narrow focus in Spanish and Italian on the traditional word order vs. intonation typology of focal marking and presents our proposed modification of this typology. Finally, Section 4 summarizes the paper and considers possible directions for future investigations.

2. Focus Marking in Spanish and Italian

2.1 Word order

Traditionally, studies of narrow focus in Spanish and Italian have investigated word order.² The claims made about how word order is used to convey narrow focus in the two languages are very similar. We will here present a consensus description of the claims for each language, illustrating the main points of the arguments made in the literature as related to the topic

² We use the term *narrow focus* in contrast with *broad focus*, but do not distinguish between types of narrow focus (e.g. contrastive and non-contrastive). With regards to the word order and intonation facts considered here, in both Castilian Spanish and Neapolitan Italian there appears to be no difference between different types of narrow focus.

of the present study and ignoring details unrelated to the present study. For further discussion of the various types of meaning which can be conveyed by word order in Spanish and Italian, the reader is referred to the references cited in this section.

In Spanish numerous scholars have considered the role of word order in marking narrow focus (e.g. Bolinger 1954, 1954-1955; Contreras 1978, 1980; Hatcher 1956; Zubizarreta 1998). These studies argue that while Spanish word order is relatively free (in comparison with a language such as English), the different possible word orders are not interchangeable. Rather, word order is manipulated based on the communicative importance of the individual words that constitute the sentence. Sentence-final position is that which is generally considered to communicate the highest level of importance. Thus, to borrow an example from Bolinger (1954:155), in answer to a question such as “Why can’t we use paper to plug it?”, a Spanish speaker is likely to give the response in (1a), where the characteristic of paper as tearable is more important than the paper itself (which is also given information from the question). Therefore *rasga* ‘tears’ occurs in final position. On the other hand, in response to a questions such as “Why did you throw your letter away?”, the answer in (1b) is most likely since the paper is the reason that the letter was thrown away, with its tearing adding

details as to the condition of the paper. In this case *papel* ‘paper’ occurs in final position.

- (1) a. *El papel se rasga.* ‘Paper tears’.
b. *Se rasgó el papel.* ‘The paper tore’.

Note that in the Spanish examples the most important element comes last, while in the English translation the subject precedes the verb in both cases and therefore the difference in importance must be signaled by intonation.

Since final position is associated with a high degree of importance in Spanish, narrow focus words often occupy this position. Consider the example in (2), from Face (2000b), which compares the English intonational focus with the Spanish word order focus.

- (2) a. He will give MARY the book. (intonation)
a’. Le dará el libro a **María**. (word order)
b. He will give Mary THE BOOK. (intonation)
b’. Le dará a María **el libro**. (word order)

The sentences in (2a) would be appropriate in response to a question such as “To whom will he give the book?”, while those in (2b) would be appropriate responses to a question such as “What will he give to Mary?”. In the Spanish sentences, the word in narrow focus (in this case the word that answers the question) appears sentence-finally as it is the communicative point of the sentence. The same applies to cases of contrastive narrow focus, as the answers in (2a) respond adequately also to a question such as “Will he give the book to John?”, where the focal object *María* contrasts with the word *John* from the question. Likewise, the answers in (2b) are acceptable responses to a question such as “Will he give Mary the watch?”, where the focal object *el libro* ‘the book’ contrasts with the word *watch* from the question.

Studies on word order in Italian (e.g. Antinucci and Cinque 1977; Benincà, Salvi and Frison 1988; Zubizarreta 1998), similarly to the aforementioned studies on Spanish, attribute a special status to sentence-final position.³ This is due to the fact that given information tends to precede new information. So, if there is any new information to communicate, it will come at the end of the sentence. This must include, then, sentence-final position, though it may involve more if the new information is of a length

³ It should be pointed out that while sentence-final position is attributed a special status in both Spanish and Italian, other word order strategies to focalize a particular word or phrase (e.g. left dislocation) are possible.

greater than one word. An example, from Antinucci and Cinque (1977), is given in (3).

- (3) a. *Che fa Giovanni?* ‘What is Giovanni doing?’
b. *Giovanni viene.* ‘Giovanni is coming.’
c. **Viene Giovanni.* ‘Giovanni is coming.’

In response to the question in (3a), the sentence in (3b) is an acceptable response, with the new information in sentence-final position. The sentence in (3c), on the other hand, is not an acceptable response to the question in (3a). It is important to point out that the sentence in (3c) is not completely impossible in this context, but it must be accompanied by a focal intonation pattern on the word *viene* ‘is coming’. The sentence in (3c) is an unacceptable response to (3a) if it is accompanied by the canonical declarative intonation pattern.

Benincà, Salvi and Frison (1988) show that the same arguments above for old and new information (or non-contrastive focus) also apply to contrastive focus. In response to a question such as “Did Mary call the police?”, the response in (4a), adapted from Benincà, Salvi and Frison

(1988:147), is acceptable while the response in (4b) is not, again unless a focal intonation pattern is used.⁴

- (4) a. *Ha telefonato Giorgio.* ‘Giorgio called’.
b. **Giorgio ha telefonato.* ‘Giorgio called.’

2.2 Intonation

While word order seems to be able to convey narrow focus in both Spanish and Italian, it has also become clear recently that intonation alone, without what would be considered a focal word order, can do the same. Various studies in each language have shown this to be the case. Since intonation can vary between varieties of one language (and even fine detail of tonal alignment, as shown for instance in Atterer and Ladd 2004), the discussion of intonation in this paper is limited to the varieties on which we have worked the most⁵, namely, as already mentioned above, Castilian Spanish and Neapolitan Italian.⁶

⁴ The response in (4a) would also have a focal intonation pattern, at least in the variety of Italian considered in the present study, as discussed in Section 2.3 below. But this does not take away from the point that the focal word is typically in final position.

⁵ Most of the data we will be referring to in order to support our claims comes from published laboratory speech studies, in which the subjects were mainly university students, speaking either the Castilian dialect for the Spanish data or the Neapolitan one for the Italian data. The age of the speakers was roughly comprised between 20 and 30.

⁶ While no systematic studies of focal intonation exist for varieties other than Castilian, data on focalization exists for Dominican Spanish (Willis 2003), Venezuelan Spanish (Sosa

In Spanish, de la Mota (1995, 1997), Face (2000a, 2001, 2002b), Hualde (1999) and Nibert (2000) have all observed that while there is a rise in F0 in the stressed syllable of a word in narrow focus as well as in the stressed syllable of words in a broad focus utterance, the shapes of these F0 rises are different. Each of these authors points out that in both cases the F0 rise begins near the onset of the stressed syllable. The difference, however, is in where the F0 rise ends. In a broad focus utterance, the F0 rise generally ends in a post-tonic syllable. In a word in narrow focus, however, the F0 prenuclear rise generally ends within the stressed syllable of the focal word. This difference can be seen in the two F0 patterns associated with the word *terminó* ‘finished’ in Figure 1. In Figure 1a, the utterance is produced in broad focus, while in Figure 1b the word *terminó* ‘finished’ is in narrow focus.

A set of recent studies has attempted to analyze the difference found between the F0 rise in words in broad focus and that found in narrowly focused words. Two manners of accounting for this difference have been proposed in recent literature by scholars working on Spanish intonation within the AM (autosegmental-metrical theory of intonation, see Ladd 1996)

1999), and several varieties are mentioned in Beckman, Díaz-Campos, McGory and Morgan (2002). For discussions of focal intonation in varieties of Italian other than Neapolitan, see Frascarelli (1997, 2000) for Tuscan, Grice (1995) for Palermo, D’Imperio and Gili Fivela (2003) for Florentine and Turin and Gili Fivela (2002, 2004) for Pisa Italian.

theory. Some scholars have argued that these two F0 rises are different phonetic manifestations of one phonological pitch accent (Nibert 2000 and Hualde 2002), while others claim that they are the results of two phonologically distinct pitch accents (Face 2000a, 2001 and Sosa 1999). In a much larger study than the preceding studies, Face (2002b) demonstrates that there are multiple ways in which a Spanish speaker can mark narrow focus intonationally.⁷ The most frequent is a pitch accent, which he analyzes as L+H*, that is phonologically different from the broad focus L*+H. The difference between these two pitch accents, which lies primarily in where the rise ends, is shown on the word *terminó* ‘finished’ in Figure 1.

@@ Insert Figure 1 here

The second and third most frequent intonational markers of narrow focus are the use of a L- and H-, respectively, following the word in focus. The pitch accent on the focal word is still analyzed as L+H*, though in this case because it is a nuclear accent (which is also marked by L+H*), and not

⁷ In this paper only the intonational markings on the focal word are discussed. Face (2002a) also discusses the intonation patterns in the pre-focal and post-focal portions of utterances. See also de la Mota (1997), Nibert (2000), and Beckman, Díaz-Campos, McGory, and Morgan (2002).

because it is in focus.⁸ Examples of these intonation patterns are given in Figure 2.⁹

@@ Insert Figure 2 here

The fourth way in which intonation can mark narrow focus in Spanish is through the typically broad focus L*+H pitch accent, but with a higher F0 peak than in broad focus utterances. Figure 3 demonstrates the use of L*+H in a non-focal and focal case, respectively, where the higher F0 peak can be seen in the narrow focus case (Figure 3b) than in the broad focus case (Figure 3a).

@@ Insert Figure 3 here

Like Spanish, Italian is able to mark focus through intonation, though there seems to be only one intonational pattern used for this purpose (as opposed to the four mentioned above for Spanish). The broad focus declarative intonation pattern of Italian is characterized by a rise to an F0 peak on the first stressed syllable of the utterance and a fall in F0 which begins prior to the final stressed syllable and which ends within that syllable. The initial rise is attributable to a H* pitch accent, while the fall into the final stressed syllable is attributable to a H+L* pitch accent. If a word in the

⁸ Face (2002a) demonstrates that L+H* is used in nuclear position regardless of whether the word in that position is in focus or not.

⁹ In Figure 2 the focal word is also followed by a silence (marked by the zero on the words tier). Both L- and H- are sometimes, but not always, followed by a silence.

utterance is in narrow focus, that word is marked intonationally by a L+H* pitch accent affiliated with its stressed syllable. This pitch accent is realized in the F0 as a rise that has a clear beginning (i.e. an F0 valley) just prior to the stressed syllable and which reaches the F0 peak within the stressed syllable. Examples of each of these intonation patterns are given in Figure 4.¹⁰

@@ Insert Figure 4 here

2.3 'Intonation AND word order' or 'Intonation OR word order'?

While both Spanish and Italian use intonation, unaccompanied by a focal word order, to mark narrow focus, there is an important difference between the two languages in this respect. So far we have only seen examples of narrow focus early in the sentence. When the word in narrow focus is the final word of the utterance, however, the two languages treat it differently. Recall that it is precisely this position that is claimed in traditional studies to be of highest communicative importance, and therefore generally is filled by the narrowly focused word when there is one. In Spanish, there is no difference in the intonation pattern found on the final

¹⁰ It can be seen in Figure 4a that there are segmental perturbations in F0 due to consonants (e.g., the F0 drop at the onset of *ballare* in the left panel due to the stop closure of the [b] and the F0 rise after the release of the stop closure as built up air pressure is released). While the F0 fall into the final stressed syllable is not much larger than these segmental perturbations, it is clearly interpreted as accented by Italian speakers while the segmental perturbations are not interpreted in this way.

word of the utterance based on whether it is in focus or not.¹¹ The Spanish nuclear accent is L+H* (Face 2000a, 2002a, 2002b), and this is the same accent which is used to mark narrow focus. When the focal word occurs in final position, it would be possible to distinguish it from a word in broad focus by using a different nuclear accent, but this is not the case. A L+H* pitch accent is used on the final word regardless of whether that word is in narrow focus or not. One might expect that even if narrow focus were not marked in this position phonologically (i.e., through a contrastive pitch accent category), it could be marked phonetically, such as through a higher F0 peak. However, this is not the case, at least not with any consistency across speakers, or even within the utterances of one speaker. In Spanish, a narrowly focused word in final position is not distinguished intonationally from any other word in the same position (Face 2002b). Figure 5 presents examples of utterances in broad focus and with the final word in narrow focus.¹²

@@ Insert Figure 5 here

¹¹ Face (2002b) comes to this conclusion in the only comprehensive study of this issue, and employing data from the Castilian variety of Spanish being considered here. Sosa (1999) presents a different opinion, but finds the “more emphatic” contour even in broad focus utterances; see Beckman, Díaz-Campos, McGory, and Morgan (2002) for a discussion of this issue.

¹² It can be seen in this figure that the stressed syllable of the final word is longer when in narrow focus. The intonation pattern affiliated with the final word, however, aligns identically with the stressed syllable in the two cases.

While Spanish does not distinguish intonationally between broad focus and narrow focus in final position, Italian does (D'Imperio 2001, 2002). In Italian the nuclear pitch accent is different based on focus. In broad focus, there is a H+L* nuclear pitch accent, as noted previously. However, when the narrowly focused word is in final position, the focal L+H* pitch accent is used. Thus there is a phonological difference in the intonation pattern in nuclear position based on whether the word in that position is in narrow focus or not.¹³ Figure 6 presents examples of a broad focus utterance and an utterance with narrow focus on the final word.

@@ Insert Figure 6 here

The intonational distinction between focal and non-focal words in final position in Italian but not in Spanish points to an important difference between these two languages. Final position is a prime position for a word in narrow focus, given that from a word order perspective that is the position which contains the most important information. This is true for both Spanish and Italian. But the intonational data presented above demonstrate that in this position the two languages treat a word in narrow focus differently in this position. In Spanish, the intonation pattern on a word in narrow focus in final position is no different than that found in that position in a broad focus

¹³ Frota (1997, 2000, 2002) points out similar facts in European Portuguese.

utterance. In Italian, on the other hand, a focal intonation pattern is found in final position if the word is in narrow focus. Therefore it seems that Spanish either uses word order OR intonation to mark narrow focus, depending on the location of the narrowly focused word in the sentence (i.e., intonation marker if the narrowly focused word is sentence medial, and just word order marker if it is sentence final). Italian, however, uses word order AND intonation in final position (i.e., intonation marker if the narrowly focused word is sentence medial, and both word order and intonation markers if it is sentence final). A language-dependent difference in the interaction of word order and intonation arises sentence finally only. In both cases, intonation alone can mark narrow focus. But when word order is used (i.e. in final position) only Italian also uses a focal intonation pattern. Spanish uses the same intonation pattern found in this position in broad focus declaratives.

This finding is accompanied neatly by the results of two other recent production studies. In a study on narrow focus in Spanish where speakers were allowed to respond relatively freely (rather than being forced to merely read a set sentence), Spanish speakers placed the narrowly focused word in final position 70% of the time (Face 2000b). In Neapolitan Italian, on the other hand, the most prominent word in an utterance has been found to occur post-verbally only 44% of the time in spontaneous speech data (Caputo

1997)¹⁴. Thus it seems that post-verbal position is a strong indicator of narrow focus in Spanish, but not as strong of an indicator in Italian. It follows that Italian speakers cannot rely solely on word order as an indicator of narrow focus, and must also mark narrow focus intonationally, while Spanish speakers rely more heavily on word order and therefore do not use intonation unless word order would incorrectly communicate the narrow focus of the utterance.

3. Reconsidering the Word Order vs. Intonation Focal Typology

The data presented so far present difficulties for the word order vs. intonation focal typology that has traditionally been accepted. The intonational data from Spanish and Italian, which are generally considered word order languages, show clearly that intonation alone (i.e. without an accompanying focal word order) is able to mark narrow focus. Therefore the division between these languages and the so-called intonation languages that has often been drawn cannot be maintained.

It is worth mentioning here that the distinction between word order languages and intonation languages has been captured in other terms by Vallduví (1991). Vallduví makes a distinction between ‘plastic’ and ‘non-

¹⁴ Caputo’s (1997) data come from spontaneous speech rather than from a controlled experiment.

plastic' languages, where a language that can modify its prominence pattern and highlight information (e.g. the focus of the utterance) anywhere within an utterance is termed 'plastic', while a language that has fixed prominence (e.g. at the end of the utterance), and therefore must modify word order in order to mark prominence, is termed 'non-plastic'. Ladd (1996) discusses these terms in the specific context of intonation, and gives examples of Italian word order manipulation as evidence that Italian is a non-plastic language. But in terms of the issue being considered here, the plastic vs. non-plastic distinction is a reformulation of the word order vs. intonation distinction. There are only two categories, and no intermediate ground. Yet, as we have shown, Spanish and Italian can use word order and intonation, but the interaction of the two is different in these languages. Therefore, a more flexible categorization of the marking of focus is needed than that which is offered in traditional studies or by Vallduví (1991).

While we believe that the data from Spanish and Italian motivate rethinking the word order vs. intonation focal typology, it is also our view that such a distinction, in a revised form, not only can be maintained, but indeed must be maintained. While Spanish and Italian are able to use intonation to mark narrow focus, just as are those languages, such as English, which are generally considered intonation languages, it cannot be

ignored that Spanish and Italian also make considerable use of word order in conveying narrow focus while English rarely does.¹⁵ So while the division may not be as rigid as has often been indicated, it does seem that some sort of division based on the use of word order and intonation in marking narrow focus is in order. In addition, such a typological division must also be able to account for the differences in the interaction of word order and intonation seen between Spanish and Italian in the preceding section.

We propose a revision of the word order vs. intonation focal typology that is less rigid and that recognizes a continuum of degrees of use of word order and intonation for marking narrow focus. The type of typological continuum we propose is represented schematically in Figure 7.

@@ Insert Figure 7 here

In this representation of the typological continuum, the larger the portion of the height of the figure accounted for by either the word order or the intonation portion of the figure, the more prominent that marker is for marking narrow focus. At the extreme left of the representation would be languages which use only word order, while at the extreme right would be languages which use only intonation.

¹⁵ English can use special syntactic structures, such as the left topicalization as in *THE STORE is where John went*. But this is rather uncommon, as opposed to the relatively free word order variations in Spanish and Italian.

Returning to the languages we have considered in this paper (i.e. Spanish, Italian and English), English must be represented near the far right of this continuum because it uses intonation, but rarely word order, in marking narrow focus. The more difficult placements along the continuum are Spanish and Italian, which both use word order and intonation in marking focus, but which are not identical in the interaction of these two focal markers. While Spanish cannot be completely at the left end of the continuum, since it uses intonation as well as word order in marking narrow focus, it is nearer to the word order end of the continuum. This is motivated by the preference in Spanish for a focal word order (recall the finding of Face 2000b reported in the preceding section) and by the fact that this focal word order is not accompanied by a focal intonation pattern (Face 2002b). Italian falls between English and Spanish on the continuum. While Italian, like Spanish, makes use of both word order and intonation in marking narrow focus, it has less of a preference for word order marking than does Spanish. This is evidenced in Caputo's (1997) findings (see the preceding section) and by the fact that even when a focal word order is used, this is accompanied by a focal intonation pattern (D'Imperio 2001). Therefore, Italian falls nearer to the middle of the continuum. The placement of Spanish, Italian and English on the continuum is shown in Figure 8.

@@ Insert Figure 8 here

The proposed typological continuum taking into account word order and intonation in the marking of narrow focus makes predictions about the types of focal markings languages may have at intermediate points on the continuum and also has implications for the stages in the change from word order to intonational focal marking or vice versa. First, languages that make use of both word order and intonation in marking narrow focus will generally have a preference for one or the other (unless they are right at the middle of the continuum). Therefore, a language with a preference for word order should not have an elaborate intonational marking of focus when word order is used. This is exactly what we have reported above for Spanish. Similarly, a language with a preference for intonation should not have a focal word order as an obligatory (or even frequent) accompanying marker of narrow focus. English is an extreme case, being as it only rarely uses word order in focal marking. Other languages near the intonation end of the continuum, but still using word order, should bear out this prediction. It should only be in languages without a significant preference for word order

or for intonation (i.e. a language at the center of the continuum) that both are frequently used together.¹⁶

Since languages change, it is expected that a given language may move along the continuum. But the change should be consistently toward one end of the continuum. For this reason, it is predicted that a language undergoing a change from one type of focal marking to another will pass through the stages mentioned for intermediate cases. To take a hypothetical example of a language moving from a word order marking of focus to an intonational marking of focus, it should gradually diminish its use of word order while gradually increasing its use of intonation. Thus for much of the change there would be different degrees of interaction between word order and intonation, but always moving away from word order and towards intonation. Of course, the reverse would be true of a language moving the other direction on the continuum. These predictions are very general in nature, and the specific steps of a change in position on the continuum must be investigated in real languages rather than in the hypothetical. This, however, must be left to future studies.

¹⁶ A plausible alternative would be to attribute to each of the language types considered here (English, Spanish and Italian) three categorically different ways of marking narrow focus. It seems to us that only adding more languages to our empirical investigation would set the issue in a concrete way, which is beyond the scope of this paper.

4. Conclusions

In this paper we have shown that the traditional word order vs. intonation focal typology is formulated too rigidly. Spanish and Italian, commonly cited as word order languages, use intonation in some cases to mark narrow focus. This focal use of intonation is not necessarily accompanied by a focal word order. The interaction of word order and intonation in marking narrow focus is different between Spanish and Italian. In Spanish, focal word order and focal intonation are not used together, and there is a preference for focal word order. In Italian, on the other hand, a focal word order is accompanied by a focal intonation pattern (though the reverse is not true). In addition, there does not seem to be the preference for word order marking of narrow focus that is found in Spanish. These data lead us to propose a revised typology that is a continuum of word order and intonation in marking contrastive focus. This allows for a distinction between word order languages and intonation languages, but also for distinctions between languages (such as Spanish and Italian) that use both mechanisms of focal markings to different degrees.

We have suggested that the proposed typological continuum makes predictions about the types of interactions between word order and intonation that should be found at intermediate points on the continuum.

Furthermore, we have hypothesized that this continuum has implications for the process of change between word order and intonation language in focal marking. Both of these issues will require further investigation to see if the proposed continuum accurately accounts for the different types of interaction between word order and intonation in focal marking that occur in the world's languages. What is clear at this point, however, is that this continuum more accurately accounts for the differences between Spanish and Italian on the one hand and English on the other, while also accounting for the differences between Spanish and Italian, which have traditionally been grouped together as word order languages.

References

Antinucci, Francesco and Guglielmo Cinque. 1977. Sull'ordine delle parole in italiano: l'emarginazione. *Studi di Grammatica Italiana* 6:121-146.

- Atterer, M. and D.R. Ladd. 2004. On the phonetics and phonology of "segmental anchoring" of F0: evidence from German. *Journal of Phonetics* 32(2):177-197.
- Beckman, Mary, Manuel Díaz-Campos, Julia Tevis McGory and Terrell A. Morgan. 2002. Intonation across Spanish, in the tones and break indices framework. *Probus* 14:9-36.
- Benincà, Paola, P.G. Salvi and L. Frison. 1988. L'ordine degli elementi della frase e le costruzioni marcate. In Lorenzo Renzi (ed.), *Grande grammatica italiana di consultazione*. Bologna: Mulino.
- Bolinger, Dwight L. 1954. English prosodic stress and Spanish sentence order. *Hispania* 37:152-156.
- Bolinger, Dwight L. 1954-1955. Meaningful word order in Spanish. *Boletín de Filología* 8:45-56.
- Caputo, Maria Rosaria. 1997. *Le domande in un corpus di italiano parlato. Analisi prosodica e pragmatica*. Doctoral dissertation, University of Naples "Federico II".
- Contreras, Heles. 1978. *El orden de palabras en español*. Madrid: Cátedra.
- Contreras, Heles. 1980. Sentential stress, word order and the notion of subject in Spanish. In Linda R. Waugh and C.H. van Schooneveld

- (eds.), *The melody of language*, 45-53. Baltimore: University Park Press.
- de la Mota, Carme. 1995. *La representació gramatical de la informació nova en el discurs*. Doctoral dissertation, Universitat Autònoma de Barcelona.
- de la Mota, Carme. 1997. Prosody of sentences with contrastive new information in Spanish. In A. Botinis, G. Kouroupetroglou and G. Carayiannis (eds.), *Intonation: Theory, models and applications. Proceedings of an ESCA workshop*, 75-78.
- D'Imperio, Mariapaola. 1999. Tonal structure and pitch targets in Italian focus constituents. *ICPhS99*.1757-1760.
- D'Imperio, Mariapaola. 2000. *The role of perception in defining tonal targets and their alignment*. Ph.D. Dissertation, The Ohio State University, USA. (<http://www.lpl.univ-aix.fr/~fulltext/1002.pdf>).
- D'Imperio, Mariapaola. 2001. Focus and tonal structure in Neapolitan Italian. *Speech Communication* 33.339-356.
- D'Imperio, Mariapaola. 2002. Italian intonation: An overview and some questions. *Probus* 14:37-69.
- D'Imperio, M. 2003. Tonal structure and pitch targets in Italian focus constituents. *Catalan Journal of Linguistics*, 2:55-65.

- D'Imperio, Mariapaola and Barbara Gili Fivela. 2003. How many levels of phrasing? Evidence from two varieties of Italian. In John Local, Richard Ogden and Rosalind Temple (eds.), *Papers in laboratory phonology VI: Phonetic interpretation*, Cambridge: Cambridge University Press, pp. 130-144.
- Face, Timothy L. 2000a. A phonological analysis of rising pitch accents in Castilian Spanish. Paper presented at the 30th *Linguistic Symposium on Romance Languages*, Gainesville, Florida, 24-27 February.
- Face, Timothy L. 2000b. Prosodic manifestations of focus in Spanish. *Southwest Journal of Linguistics* 19.45-62.
- Face, Timothy L. 2001. Focus and early peak alignment in Spanish intonation. *Probus* 13.223-246.
- Face, Timothy L. 2002a. Spanish evidence for pitch-accent structure. *Linguistics* 40.319-345.
- Face, Timothy L. 2002b. *Intonational marking of contrastive focus in Madrid Spanish*. Munich: Lincom Europa.
- Face, Timothy L. 2002c. Local intonational marking of Spanish contrastive focus. *Probus* 14.71-92.
- Face, Timothy L. 2003. Effects of syntactic constituency on the intonational marking of Spanish contrastive focus. In Silvina

- Montrul and Francisco Ordóñez (eds.), *Linguistic theory and language development in Hispanic languages*, 119-137. Somerville, MA: Cascadilla Press.
- Frascarelli, Mara. 1997. The phonology of focus and topic in Italian. *The Linguistic Review* 14.221-248.
- Frascarelli, M. 2000. *The syntax-phonology interface in focus and topic constructions in Italian*, Dordrecht: Kluwer.
- Frota, Sónia. 1997. On the prosody and intonation of focus in European Portuguese. In Fernando Martínez-Gil and Alfonso Morales-Front (eds.), *Issues in the phonology and morphology of the major Iberian languages*, 359-392. Washington, D.C.: Georgetown University Press.
- Frota, Sónia. 2000. *Prosody and focus in European Portuguese. Phonological phrasing and intonation*. New York: Garland.
- Frota, Sónia. 2002. Nuclear falls and rises in European Portuguese: A phonological analysis of declarative and question intonation. *Probus* 14.113-146.
- Gili Fivela, B. 2002. Tonal Alignment in two Pisa Italian peak accents. In B. Bel and I. Marlien (Eds.), *Proceedings of the Speech Prosody 2002 conference* (pp. 339-342), Aix-en-Provence.

- Gili Fivela, B. 2004. *The phonetics and phonology of intonation: The case of Pisa Italian*. Ph D. Dissertation, Scuola Normale Superiore, Pisa.
- Grice, Martine. 1995. *The intonation of interrogation in Palermo Italian: Implications for intonation theory*. Tübingen: Niemeyer.
- Hatcher, Anna Granville. 1956. Theme and underlying question. Two studies of Spanish word order. Supplement to *Word* 12, monograph no.3. New York: Linguistic Circle of New York.
- Hualde, José Ignacio. 1999. Basic intonational contours in Spanish. Paper presented at the *First Sp-ToBI Workshop*, Columbus, Ohio, 1-3 October.
- Hualde, José Ignacio. 2002. Intonation in Spanish and the other Ibero-Romance languages: Overview and status quaestionis. In Caroline R. Wiltshire and Joaquim Camps (eds.), *Romance phonology and variation*, 101-115.. Amsterdam: John Benjamins.
- Ladd, D. Robert. 1980. *The structure of intonational meaning*. Bloomington: Indiana University Press.
- Ladd, D. Robert. 1996. *Intonational phonology*. Cambridge: Cambridge University Press.

- Nibert, Holly J. 2000. *Phonetic and phonological evidence for intermediate phrasing in Spanish intonation*. Doctoral dissertation, University of Illinois at Urbana-Champaign.
- Sosa, Juan Manuel. 1999. *La entonación del español*. Madrid: Cátedra.
- Vallduví, Enric. 1991. The role of plasticity in the association of focus and prominence. *Proceedings of the eastern states conference on linguistics (ESCOL)* 7.295-306.
- Willis, Erik. 2003. *The intonational system of Dominican Spanish: Findings and analysis*. Doctoral dissertation, University of Illinois at Urbana-Champaign.
- Zubizarreta, María Luisa. 1998. *Prosody, focus, and word order*. Cambridge, MA: MIT Press.

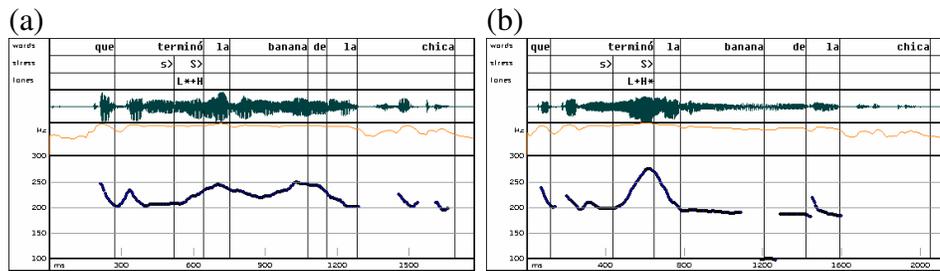


Figure 1. Comparison of broad focus (a) and narrow focus (b) readings of the Spanish declarative *Que terminó la banana de la chica* ‘That she finished the girl’s banana’ by the same speaker.

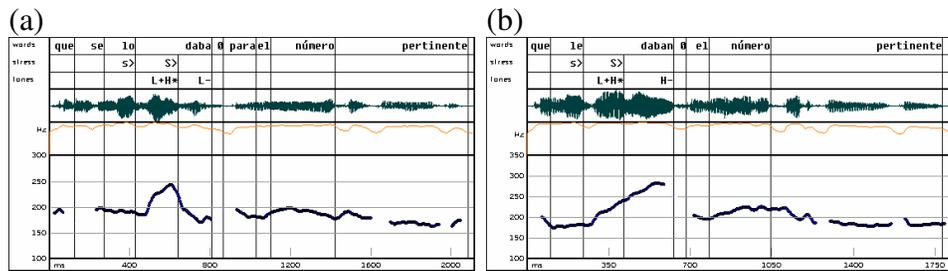


Figure 2. Use of L- (a) and H- (b) following a word in narrow focus in the Spanish declaratives *Que se lo daba para el número pertinente* ‘That he gave it to her for the relevant number’ (Figure 2a) and *Que le daban el número pertinente* ‘That they gave her the relevant number’.

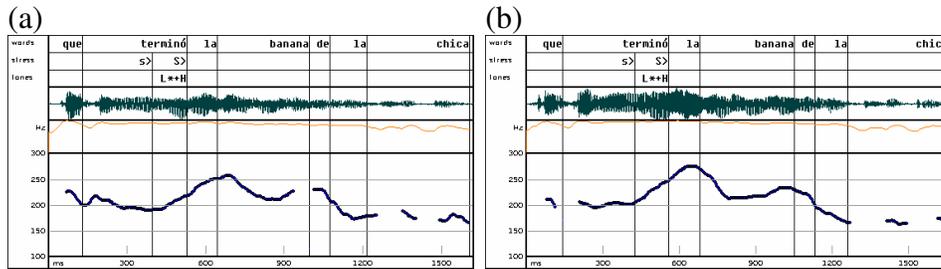


Figure 3. Broad focus (a) and narrow focus (b) reading of the Spanish declarative *Que terminó la banana de la chica* 'That he finished the girl's banana' by the same speaker.

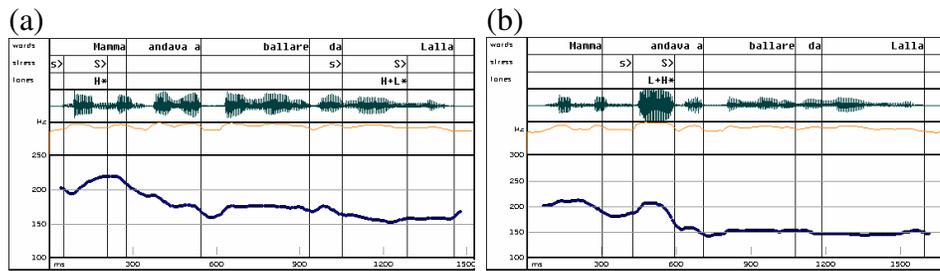


Figure 4. Broad focus (a) and narrow focus on the verb (b) readings of the same Italian declarative *Mamma andava a ballare da Lalla* ‘Mom used to go dancing at Lalla’s’ uttered by the same speaker.

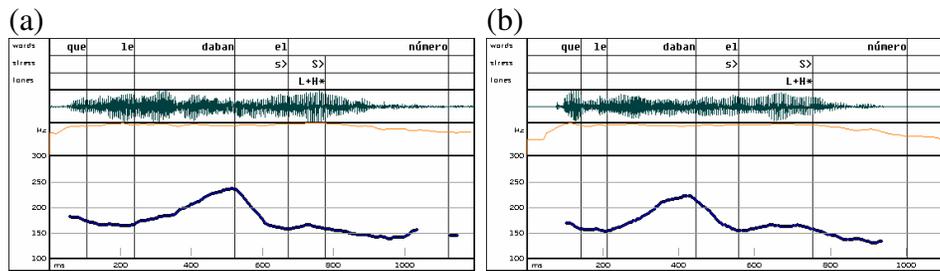


Figure 5. Readings of the Spanish sentence *Que le daban el número* ‘That the gave her the number’ in broad focus (a) and with narrow focus on the final word (b), produced by the same speaker.

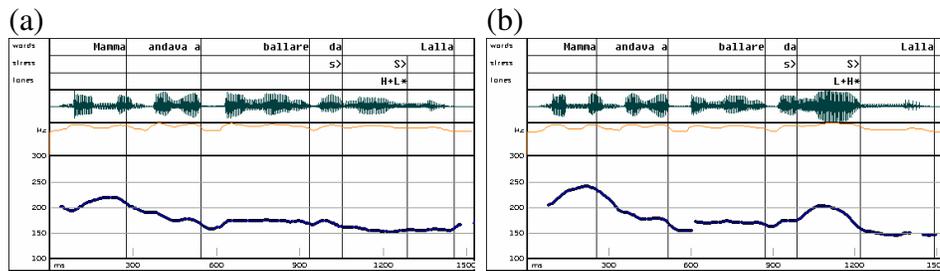


Figure 6. Readings of the same Italian declarative *Mamma andava a ballare da Lalla* ‘Mom used to go dancing at Lalla’s’ in broad focus (a) and with narrow focus on the final word (b), produced by the same speaker.

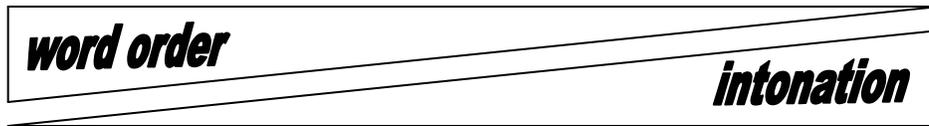


Figure 7. Schematic representation of proposed typological continuum.

