

BASQUE WORD ACCENTS IN THE SENTENCE

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ABSTRACT

This paper provides a brief overview of the basic intonational features of the Basque dialects that have been studied so far, namely Northern Bizkaian Basque, Central and Standard Basque, and Arratia Basque. The three dialects possess different characteristics. Northern Bizkaian Basque (NBB) has a lexical distinction between accented and unaccented words, and it only has one type of pitch accent, H*+L, which falls on the final or on the penultimate syllable of an Accentual Phrase. Central/Standard Basque has no lexical distinction of this kind, and has pitch rising pitch accents, which can be transcribed as (L+H)*, since the peak aligns with the tonic or the posttonic syllable. Arratia Basque maintains the accented/unaccented distinction (only in uninflected words), and it has rising pitch accents, with a peak on the tonic syllable, followed by a rapid fall until the end of the word. The tonal contour of an Accentual Phrase in this dialect can be transcribed as L+H* L α .

Keywords: Northern Bizkaian Basque, Central Basque, Standard Basque, Arratia Basque, pitch accents, Accentual Phrases.

RESUMEN

Este artículo ofrece un breve repaso a las principales características entonativas de los dialectos vascos que han sido estudiados hasta el momento: vizcaíno septentrional, euskera central y estándar, y euskera del Valle de Arratia. El vizcaíno septentrional posee un contraste léxico entre palabras acentuadas y no acentuadas, y el acento tonal es siempre H*+L, que cae sobre la última o penúltima sílaba de un Sintagma Acentual. El dialecto central (guipuzcoano central) y el euskera estándar no poseen esta distinción, y los acentos se manifiestan como subidas tonales, cuyos picos se sitúan en la tónica o en la postónica (p. e., (L+H)*). El dialecto de Arratia mantiene la distinción entre palabras acentuadas y no acentuadas en palabras no flexionadas, y el acento se manifiesta como una subida tonal con pico en la tónica, seguido de un rápido descenso hasta el final de la palabra. El contorno tonal de un Sintagma acentual en este dialecto se podría transcribir como L+H* L α .

Palabras clave: vizcaíno septentrional, dialecto central (guipuzcoano), euskera estándar, dialecto de Arratia, acentos tonales, sintagmas acentuales.

1. WHAT DO WE KNOW ABOUT BASQUE INTONATION?

So far, the prosodic system of Basque whose intonational structure and properties has received most attention is Northern Bizkaian Basque (NBB). Over the last 15 years there have been several studies on local varieties of NBB, such as Lekeitio, Ispaster, Bermeo, Fruiz, and Gatika, as the most noteworthy ones (cf. Hualde 1989, 1997; Hualde and Bilbao, 1992; Hualde, Elordieta and Elordieta, 1994; Gandarias, 1996; Elordieta, 1997, 1998, 2003, 2007a, b, c; Jun and Elordieta, 1997; Elordieta, Gaminde, Hernáez, Salaberria and

Martin de Vidales, 1999; Gaminde, 2000, 2001, 2004, 2007; Hualde, Elordieta, Gaminde and Smiljanic, 2002; Gussenhoven, 2004; Elordieta and Hualde, in press, among others). The Gipuzkoan dialect has been studied in less detail (e.g. Tolosa, Errenteria; cf. Elordieta, 2003; Irurtzun, 2003, 2007), and other dialects or varieties are only starting to be described and analyzed, such as High Navarrese (Goizueta, cf. Hualde and Lujanbio, 2008; Hualde, Lujanbio and Torreira, 2008) and Standard Basque (Elordieta and Hualde, in press).¹

Before we proceed with the brief overview of the main intonational features of the Basque dialects that have been studied, a methodological note is in order. The descriptions of the intonational features of Basque dialects have followed the Autosegmental-Metrical framework, which establishes a taxonomy of pitch accents according to the phonetic alignment of the tones composing the pitch accents with the accented syllables. The taxonomy is simplified in Figure 1:²

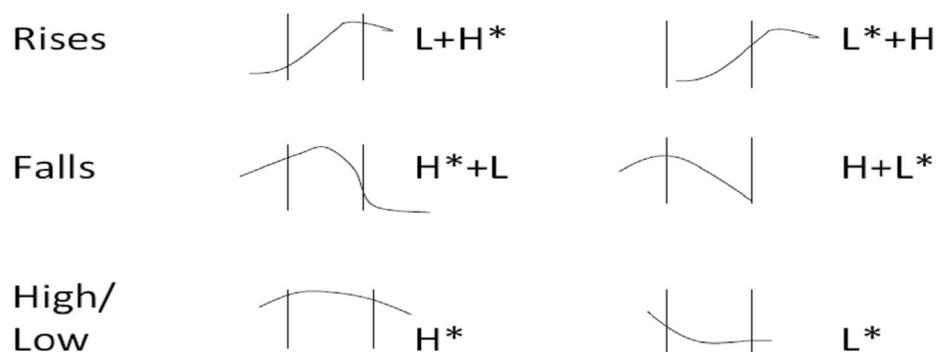


Figure 1. Taxonomy of pitch accents and their patterns of tonal alignment

1.1. Northern Bizkaian Basque

In the varieties of Bizkaian spoken in the north, a noteworthy feature is the phonological distinction between accented and unaccented words. In what follows we will provide a brief summary of the main characteristics of NBB. Detailed descriptions are offered in the references mentioned above, and Elordieta (in press) offers a complete list of references on NBB accentuation and intonation).

¹ A more comprehensive list of references can be found in Elordieta (in press).

² Classic references of the A-M model, where the main foundations of the theory are explained, are Pierrehumbert (1980), Pierrehumbert and Beckman (1988) and Ladd (2008).

Accented words have an accent (H*+L) on the penultimate syllable:

- (1) *lagunak, mutillak, **Koldo**, arbola, liburu*

Lexically unaccented words occurring before the verb and in isolation receive a H*+L accent on the penultimate syllable:

- (2) *laguna etorri da*
lagunak ein dau
laguna

Other lexically unaccented words do not have a syllable with an accent:

- (3) *laguna etxian geratu da*
lagunen andria gaixorik egon da

Words are grouped in intonational constituents: Accentual Phrases, Intermediate phrases, and intonational phrases. Here we will concentrate on Accentual Phrases (APs). They have the following features:

- (a) An initial Low boundary tone on the first syllable (%L)
- (b) A rise on the second syllable (i.e., from a Low tone on the first syllable to a High tone, H-, on the second syllable)
- (c) A pitch accent on the final or penultimate syllable (H*+L)
- (d) Hence, the intonational contour of an AP at the phonological level is %L H- H*+L

(4) is an example of an AP composed of a lexically unaccented word which receives an accent on its final syllable by virtue of being pronounced in isolation (and similarly so if it were the last word before the verb). Fig. 2 contains a pitch track of this example. By comparison, (5) is an example of an AP composed of a lexically accented word which receives an accent on its penultimate syllable. Fig. 3 illustrates a typical pitch contour of this type of APs. The tonal transcription of the two APs is represented below each F0 contour.

- (4) *Lagunenarí (emon dotzat)*
friend:GEN;SG.:ABS;SG:DAT

‘To the one of the friend’

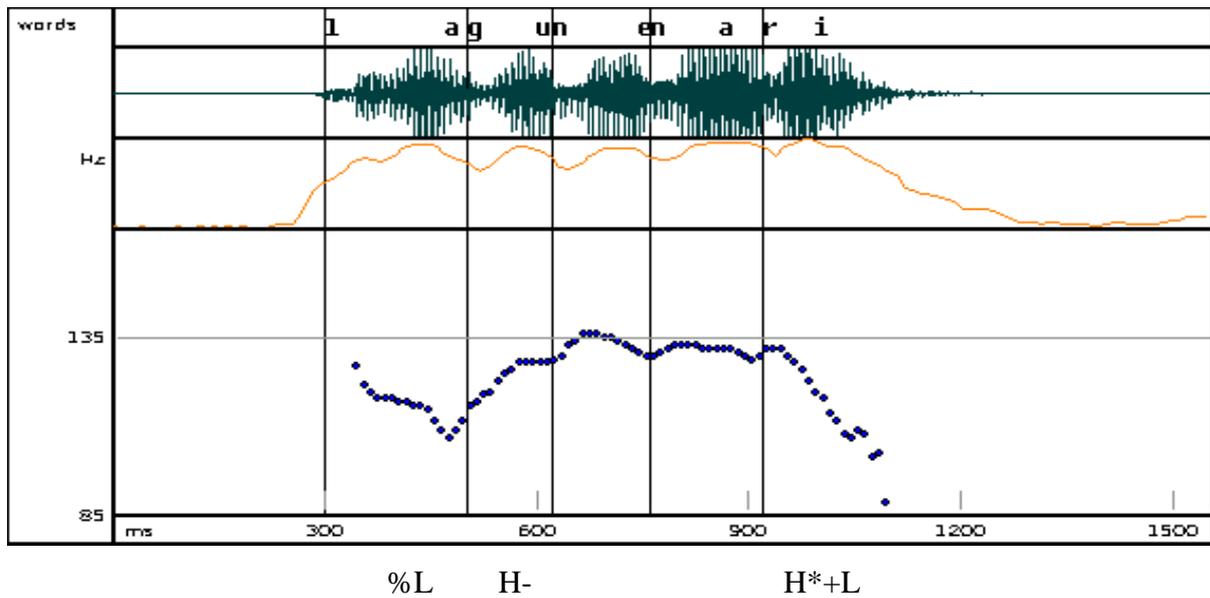


Figure 2. F0 contour, tonal representation and tonal alignment of an AP containing an unaccented word, with an accent on its final syllable

(5) *Lagunenári* (*emon dotzat*)

friend:GEN;PL:ABS;SG:DAT

‘To the one of the friends’

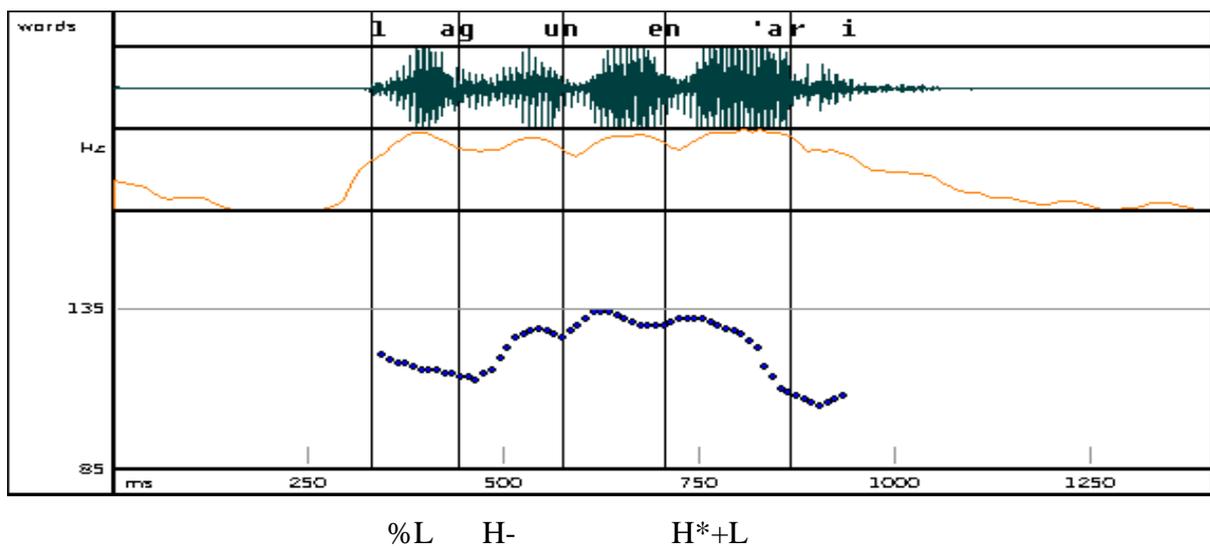


Figure 3. F0 contour, tonal representation and tonal alignment of an AP containing an accented word, with an accent on its penultimate syllable

When an unaccented word does not precede the verb it does not receive an accent on its final syllable, and the high tone level reached from the second syllable is maintained onto the following word. An accented word, on the other hand, always surfaces with an accent on its penultimate syllable. Figure 4 contains a comparison of two sequences of two words; the first word in the first sequence is unaccented (the word *lagunen* ‘of the friend’, in genitive singular), and the first word in the second sequence is accented (the word *lagúnen* ‘of the friends’, in genitive plural). The contrasting sequences are glossed in (6)-(7). Note that the only surface difference between the words *lagunen* and *lagúnen* is the absence vs. presence of an accent. Since an AP in NBB usually ends with an accent, the consequence for prosodic phrasing in NBB of the presence of an unaccented or an accented word preceding another word is that in the first case there is only one AP, containing the two words, and in the second case there are two APs, each containing one word with an accent:

(6) *lagunen amúma ikusi dot*
 friend:GEN;SG grandmother:ABS;SG see aux
 ‘I have seen grandma’s friend’

(7) *lagúnen amúma ikusi dot*
 friend:GEN;PL grandmother:ABS;SG see aux
 ‘I have seen grandma’s friends’

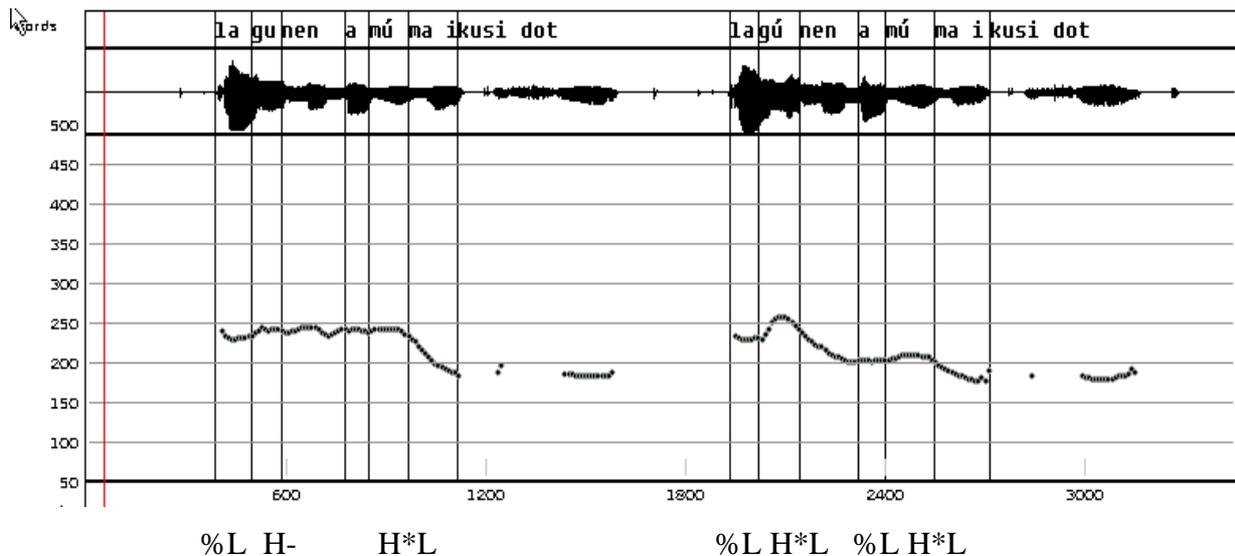


Figure 4. A comparison of two pitch tracks, illustrating the difference between having an unaccented word preceding another word (left-hand pitch track) or having an accented word preceding another word (right-hand pitch track)

1.2. Central Basque

Accentuation in most Gipuzkoan and Eastern Bizkaian dialects (Central Basque) is rather different from NBB. The following would be the most relevant prosodic characteristics of Central Basque:

- (a) No contrast between lexically accented and unaccented words.
- (b) Stress generally falls on the postinitial syllable (i.e., second syllable).³
- (c) There may be an exceptional class of items with initial accent.
- (d) Accents are typically realized as rising contours which are immediately followed by falls if the word is in phrase-final position.

Irurtzun (2003, 2007) proposes a H* pitch accent in Central Basque (more specifically, for the local variety of Errenteria), and Elordieta and Hualde (in press) suggest a (L+H)* pitch accent for Standard Basque, in the speech of a native speaker of a local variety of Central Basque (Standard Basque lacks a normalized prosody, but it is well assumed that it shares the main features of Central Basque). They observe that pitch accents in Standard Basque are realized as rises, with a valley at the beginning of the accented syllable and a peak within the tonic syllable or in the posttonic one. The study these authors conducted was not designed to investigate in detail whether the alignment of peaks with the tonic or the posttonic syllable was phonologically determined, that is, whether there are two pitch accents, L*+H and L+H*, as in most varieties of Spanish. Figure 5 serves to illustrate an example of an F0 curve of a short broad focus declarative sentence such as the one in (8).

- (8) *garágado epéla edán du*
beer warm:ABS;SG drink aux
'(S)he has drunk warm beer'

³ Hualde (2003) hypothesized that the postinitial accentuation in Central Basque probably arose from a reinterpretation of the old phrasal rise on the second syllable that nowadays only NBB but which Hualde argues that was common to all Basque dialects. This rise was reinterpreted as an accent on the second syllable of an AP, and later on a prosodic word. Elordieta and Hualde (2003) proved that Spanish-dominant bilingual speakers as well as native Basque speakers of dialects other than NBB tend to perceive accentual prominence on the second syllable of words in isolation in NBB regardless of the actual position of the accent (H*L).

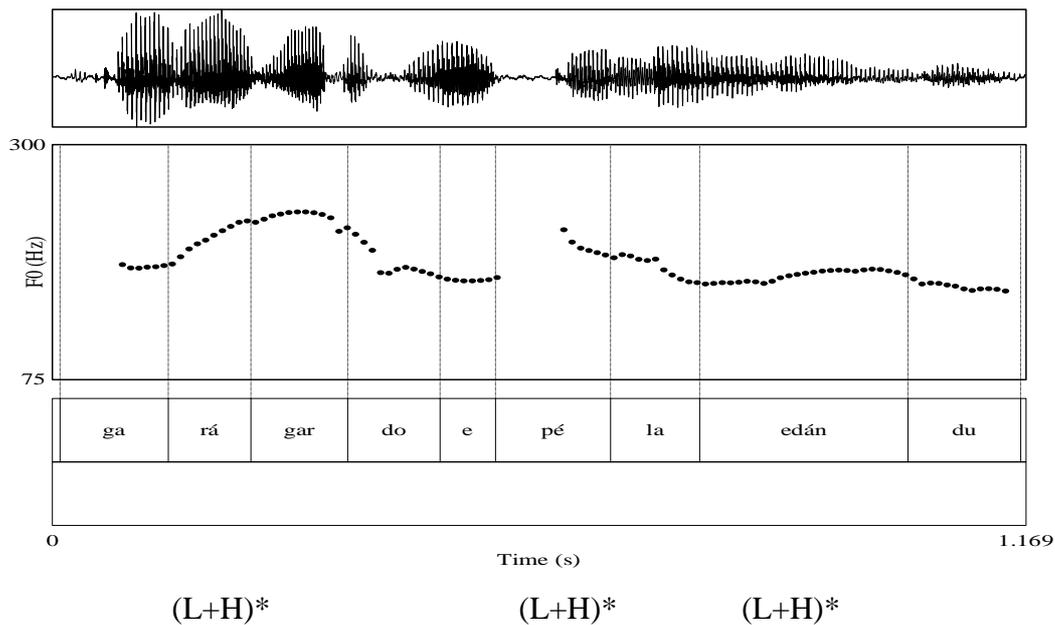


Figure 5. F0 track of a broad focus declarative sentence in Standard/Central Basque

In Figure 5, the first pitch accent has a peak on the posttonic syllable, and the second accent has a peak on the tonic syllable. The difference in peak alignment could be related to a difference in terms of prenuclear and nuclear (i.e., immediately preverbal) accents: prenuclear accents would have a peak on the posttonic syllable, and nuclear accents would have it within the boundaries of the tonic syllable. Following the notation system of the Autosegmental-Metrical Theory of intonation, this difference could be transcribed as L^*+H for prenuclear accents and $L+H^*$ for nuclear accents. This would seem to be confirmed in the following F0 curve, for the sentence in (9). The verb has an accent with a peak on the tonic syllable, as can be observed in Figures 5-6, so we may transcribe this accent as $L+H^*$ as well. Obviously, more work is necessary in order to establish any correspondences of this kind. Future work with more speakers and a sufficient number of tokens for a statistical analysis will reveal the main patterns of tonal alignment in pitch accents in Central Basque.

- (9) *Gúre lagúnak galdú du*
 our friend:ERG;SG lose aux
 ‘Our friend has lost it’

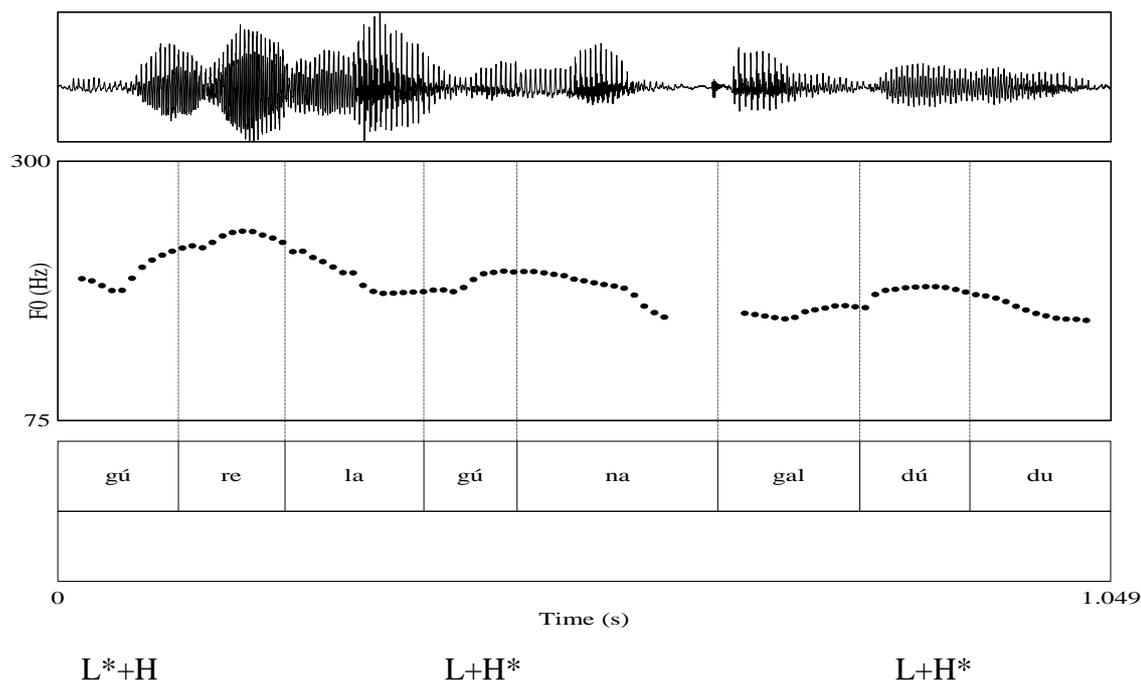


Figure 6. F0 track of a broad focus declarative sentence in Standard/Central Basque

Words bearing the narrow focus of a sentence (more specifically, contrastive or corrective focus) display a rising pitch accent with the peak within the tonic syllable. This pitch accent would thus be transcribed as L+H*. The sentence in (10) and its F0 contour in Figure 7 show this:

- (10) *ALÁBA etorri da, ez lagúna*
 daughter-ABS;SG come aux not friend:ABS;SG
 ‘It’s been THE DAUGHTER that has come, not the friend’

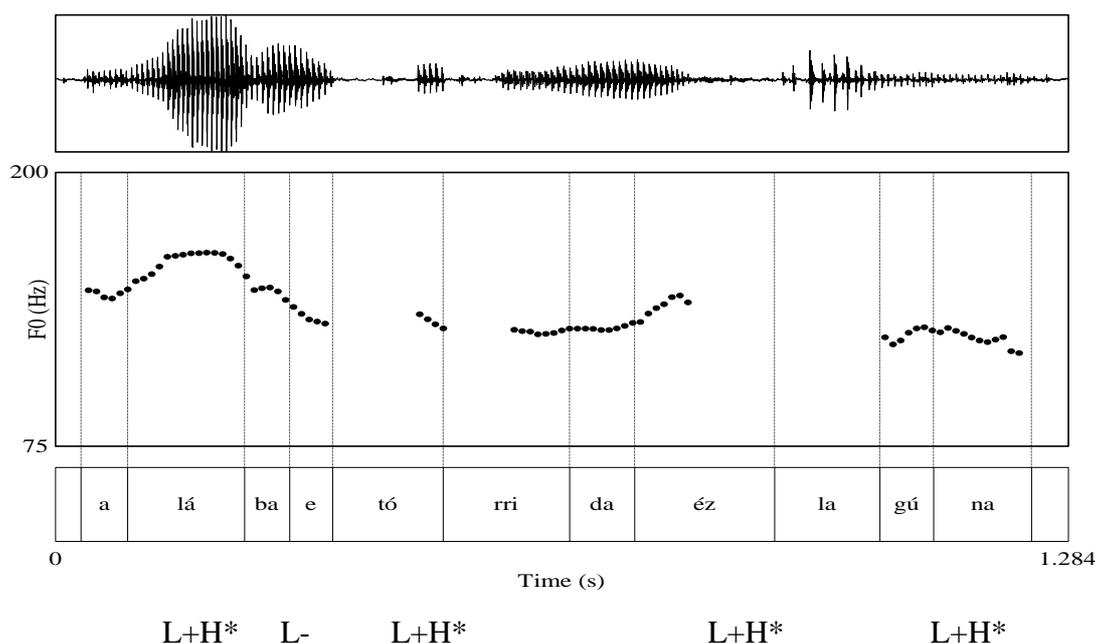


Figure 7. F0 contour of a declarative sentence in Standard/Central Basque where the first word bears a narrow focus accent

1.3. Southern Bizkaian (Arratia)

The other dialect whose intonational system has been minimally described is the southern Bizkaian dialect of Arratia (Gaminde, 2003; Hualde et al., 2002).⁴ This dialect has the following intonational characteristics:

- (a) Low tone level until the stressed syllable⁵
- (b) Rise on the stressed syllable
- (c) The peak is immediately followed by a fall in pitch until the end of the word

The F0 contour in Figure 8, corresponding to sentence (11), shows these features.

- (11) gure abadéana da
 our priest:GEN;SG is
 ‘It is our priest’s’

⁴ By ‘describing an intonational system’ we mean studying the intonational patterns that arise in sequences of two or more words before the verb, not only describing the F0 movement that realizes pitch accents in a dialect (as for Goizueta Basque, cf. Hualde and Lujanbio 2008, Hualde, Lujanbio and Torrerrira 2008. A study of the intonation of this extremely interesting variety is pending).

⁵ For the accentuation pattern in Arratia, the reader should refer to Hualde (1997, 1999).

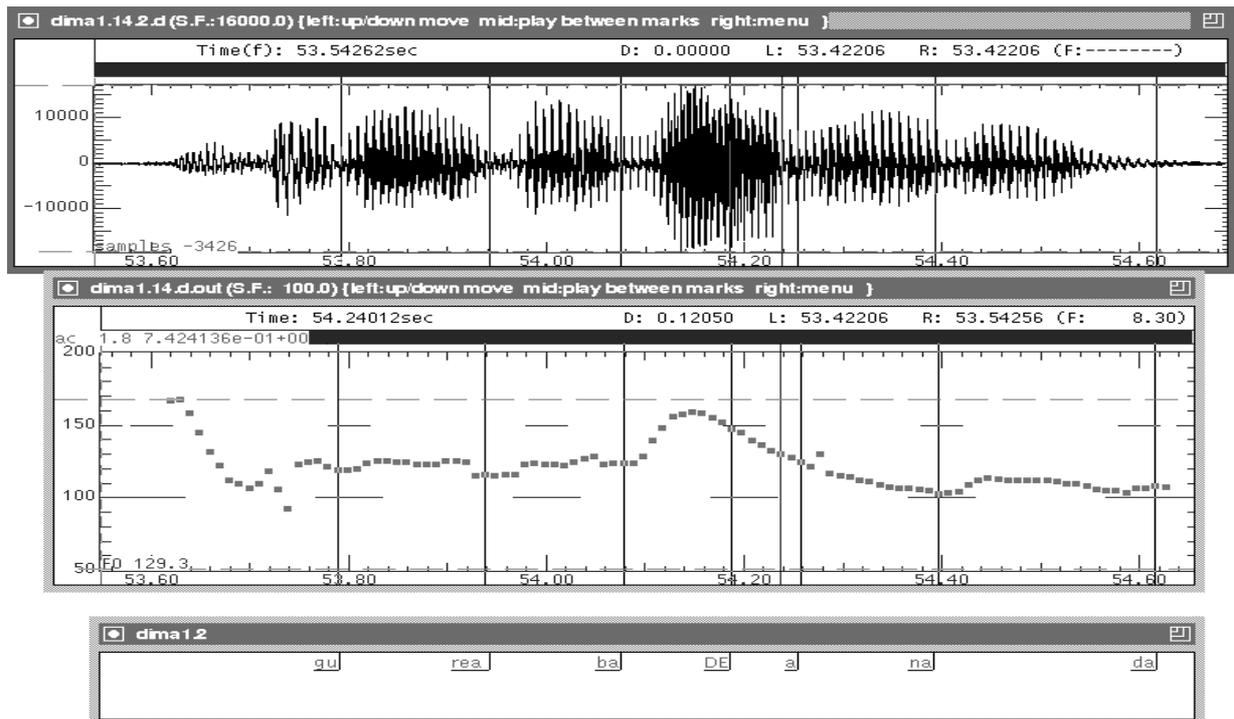


Figure 8. F0 contour of a declarative utterance of southern Bizkaian Basque

$L\alpha$ would be a boundary tone at the right edge of an accented word (or an AP), as the L target is reached at the end of the word, not on the posttonic syllable.⁶ When the accent falls on the final syllable of the word, the fall is steeper, as there is less time to complete the fall. Figures 9 and 10 illustrate this, for sentences (12)-(13), respectively:

- (12) *alaba argalá etorrí de*
 daughter thin:ABS;SG come aux
 ‘The thin daughter has come’

⁶ The diacritic α stands for ‘Accentual Phrase’ (AP), and is inspired on Gussenhoven (2004).

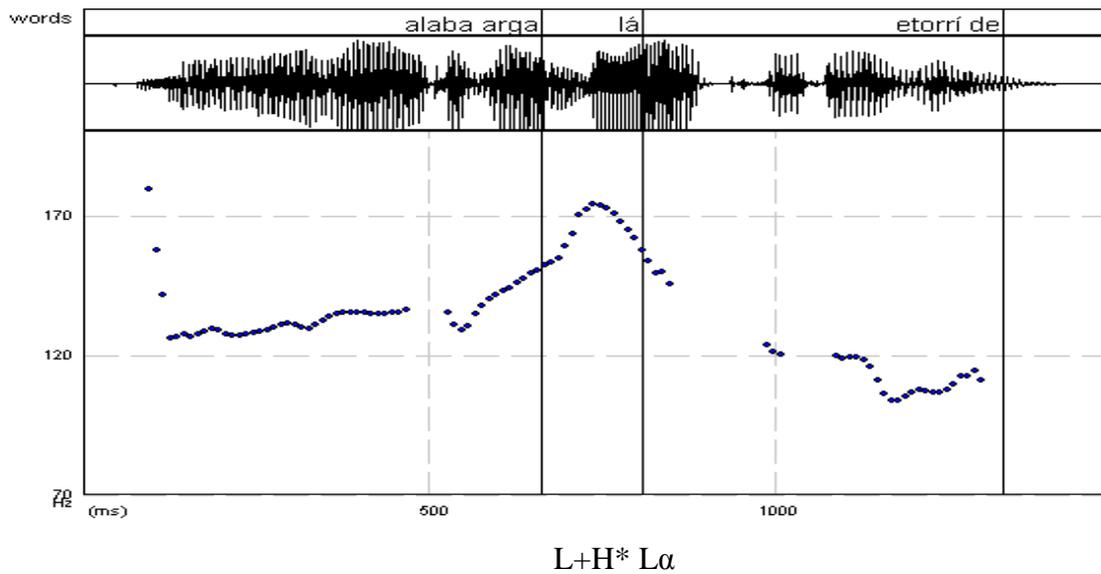


Figure 9. F0 contour of a declarative utterance of southern Bizkaian Basque with final accent on the preverbal word

- (13) *lagunén alabéa etorri de*
 friend:gen;sg daughter:abs;sg come aux
 ‘The friend’s daughter has come’

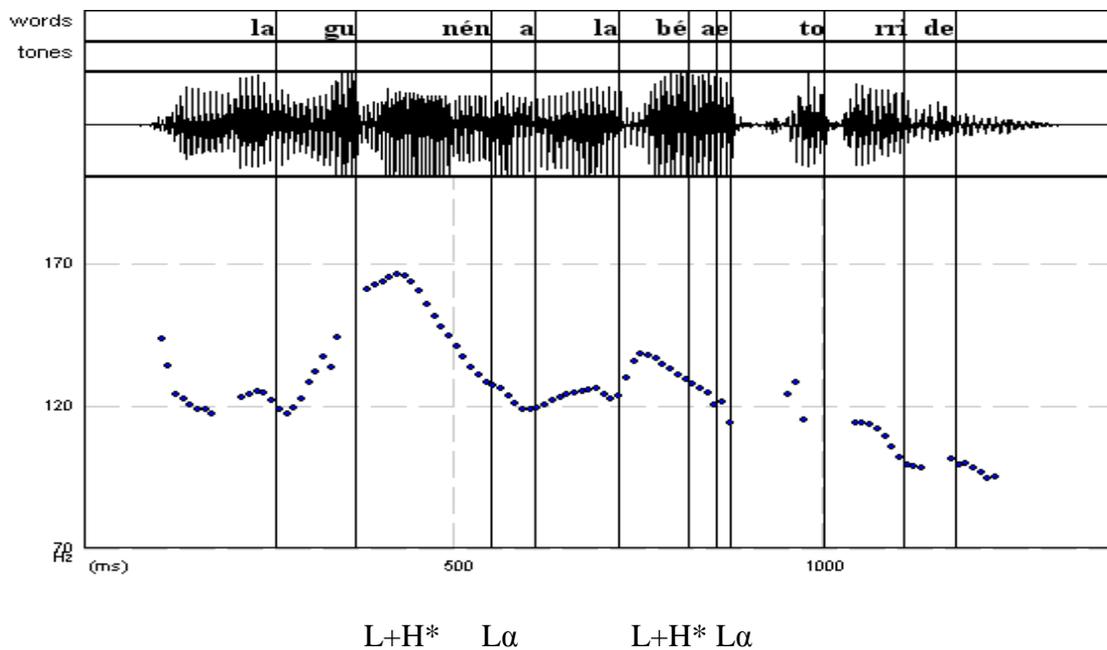


Figure 10. F0 contour of a declarative utterance of southern Bizkaian Basque with two accented words before the verb.

2. PRACTICAL RECOMMENDATIONS

Sometime it may be difficult to decide when exactly a peak has been reached, in cases in which the peak is maintained for some time or the pitch level even keeps rising, albeit slightly. Figure 11 is a case at hand, illustrating the F0 contour of a sentence of Standard/Central Basque with narrow focus on the first word (cf. sentence (14)). The peak on the accented syllable of this word (i.e., *gu*) has been reached at the end of this syllable, but the pitch level rises slightly above that level on the posttonic vowel. In the verb, the highest pitch level is already reached at the end of the tonic syllable *man*, but there is a slight dip after that and the pitch seems to rise again after that. The practical recommendation would be to ignore such tiny differences, which may be due to microprosody or artefacts of the pitch extracting algorithm, and assume that the turning point or target is reached earlier, the first time a pitch level is reached.

This example serves to illustrate another important issue, which is deciding where an elbow or a valley (i.e., a L target) is located. Should we pay attention to the lowest F0 level before the pitch starts rising, or to the F0 point immediately before the pitch starts rising? The latter criterion is usually adopted in AM analyses (cf. del Giudice, Shosted, Davidson, Salihie and Arvaniti, 2007).

- (14) *LAGÚNARI emán diogu*
friend:dat;sg give aux
'We have given it TO THE FRIEND'

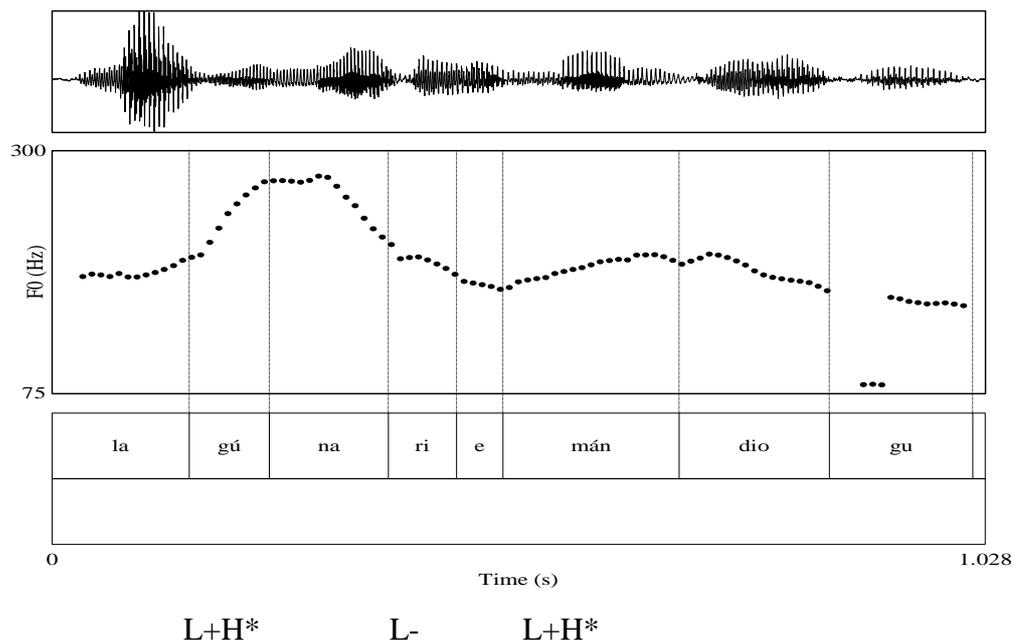


Figure 11. F0 contour of a sentence of Standard/Central Basque that serves to exemplify criteria for deciding on the exact location of tonal targets

Another important issue is that of deciding which syllable is stressed or bears the main prominence in the word. This is especially pressing in the case of Basque, because unlike Spanish, French or any other official European language Basque does not have academically established and academically taught rules of accentuation, and there is a considerable degree of dialectal fragmentation in accentuation. Usually investigators rely on their ears. Another suggestion would be to ask native speakers of those dialects for their intuitions as to where they hear stress or an accent. The problem is that naïve speakers don't always understand what 'stress' or 'accent' or even 'prominence' means, so the investigator would have to train them. Not "teach" them the rules, but train them in listening and perceiving main prominence. In any case, a practical and useful recommendation is to start with words in isolation, where the accentual patterns are best and more clearly revealed, without the pressure of neighboring accents. The fewer the neighboring accents, the more clearly each accent will be realized and perceived, as the temporal pressure to go from one accent to the next (and hence from one tonal gesture to the next) will be reduced and there will hence be enough time for a clear intonational realization of an accent.

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