Unstressed words in Spanish

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Abstract

In this paper I examine the prosodic nature of unstressed function words in Spanish. I defend the hypothesis that these words, like all other words in the language, have a syllable that is lexically designated as stressed. I suggest that the essential property of these words is that they are subject to a rule of prosodic merger with following elements within the syntactic phrase, creating a single prosodic word domain. Their surface stresslessnes, I argue, is a consequence of the fact that, by a general rule operating in the language, only the rightmost lexical stress is preserved within a prosodic word domain in Spanish. I also consider several pragmatic contexts in which these words may receive stress in discourse. Finally, I briefly compare stresslessness in Spanish with accentlessness in Basque and tonelessness in Bantu languages.

Keywords: Spanish phonology, stress, accent, prosodic domains, unstressed words

1. Introduction

In Spanish, all content words and some grammatical words bear lexical stress on one of their last three syllables. Some other grammatical words and expressions, on the other hand, are said to be unstressed (“palabras inacentuadas”, see Navarro Tomás 1977[1918]. Real Academia Española 1973, Quilis 1993). For instance, whereas in the phrase in (1a) all words contain a stressed syllable, in (1b) all words but the last one belong to the unstressed class and, consequently, there is a single lexical stress in this phrase, on the last syllable of the last word. In this paper I indicate stress by setting the nuclear vowel of stressed syllables in bolface.

(1) Stressed and unstressed words
   a. unos árboles verdes ‘some green trees’
   b. aunque para los de nuestra profesión ‘although for those of our profession’

Although only grammatical words and expressions may belong to the unstressed class, the stressed/unstressed distinction is involved in many contrasts. Some minimally contrasting examples are given in (2):

(2) Contrasts between unstressed and stressed words

   menos amigos ‘except for friends’
   menos amigos ‘fewer friends’
In Figures 1 and 2, we can observe pitch contours for a minimal pair (produced by the author): *para la marea* ‘for the tide’ vs. *para la marea* ‘it stops the tide’. As we can see, in the first contour the pitch remains low up to the stressed syllable in the last word, where there is a rise (a LH pitch accent). In the second contour, instead, there are two pitch accents: there is a pitch accent on the first syllable of the first word, with a delayed peak, which downsteps the accent on the last word.
The stressed or unstressed status of particular grammatical words is to a great extent idiosyncratic. For instance, definite articles are unstressed, but indefinite articles are stressed, pronominal possessives are unstressed, but demonstratives are stressed. There are also synonymous or nearly synonymous conjunctions and modifiers that differ in their stressed or unstressed nature. In some cases, including some of the examples in (2) above, it is difficult to determine whether we are dealing with two words differing in stress properties or with a single word with stressed and unstressed variants. An interesting case is that of the possessives. Some of them have different shapes when used as (unstressed) prenominal modifiers and when used phrase-finally. Other possessives, however, are identical in both positions, except for their stress status:

(3) Stressed and unstressed possessives

<table>
<thead>
<tr>
<th>mi libro</th>
<th>‘my book’</th>
</tr>
</thead>
<tbody>
<tr>
<td>el libro mío</td>
<td>‘MY book’</td>
</tr>
<tr>
<td>otro libro mío</td>
<td>‘another book of mine’</td>
</tr>
<tr>
<td>nuestro libro</td>
<td>‘our book’</td>
</tr>
<tr>
<td>el libro nuestro</td>
<td>‘OUR book’</td>
</tr>
<tr>
<td>nuestros tres libros</td>
<td>‘our three books’</td>
</tr>
<tr>
<td>tres libros nuestros</td>
<td>‘three books of ours’</td>
</tr>
</tbody>
</table>

In (4), examples are given of expressions of the same grammatical category and similar meaning differing in stress properties:

(4) Quasi-synonyms differing along stressed/unstressed parameter

<table>
<thead>
<tr>
<th>apenas llegó</th>
<th>‘as soon as s/he arrived’</th>
</tr>
</thead>
<tbody>
<tr>
<td>en cuanto llegó</td>
<td>‘as soon as s/he arrived’</td>
</tr>
<tr>
<td>mientras llegaba</td>
<td>‘as s/he was arriving’</td>
</tr>
<tr>
<td>dado que llegó</td>
<td>‘since s/he arrived’</td>
</tr>
<tr>
<td>puesto que llegó</td>
<td>‘since s/he arrived’</td>
</tr>
<tr>
<td>muy dormido</td>
<td>‘very sleepy’</td>
</tr>
</tbody>
</table>

Fig. 2. Spanish: para la marea ‘it stops the tide’. Two stressed words.
medio dormido 'half asleep'

Whereas the rules of stress assignment in Spanish have received considerable attention within Metrical Theory (see Harris 1983, 1995, Roca 1988, 2005, among many others), the existence and interest of an unstressed class of words has been generally ignored in this literature. Detailed classifications of Spanish words as stressed or unstressed (for Standard Peninsular Spanish) can, nevertheless, be found in references such as Navarro Tomás (1977[1918]), Quilis (1993), Real Academia Española (1973) and Hualde (2005, 2006). In this paper I build on the results of Hualde (2006) to propose an explicit analysis of the prosodic properties of unstressed words. The variety considered in this paper is Standard Peninsular Spanish, as in the other works cited above.

2. The nature of unstressed words

In citation form, there is no difference between stressed and unstressed words. In this context, lexically unstressed monosyllabic words receive stress on their only syllable and all polysyllabic unstressed words on the penultimate syllable:

(5) Unstressed words in citation form

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>el artículo la</td>
<td>'the article la'</td>
</tr>
<tr>
<td>la conjunción aunque</td>
<td>'the conjunction aunque'</td>
</tr>
<tr>
<td>la preposición para</td>
<td>'the preposition para'</td>
</tr>
<tr>
<td>(= la forma verbal para)</td>
<td>= 'the verb form para')</td>
</tr>
<tr>
<td>para es una preposición</td>
<td>'para is a preposition'</td>
</tr>
</tbody>
</table>

All function words are also stressed when they are nominalized: *ese “aunque” triste* 'that sad “although”'. This follows from the change in lexical category.

What serves to characterize lexically unstressed words in Spanish is the fact that they are unstressed in non-phrase-final position. In this context, all their syllables have the same (lack of) prominence as the unstressed syllables of content words. That is, sequences where a lexical word is preceded by one or more unstressed words in the syntactic phrase have the same stress profile as a single word with the same number of syllables.

(6) unstressed word + stressed word single stressed word

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>para lelos 'for dummies' = paralelos</td>
<td>'parallel'</td>
</tr>
<tr>
<td>para la ría 'for the estuary'</td>
<td>ferretería</td>
</tr>
<tr>
<td>me lo daría 's/he would give it to me'</td>
<td>melomanía</td>
</tr>
<tr>
<td>porque riza 'because s/he curls'</td>
<td>porquería</td>
</tr>
</tbody>
</table>

3. Proposed analysis of lexical stresslessness

In a recent paper (Hualde 2006), I suggested that unstressed words form a single prosodic word with a following content word within the syntactic phrase. That is, the three-word sequence in (7a) has the same prosodic structure as the single word in (7b):

(7) Unstressed word + stressed word single stressed word

<table>
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</tr>
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</table>
The syntactic phrase in (7a) is comparable to a word-level compound. As Liberman & Sproat (1992) propose for English, in Spanish as well we may distinguish between word-level and phrase-level compounds. The prosodic feature that distinguishes word-level from phrase-level compounds in Spanish is that, in the former class, only the stress of the last member is preserved, as in *limpiaparabrískas* ‘windshield wiper’. In phrase-level compounds, on the other hand, each member preserves its stress, as in *hombre rana* ‘frogman’. (For a classification of compounds in Spanish according to their stress properties, see Hualde 2006.) Syntactic phrases where a stressed content word is preceded by one or more unstressed words can thus be assimilated to word-level compounds, since they show a single stressed syllable.

Here I would like to suggest that, in a possible metrical analysis, unstressed words, like all other words, have a syllable that is designated as head of the word. This is the syllable that receives stress when the word is cited, nominalized or focalized. They differ from other words in that they are subject to a rule of de-stressing when not immediately preceding a prosodic word boundary. Unstressed function words are thus words that are lexically specified to undergo prosodic fusion with following words in the syntactic phrasal constituent.

(8) Prosodic word formation and stress removal

(\(\text{para} \) (\text{nuestros} \) (\text{amigos}) \(\rightarrow\) (\text{para} \text{nuestros amigos})

As just mentioned, this prosodic process would be analogous to the stress removal rule that we find in word-level compounds (as opposed to phrase-level compounds, where each member keeps its stress):

(9) Stress removal in word-level compounds

(\text{recoge} \text{pelotas} \(\rightarrow\) (\text{recogepelotas}) ‘ball-catcher (in tennis)’
gathers balls
(\text{limpia} \text{para} (\text{brisas}) \(\rightarrow\) (\text{limpiaparabrískas}) ‘windshield wiper’
cleans stops breezes
(\text{agua} \text{nieve} \(\rightarrow\) (\text{aguani}ve) ‘sleet’
water snow

In fact, sometimes there is very little difference between compounds and sequences with unstressed words. Consider the word *medio* ‘half, mid’. Navarro Tomás (1977: 169) states that this word is stressed when it is an adjective, as in (10a) and unstressed when it functions as an adverb (i.e. an adjective specifier), as in (10b). However, *medio* is also unstressed in compounds, (10c):

(10) a. *medio día* ‘half a day’
b. *medio dormido* ‘half asleep’
c. *mediodía* ‘midday’

The phonological rule or principle is the same that operates in derivation: the rightmost derivational suffix determines the position of the word-stress and other stresses are deleted.
It should be noted that in derivation as well, we find one case where the mapping between morphosyntactic and prosodic structures is less than straightforward: adverbs in -mente ‘-ly’, which are productively derived from adjectives, contain two prosodic words; e.g., sencillamente ‘simply’, naturalmente ‘naturally’. These adverbs have their historical origin in compounds (cf. mente ‘mind’).

We can thus propose the following rule of de-stressing or stress removal in the phonological grammar of Spanish:

(12) Stress Removal rule (SR)

\[ \text{S...S...} \rightarrow \text{S...S...} \]

“In word-level prosodic structures delete all stresses but the last”

Stress \[ \rightarrow 0 / \text{______ Stress} \]

Part of the lexical information born by function words in Spanish is whether or not they fuse with a word to their right in a single prosodic word, creating structures analogous to word-level compounds. Those that undergo fusion are subject to the de-stressing rule in (12). Stressed function words, on the other hand, form structures like those of phrase-level compounds, where each member keeps its stress (e.g. sofá cama ‘sofa-bed’), and adverbs in -mente.

I am thus proposing a two-step process, where prosodic merger (PM) feeds the stress removal rule in (12). Both in compounding and in phrases containing function words, the application of merger is subject to lexical specification. The application of prosodic merger automatically triggers the rule of stress removal, which is a general rule of the language. In (13) the examples in the first two columns are structures where prosodic merger applies and the other two examples are structures where it does not apply:

(13) Compounds and phrases with and without de-stressing

<table>
<thead>
<tr>
<th>PM</th>
<th>SR</th>
</tr>
</thead>
<tbody>
<tr>
<td>lava</td>
<td>lavaplatos</td>
</tr>
<tr>
<td>(platos)</td>
<td>(para platos)</td>
</tr>
<tr>
<td>(para)</td>
<td>(estos)</td>
</tr>
<tr>
<td>platos</td>
<td>libros</td>
</tr>
<tr>
<td>hombre</td>
<td>n.a.</td>
</tr>
<tr>
<td>(rana)</td>
<td>n.a.</td>
</tr>
<tr>
<td>‘dishwasher’</td>
<td>‘frogman’</td>
</tr>
<tr>
<td>‘for dishes’</td>
<td>‘these books’</td>
</tr>
</tbody>
</table>

In our analysis, thus, the de-stressing rule in (12) applies in all prosodic word structures, preserving only the rightmost stress. On the other hand, whether merger into a single prosodic word takes place or not is an idiosyncratic property in the case of both compounds and phrases containing function words. This is what gives rise to the distinction between compounds with one and with more than one stress (including adverbs in -mente in this latter case) and also to the distinction between stressed and unstressed function words.

It should be noticed that, in this proposal, Spanish does not actually have lexically unstressed words. All words are assumed to have a lexically stressed syllable. Unstressed function words are redefined as cliticizing elements (proclitics), which lose their word stress in non-phrase-final position, that is, when they are integrated into a single prosodic
word with a following syntactic word. Before a prosodic-word boundary, be it in citation form, because a prosodic boundary is introduced before the next syntactic word or because they can also appear in syntactic phrase-final position (e.g. nuestro ‘our’), they are stressed. Although I will continue to use the expression “lexically unstressed words”, it should be kept in mind that in the analysis presented here these are properly understood as function words subject to prosodic merger.

In an alternative analysis, unstressed words would literally be lexically unstressed and would receive stress by default when placed in a position requiring prominence. The fact that all polysyllabic words in this group have penultimate stress in citation form would be consistent with this alternative analysis. Under this analysis, however, the parallelism with compound formation pointed out in this section would be missed. Since a process of prosodic merger and stress removal is independently required in compounding, the proposal in this paper has the virtue of providing a unified analysis of both sets of facts.

4. Stress on lexically unstressed syllables

Words that are normally unstressed may actually receive stress in discourse. We have already considered the citation form environment, where the word is placed in phrase-final position and receives stress. Lexically unstressed words may also bear an accent if they are contrastively focalized. In addition, there are a couple of postlexical or phrase-level rules in Spanish that put stress on lexically unstressed syllables for certain discourse purposes. The syllables of lexically unstressed function words can undergo these processes just like any other unstressed syllables in the same position within the phrase.

We will consider narrow focus before examining these phrase-level rules.

4.1. Narrow focus

Lexically unstressed words may receive stress under narrow or contrastive focus. When they do, they become phonetically undistinguishable from lexically stressed words (Ortega-Llebaria 2008). Polysyllabic unstressed words bear stress on the same syllable as in their citation form (i.e. the penult). The contrasts illustrated in (2) above disappear when the function words receive narrow-focus stress:

(14) Stress on lexically unstressed words under narrow focus

para la ciudad ‘for the city’ (broad focus)
para la ciudad ‘FOR the city’ (narrow focus) = ‘the city stops’

I interpret these facts in the following manner: Narrow focus introduces a prosodic boundary right after the focalized word, preventing its prosodic merger with the following word and, hence, the application of de-stressing:

(15) Narrow focus and phrasing

a. Broad focus: b. Narrow focus:
(para) (la) (ciudad) (para)–(la) (ciudad)
PM (para la ciudad) (para)–(la ciudad)
SR (para la ciudad) (para)–(la ciudad)
‘for the city’ ‘FOR the city’
Beside this emphatic stress phenomenon, Spanish has several other phenomena placing stress on lexically unstressed syllables, and these may affect unstressed words in the same manner that they affect the unstressed syllables of content words. These stress phenomena are usually referred to as “secondary stress” (Bolinger 1962, Harris 1983, Roca 1986), although they bear little resemblance to the secondary stress of a language like English.

4.2. Initial emphatic stress

First of all, although, as we have just seen, one way to emphasize a word is to give greater stress prominence to its lexically stressed syllable, like in English, another strategy is to shift the stress towards the beginning of the word. That is, optionally stress (manifested primarily as a high tone) may occur on the initial syllable of the word or the phrase when the word is emphasized, as shown in (16a). The emphatic stress may occur on the second syllable instead in long words, (16b). The phenomenon is blocked when the lexically stressed syllable is the second from the left, so that the emphatic stress would fall on the immediately pretonic syllable, (16c). If the lexically stressed syllable is the first syllable of the word, the emphatic stress rule applies vacuously, (16d):

(16) Initial emphatic stress

<table>
<thead>
<tr>
<th>citation form</th>
<th>emphatic initial stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. fundamental</td>
<td><em>fundamental</em> ‘fundamental’</td>
</tr>
<tr>
<td>portugueses</td>
<td>portugueses ‘Portuguese, pl.’</td>
</tr>
<tr>
<td>regulaciones</td>
<td>regulaciones ‘regulations’</td>
</tr>
<tr>
<td>superioridad</td>
<td>superioridad ‘superiority’</td>
</tr>
<tr>
<td>b. espectacular</td>
<td>espectacular, espectacular ‘spectacular’</td>
</tr>
<tr>
<td>gramaticalidad</td>
<td>gramaticalidad, gramaticalidad ‘grammaticality’</td>
</tr>
<tr>
<td>c. ventana</td>
<td>*ventana ‘window’</td>
</tr>
<tr>
<td>dinámico</td>
<td>*dinámico ‘dynamic’</td>
</tr>
<tr>
<td>d. épico</td>
<td>épico ‘epic’</td>
</tr>
</tbody>
</table>

In the emphatic pronunciation shown in (16) the lexically stressed syllable may receive some stress by durational means or may lack all prominence. That is, particular tokens may show either reduction or deletion of the lexical stress.\(^1\)

The basic process of emphatic stress can thus be stated as follows:

(17) Emphatic stress shift rule
“Shift stress to the initial syllable, unless it is on the second syllable from the left”

\[(S \ S, S) \rightarrow (S \ S, S)\]

In long words (of five or more syllables) the stress may be shifted to the second syllable instead, subject to the same condition.

Notice that, under this strategy, greater (phrasal) prominence does not result from adding more prominence to already prominent syllables (as is usually assumed in

\(^1\) In the small number of tokens that I have measured, the lexically stressed syllable consistently shows greater duration, even though it lacks tonal prominence. If further study confirms these findings, the initial emphatic stress process would be properly characterized as involving shift of the main stress to the first syllable and reduction of the degree of stress of the lexically stressed syllable, rather than its complete de-stressing. I don’t know of any systematic acoustic study of words in this context.
Metrical Theory), but, rather, from shifting the stress to a lexically unstressed syllable. It is conceivable that future experimental research will show that the alignment of the tones in this contour is consistent with their analysis as “edge tones” rather than as pitch-accents, as Welby (2006) demonstrates for the early rises of French. Nevertheless, this appears to be a prominence-lending contour, in the sense that the word bearing it is perceived as being emphasized. As mentioned, adding greater prominence to the lexically stressed syllable, without complete de-stressing of the lexically stressed syllable, is also a possibility.

4.3. Rhythmic stress

A different phenomenon is a rhythmic stress on the countertonic syllable (i.e. two syllables before the lexically stressed syllable) used in didactic style. This rhythmic stress pattern is particularly frequent in public discourse. It tends to occur before a continuation rise (Kimura 2006), but occasionally may also occur at the end of a turn. Rather than signaling emphasis or narrow focalization of the word or phrase bearing the contour, the general use of this stress pattern is to indicate to listeners that they should continue paying attention, as the information that is being conveyed is very relevant. In this stress contour, the lexically stressed syllable maintains its prominence. That is, unlike the emphatic stress phenomenon discussed above in 4.2, which is a process of stress shift, this is a process of stress addition. There are, thus, two stressed syllables in the word under this prosodic contour:

(18) citation form rhythmic stress
    fundamental    fundamental
    portugueses    portugueses
    regulaciones   regulaciones
    superioridad   superioridad

Under this contour, the word clearly has two stressed syllables (each bearing an associated high tone). In spite of the “secondary stress” label that is often attached to this phenomenon, the syllable that receives stress as a consequence of this process has at least as much prominence as the lexically stressed syllable of the word, if not more. Typically the phenomenon is accompanied by pitch-range resetting, so that the pitch-accent on the syllable that receives rhythmic stress is upstepped with respect to a preceding pitch-accent.

This process is not subject to the same restriction as emphatic stress. If the lexically stressed syllable is the second syllable from the left, and, therefore there is no other available syllable, a rhythmic stress may be added immediately before the lexically

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2 I agree with Quilis (1993), who also uses the same notation for lexical and postlexical stresses without distinguishing degrees of prominence: “Aunque las palabras acentuadas en español sólo poseen una sílaba acentuada (recuérdese la excepción de los adverbios en -mente), ocurre a veces que por un énfasis especial que tiene por objeto poner de relieve una palabra determinada, o por afectación propia de algunas personas, se señala por medio de un segundo acento una de las sílabas inacentuadas de la palabra o una palabra átona; /baxo mi responsabilidad/ bajo mi responsabilidad, /intérpreted/ interpretada, /trabajo de la memoria/, trabajo de la memoria, etc.” (Quilis 1993: 396) [Although stressed words in Spanish only have one stressed syllable, it happens sometimes that either because of a special emphasis with the purpose of giving prominence to a specific word or because of an idiosyncrasy of some people, one of the unstressed syllables of the word or an unstressed word is marked with a second accent /bajo mi responsabilidad/ bajo mi responsabilidad, /intérpreted/ interpretada, /trabajo de la memoria/, trabajo de la memoria, etc.]
stressed syllable. This situation, although relatively rare, is by no means excluded (pace Harris 1983: 85-86). All the examples in (19) have been observed in actual discourse:

(19) citation form rhythmic stress
Madrid    Madrid
común     común
reales    reales
cascos urbanos cascó urbanos  ‘city centers’

The process can be schematized as in (20):

(20) Rhythmic stress addition
a. General case:       S S S → S S S
b. Special case:       (S S → (S S

Although, in principle, emphatic and rhythmic stress can be analyzed as two distinct phenomena, there are some prosodic patterns that share properties with both. One of them is a type of emphatic listing contour. For instance, one way to answer the question “What nationalities are represented in your company?” may be *pues, tenemos portugueses, italianos, rumanos, búlgaros,...* “Well, we have Portuguese, Italians, Romanians, Bulgarians...” This contour expresses the meaning that, in the opinion of the speaker, this is a long list. As shown, this contour allows stresses on adjacent syllables. In the same context, a word with three pretonic syllables, such as *venezolanos* ‘Venezuelans’, could be produced with stress either on the countertonic, as regularly in the rhythmic stress pattern, or on the initial: *venezolanos, venezolanos.*

Lexically unstressed words may receive stress in the same contexts that other unstressed syllables receive stress. That is, both emphatic and rhythmic stress may produce stress on a lexically unstressed word. Under rhythmic stress, polysyllabic unstressed words may be stressed on any syllable, depending on the distance to the following lexical stress:

(21) citation form rhythmic stress
parados     para todos  ‘for all’
para saber   para saber   ‘to order to know’
para la casa para la casa  ‘for the house’

nuestra casa    nuestra casa  ‘our house’
nuestra propuesta    nuestra propuesta  ‘our proposal’

The rhythmic stress addition rule may reiterate, although this is relatively infrequent. The examples in (23) have been observed in natural discourse:

(22) Reiteration of rhythmic stress rule
*de documentación*   ‘of documentation’
*de la literatura*    ‘of the literature’

Unstressed function words are thus treated like any other lexically unstressed syllables for the postlexical or phrase-level phenomena of emphatic and rhythmic stress. In derivational terms, these function words first become unstressed by the operation of the process of prosodic merger and then, at the postlexical level, may receive stress on any
syllable by the rhythmic stress rule; e.g. (para) (saber) (cantar) PM/SR → (para saber) (cantar) RS → para saber cantar ‘in order to know how to sing’. There is very little abstraction in this derivation, as all three pronunciations are, in fact, possible. The first pronunciation is obtained when the three words are pronounced with pauses between them. The second pronunciation, where para is unstressed, is the unmarked rendition of phrase. Finally, the third stress pattern results from applying rhythmic stress to the phrase.

5. Spanish unstressed words from a cross-linguistic perspective

To end this paper, it may be useful to consider the Spanish contrast between stressed and unstressed words from a comparative perspective. Something to keep in mind is that when we establish comparisons between languages, most of the time we must refer to similar or analogous phenomena, rather than to identical phenomena (Pierrehumbert, Beckman & Ladd 2001, Pierrehumbert 2003).

Spanish stress is not the same phenomenon as, for instance, English stress any more than Spanish /t/ is the same sound as English /t/. Although the two languages agree in the basic fact that every word has a syllable that receives prominence when the word is cited in isolation, serving as anchoring point for prominence-lending tonal events, there are also many differences between the two languages regarding the phenomenon that we call stress. This is not only regarding phonetic implementation, but also from a structural point of view. For instance, English has a lexical contrast between full and reduced vowels (e.g. bandanna vs. banana, gymnast vs. tempest), analyzed in Metrical Theory as foot level stress (Chomsky & Halle 1968, Hayes 1995, Halle and Vergnaud 1987, among others), that is totally absent in Spanish.

In addition, Spanish lacks the complications in the assignment of nuclear stress in neutral utterances that we find in English, as well as the freedom the English language allows to alter the position of the nuclear stress for special effect (see, e.g., Ladd 1996). Consider, for instance, the following passage from Don Kurtz’s novel Churchgoers: “But the gates of Hell will not prevail. They will not prevail. They will not prevail, and that’s the promise of Jesus Christ….” (p. 75) This passage strikes me as virtually untranslatable into Spanish without massive paraphrasing. On the other hand, English does not have the phrase-level “secondary stress” phenomena of Spanish, i.e. the possibility of stressing syllables lacking word-level prominence.

The unstressed words of Spanish that we have considered in this paper also have properties that are not found in English. The closest parallel in English to Spanish unstressed words is provided by those words that shun nuclear stress (cf., e.g. you saw your friend vs. you saw somebody). This phenomenon in English can result in contrasts that are reminiscent of those between stressed and unstressed words in Spanish. Consider the two readings of the text animals like me (under neutral stress: animals like me ‘animals such as myself’ vs. animals like me ‘animals love me’). English also has a class of monosyllabic function words that appear in reduced form when unstressed (Selkirk 1972). Crucially, however, the unstressed words of Spanish may have more than one syllable and may occur in sequences. These words are proclitics that always occur before the first stress in their phrase.

Having thus noted that even when we consider two typologically similar languages like English and Spanish we are not really referring to exactly the same thing when we talk about “stress”, we may venture a comparison with typologically more distant languages, with all necessary caveats. Is there any interesting respect in which stresslessness in Spanish resembles tonelessness in tone languages?
In the context of this Festschrift, it may be of some interest to establish a brief comparison with Bantu. Many Bantu languages have a class of toneless words (see, e.g., Kisseberth & Odden 2003). Although this phenomenon, at first blush, might seem to have very little in common with lexical stresslessness in Spanish, it appears that there is a certain continuum of intermediate phenomena, for instance in Basque dialects, as we will see. What both classes—toneless words in Bantu and unstressed words in Spanish—would have in common is lack of lexical prosodic features within the particular system of oppositions. In Bantu languages with lexical tone, toneless words lack lexical tone. In the stress system of Spanish, unstressed words appear to lack lexical stress (although in the analysis that I have proposed in this paper this would be a consequence of their becoming cliticized). Spanish, of course, lacks lexical tone, but what most clearly allows us to identify certain words as lexically unstressed is precisely the fact that they consistently fail to bear a high tone in phrasal contexts where other words would show a high tone linked to one of their last three syllables.

Let us consider some examples from Logooli, a Bantu language of the Luyia group spoken in Kenya. As is typical of Bantu languages, words in Logooli may have one or more lexically high toned syllables, and there is also a toneless class of words. The word *manyonyi* 'birds' in Figures 3 and 4, for instance, is toneless. As shown in Figure 3, in isolation, all syllables of this word have a low tone, which falls even lower in the last syllable. Before another word that bears a lexical high tone, on the other hand, the pattern is different. In Figure 4 we see a rendition of the phrase *manyonyi manéne* 'big birds' where the adjective *ma-néne* bears a high tone on the first syllable of the stem. As can be observed in the figure, this high tone spreads towards the beginning of the phrase. Depending on the token, the rise from the beginning of the phrase to the lexically high-toned syllable may be more or less gradual.

![Fig. 3. Logooli: *manyonyi* ‘birds’. Toneless word in final position.](image)

3 The Logooli data are from the author’s ongoing work on this language. The soundfiles that were used for the figures were all produced by the same (male) native speaker of the language, to whom I am grateful. See also Leung (1991).
The contrast between high-toned and toneless words in phrase-initial position when preceding a word with a lexical high tone is illustrated in Figures 5 and 6. The infinitive *kurúma* ‘to bite’ has a lexical high tone, whereas *kurima* ‘to dig’ is toneless. In the figures, the infinitive is followed by *garáha* ‘slowly’. In Figure 5, the high tone of *kurúma* causes downstep of the high tone of *garáha*. There are, thus, two visible tonal peaks, the second one downstepped with respect to the first (in words with two high tones, such as *mídógá* ‘cars’, the second one is also downstepped). In Figure 6, on the other hand, there is a single peak, since the first word lacks lexical tone. There is a high plateau from the beginning of the phrase to the lexically high-toned syllable in the second word, *garáha*.
Some Basque dialects have a contrast between lexically accented and unaccented words manifested in tonal patterns that resemble those in Figures 5-6. Figure 7 and 8 (for the Northern Bizkaian Basque dialect of Lekeitio) shows that, preceding an accented word—amúma ‘the grandmother’ in this case—the contrast between accentless lagunen ‘of the friend’ (Fig. 7) and accented lagúnen ‘of the friends’ (Fig. 8) is very similar to what we have seen for toneless vs. other words in Logooli. In the first example, Fig. 7, there is a tonal plateau from the second syllable of the first (unaccented) word up to the accented syllable in the second word, amúma. In the second example, Fig. 8, on the other hand, we see that there are two peaks, corresponding to the two lexical accents, and that the accent on lagúnen causes downstep of the accent on amúma. This second example is thus to be compared with Figure 5.

Fig. 6. Logooli: kurima garáha ‘to dig slowly’. One lexical H tone.

Fig. 7. Lekeitio Basque: lagúnen amúma ikusi dot ‘I have seen the friend’s (sg) grandmother’. Phrase with one accent: Unaccented word preceding an accented word (adapted from Hualde et al. 2002)
The surface similarity between Logooli toneless words and Northern Bizkaian Basque unaccented words disappears, however, when we consider words in isolation. In citation form or at the end of a focalized phrase, unaccented words in Lekeitio Basque receive an accent on their last syllable and show a high rising pattern up to the last syllable. In this, they resemble the unstressed words of Spanish, which are only unstressed if not phrase-final.

The Lekeitio Basque contrast is thus one between words that contain a syllable with an invariable HL contour in all contexts and words that show such a contour—on their last syllable—only in final position in certain phrases. Whether we refer to it as a contrast between accented and unaccented, stressed and unstressed or high-toned and toneless words would seem to amount to the same thing.

In Hualde & Bilbao (1993) an analysis is developed for the Northern Bizkaian Basque dialect of Getxo where unaccented words receive stress on their final syllable (as they would in isolation) but are subject to a rule deleting all word-final stresses except for the last one of the phrase. Using the notation introduced for Spanish in this paper, e.g.: /gurē lagun ederrēl/ → (gurē) (lagun) (ederrēl) → (gurē lagun ederrēl) ‘our beautiful friend’. This is very much like the proposal I have made in this paper for Spanish unstressed words. One difference is that, at least in conservative varieties, the unaccented words of Basque are not accentable at all in non-phrase-final position, even if narrow or contrastive focus is intended: *gurē laguna ‘OUR friend’ (see, e.g. Hualde, Elordieta, Gaminde & Smiljanic 2002). As we have seen, Spanish allows stress on unstressed words in this case. The merger of unaccented words into larger prosodic units is obligatory in Basque and cannot be blocked by syntactic phrase-internal focus.

From the figures, a readily noticeable surface difference between Spanish, on the one hand, and Northern Bizkaian Basque and Logooli, on the other, is that the latter two languages have a phenomenon of leftward tonal spreading, which Spanish does not have in declarative utterances. Instead, Spanish has rightward spreading of high tones, a phenomenon referred to as “peak displacement”, which is observable in Figure 2. But there are also Basque dialects with a class of unaccented words that lack leftward tone spreading (Hualde, Elordieta, Gaminde & Smiljanic 2002). In Southern Bizkaian varieties (Arratia), which lack tonal spreading (and possibly lexical tone), the contrast...
between accented and unaccented words appears to be realized very much like the parallel Spanish phenomenon, the most important difference being one of lexical distribution, since nouns, adjectives, verbs and adverbs may belong to the unaccented class in these Basque dialects.

6. Summary and conclusions

Traditional descriptions of Spanish prosody have pointed out the existence of a class of unstressed function words in this language. These words may have more than one syllable and may occur in sequences preceding a stressed word. In this paper I have suggested that these words are lexically stressed on the syllable that shows stress-prominence in their citation form, but lose their stress as a consequence of a process of prosodic procliticization, which makes them part of larger prosodic words. The advantage of this proposal is that it allows us to include other stress phenomena observable in compound-formation and derivation under the same generalization. In addition, this analysis would appear to make the facts more consistent with typological perspectives where the Obligatory Head constraint (i.e. the requirement that in every prosodic word there must be a syllable with primary stress) is the defining property of stress languages (Hyman 2006), since, as we have seen, there are contexts where these function words may constitute prosodic words by themselves.

From a comparative point of view, we have noted that these words can be stressed and receive a pitch-accent in their normal syntactic position under contrastive focus, whereas the unaccented words of Bizkaian Basque must be final in the syntactic phrase in order to receive prominence. This can be interpreted as providing further evidence for the view that the unstressed words of Spanish have a syllable that is designated as stress-bearing, even if most of the time they surface as unstressed (and may also be stressed on a different syllable under phrase-level rhythmic stress).

Using unaccentedness in Basque as a typological bridge has allowed us to also establish a comparison with tone languages. Unstressed function words in Spanish are usually toneless in the sense that they do not anchor intonational pitch-accents, but appear to be rather different in their properties from the lexically toneless words of a tone language like Logooli.

References


