## THE INTONATION OF INFORMATION-SEEKING ABSOLUTE INTERROGATIVES IN MADRID SPANISH

# LA ENTONACIÓN DE LAS INTERROGATIVAS ABSOLUTAS DE BÚSQUEDA DE INFORMACIÓN EN ESPAÑOL DE MADRID

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### ABSTRACT

Romera and Elordieta (2019) and Elordieta and Romera (2020) reported that most information-seeking absolute interrogatives in the variety of Spanish spoken in the Basque Country have a rising-falling circumflex final contour. Basque has falling final contours in absolute interrogatives. Applying the same methodology, this paper shows that most information-seeking absolute interrogatives in Madrid Spanish end in a high rising configuration. The results of this research strengthen the hypothesis proposed by Romera and Elordieta (2019) and Elordieta and Romera (2020) that the variety of Spanish spoken in the Basque Country shows influence from Basque.

Keywords: intonation, absolute interrogatives, Spanish, Basque, language contact.

#### RESUMEN

Romera y Elordieta (2019) y Elordieta y Romera (2020) informaron que la mayoría de los enunciados interrogativos absolutos neutros o de búsqueda de información en la variedad de español del País Vasco tienen un contorno final circunflejo ascendente-descendente. El euskera tiene contornos finales descendentes en enunciados interrogativos absolutos. Este artículo muestra que la mayoría de las preguntas absolutas de búsqueda de información en el español de Madrid terminan en una configuración tonal de subida. Los resultados refuerzan la hipótesis de Romera y Elordieta (2019) y Elordieta y Romera (2020) de que la variedad del español hablado en el País Vasco muestra influencia del euskera.

Palabras clave: entonación, interrogativas absolutas, español, euskera, contacto lingüístico.

### 1. INTRODUCTION

Romera and Elordieta (2019) and Elordieta and Romera (2020) reported that most information-seeking absolute interrogative statements in the variety of Spanish spoken in the Basque Country have a rising-falling circumflex final contour. This finding contrasts with the traditional description of neutral, information-seeking absolute interrogatives in Central Castilian Spanish and Southern Spanish. They are characterized primarily by rising final contours in which the final stressed syllable of the statement presents a low tonal value followed by a rising intonation in the last syllable. See, among others, Navarro Tomás (1966, 1999), Quilis (1981, 1993), Escandell (1998, 1999, 2017), Sosa (1999), Face (2004, 2008), Hualde (2005), Estebas-Vilaplana and Prieto (2008, 2010), Henriksen (2010), Henriksen and García-Amaya (2012), Hualde and Prieto (2015). In Sp\_ToBI, this tone is transcribed as L\* H%. Romera and Elordieta (2019) and Elordieta and Romera (2020) suggested that the falling final contours of the Spanish variety spoken in the Basque Country are due to influence from Basque, which is characterized by falling final contours in absolute interrogatives.

However, it should be noted that many of these studies have reported the existence of falling intonation patterns in absolute interrogatives in Central Castilian Spanish. These interrogative sentences are not genuine information-seeking questions, but rather have pragmatic connotations of echo, imperative or confirmatory questions, in which the speaker is attributing the content of the interrogative to another person (cf. Escandell, 1998, 1999, 2017; Estebas-Vilaplana and Prieto, 2010; Hualde and Prieto, 2015, Henriksen *et al.*, 2016, among others). These are annotated by the above-mentioned sources as L+H\* L%, with a rise in pitch on the nuclear syllable above the level of other previous high tones (hence also annotated as L+¡H\* L% by Torreira and Floyd 2012, with the symbol "¡" used to indicate upstep in ToBI-based analyses of intonation).

In spontaneous speech in Madrid Spanish, Torreira and Floyd (2012) claim that circumflex tones may be even more common than rising tones, which suggests that the most neutral intonation patterns are not necessarily the most common in conversational speech (cf. Hualde and Prieto, 2015). Torreira and Floyd (2012) mention several but disperse pragmatic and discourse contexts where the circumflex contour occurs, but they come up with the generalization that this type of contour is mainly used as a "topic follow-up", and secondarily as a signal that the speaker is "maintaining the course of action". These interrogatives appear with the following functions in discourse in the corpus analyzed by these authors: responding to a

previous question, providing news receipt, initiating a repair, checking the listener's attention during a telling, or providing a pre-announcement during a telling.

Henriksen *et al.*, (2016) also observed that rising tones are rare in spontaneous speech among speakers of Manchego Spanish. Inspired by Escandell (1998), the authors associated the rising contours with statements in which the content of the question is attributable to the speaker (in other words, a genuine information-seeking question). Falling contours are more common in interrogative sentences in which the content of the question can be attributed to another person, be it the speaker's conversation partner or another, external party.

Thus, the issue may be raised about how frequent rising or falling F0 contours really are in Central Castilian Spanish information-seeking yes/no questions like the ones investigated for Basque Spanish. It is important to stress that the absolute interrogatives analysed in Romera and Elordieta (2019) and Elordieta and Romera (2020) were of the information-seeking type, that is, questions that were genuinely addressed to the interlocutor with the intention of obtaining information that the person uttering the questions did not possess. In the end, if such sentences also showed final falling intonational contours in Central Castilian Spanish, the conclusion by Romera and Elordieta (2019) and Elordieta and Romera (2020) that the falling contours found in Basque Spanish yes/no questions were due to influence from Basque could be brought into question.

The aim of the work presented here is to obtain data from Central Castilian Spanish that is comparable to the one in Basque Spanish. That is, we apply the same methodology used by Romera and Elordieta (2019) and Elordieta and Romera (2020) to obtain information-seeking absolute interrogatives, so that a direct comparison between the two varieties can be established. That way, we would add more knowledge to the issue of the frequency of final rising intonational contours in information-seeking yes/no questions in Central Castilian Spanish and to the issue of whether the high frequency of falling contours in such sentences in Basque Spanish can be attributed to influence from Basque. We have chosen Madrid Spanish as a representative variety of Central Castilian Spanish, in a similar line to most previous work.

<sup>1</sup> With the exception of Henriksen (2010) and Henriksen *et al.* (2016), who gather data on a Castilian variety spoken south of Madrid, Manchego Spanish.

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### 2. FINAL TONE CONTOURS OF ABSOLUTE INTERROGATIVES IN SPANISH IN CONTACT WITH BASOUE

Romera and Elordieta (2019) and Elordieta and Romera (2020) researched the intonation patterns of absolute interrogatives in the variety of Spanish spoken in the Basque Country, in areas in contact with a vernacular variety of Basque. Elordieta and Romera (2020) analysed data from the cities of Bilbao and San Sebastian, and Romera and Elordieta (2019) extended this research to two non-urban populations in the provinces of Biscay and Gipuzkoa, with a view to obtaining data on both urban and non-urban areas. It should be noted that the pragmatic meaning of the interrogative sentences corresponded to a genuine search for information, since the absolute interrogative statements occurred in the context of a semi-directed interview or conversation in which the interviewer asked questions that sought information about the interviewee that was unknown to the interviewer. In such a context, Romera and Elordieta (2019) and Elordieta and Romera (2020) observed an occurrence frequency of rising tones of just 12%, while rising tones of the type L\* H% are the most common in information-seeking absolute interrogatives in Central and Southern Spanish. Falling final contours are only more common in these varieties when the question content can be attributed to another person, be it the conversation partner or another, external party (see references cited above).

The falling circumflex tonal configurations of Basque Spanish can be transcribed in the autosegmental-metrical annotation system as  $L+(\ _i)H^*$  (H)L%, that is, a rising pitch accent with the peak on the stressed syllable followed by a drop in tone in the final syllable. The pitch reached in the stressed syllable may exceed the level reached in the rest of the sentence, hence the upstep diacritic 'i'. On the other hand, the high tonal level may be maintained in the final syllable of the interrogative sentence and may fall even more abruptly towards the end, hence the possible presence of the high tone H in the boundary tone (subject to intra- and inter-speaker variation). The average occurrence of such contours in the 24 speakers from the Basque Country was 87% (with falling final contours observed more often in non-urban areas than in urban areas). Figure 1 shows an intonation contour of an absolute interrogative sentence in Basque Spanish, corresponding to a male bilingual speaker with Spanish as his native language, from San Sebastian.

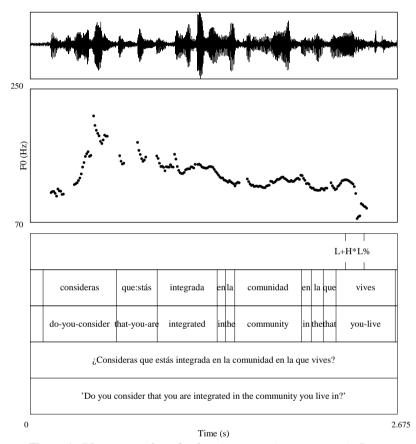


Figure 1. F0 contour of an absolute interrogative statement in Basque Spanish, by a male L1Spanish/L2Basque speaker from San Sebastian.

Falling circumflex tones in absolute interrogatives are typical of Basque (cf. Elordieta, 2003; Gaminde *et al.*, 2011; Robles-Puente, 2012; Elordieta and Hualde, 2014). Figure 2 shows an intonation contour of an absolute interrogative statement in Gipuzkoan Basque (example taken from Elordieta and Hualde, 2014:457). Romera and Elordieta (2019) and Elordieta and Romera (2020) attributed the high frequency of falling circumflex tones in the Spanish spoken in the Basque Country to an influence from Basque. This influence could be understood in diachronic terms

as a historical transfer by native Basque speakers to their Spanish, followed by a consolidation of falling contours as a characteristic of Basque Spanish.<sup>2</sup>

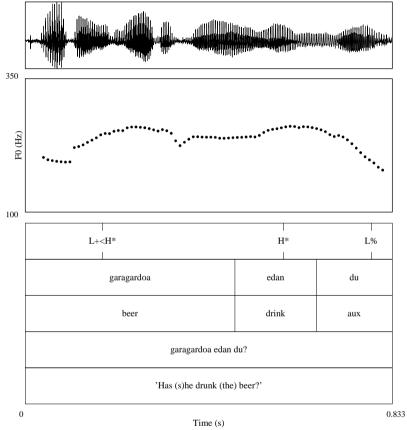


Figure 2. F0 contour of an absolute interrogative statement in Gipuzkoan Basque, by a female speaker (example from Elordieta and Hualde, 2014:457).

<sup>&</sup>lt;sup>2</sup> There is a growing literature on the presence of prosodic features of one language on another it is in contact with. For a comprehensive bibliography, which includes studies on Spanish in contact with other languages in the Iberian Peninsula and in America, the reader can consult Elordieta and Romera (2020).

Other northern varieties of Spanish such as those spoken in Galicia, Asturias and Cantabria present falling final contours in absolute interrogatives, especially in non-urban areas.<sup>3</sup> However, the falling contours are different from those found in Basque Spanish. For a detailed comparison, the reader is referred to Elordieta and Romera (2020).

### 3. METHODOLOGY

Seven people were recorded, all originally from Madrid and living in this city. They belonged to the same age group and sociocultural background as the speakers recorded in the Basque Country (i.e. 35 to 55 years of age and had secondary education or higher). Of the seven subjects, four were women and three were men.

As in the Basque Spanish experiments by Romera and Elordieta (2019) and Elordieta and Romera (2020), the data were obtained from semi-directed conversations in an interview format. These conversations had two parts. First, an interviewer (a research assistant trained specifically for the task) asked the subjects about their circumstances, habits and personal tastes (marital status, background, level of education, network of family and friends, hobbies, travel, opinions about the areas where they have lived and currently live, etc.). The interviewer did not have any kind of family relationship or friendship with the interviewed subjects. In this first part, declarative utterances were obtained from the subjects' responses. In a second part, the subjects were asked to adopt the role of interviewer by asking the initial interviewer questions about the same kinds of topics addressed in the first part. This made it possible to obtain both absolute and partial interrogative utterances (20 of each type, i.e. a total of 40). This technique was first devised and put into practice by Romera and Elordieta (2013).

As in the aforementioned work on Basque Spanish, the absolute interrogatives obtained from the Madrid Spanish speakers were of the information-seeking type. The speakers producing the questions did not know their interlocutor and asked questions about her family, background, career, habits, tastes, leisure time, and related questions pertaining to personal life. Thus, the questions were genuinely of the information-seeking type, and had no pragmatic bias from the speaker's side. They were not uttered in order to obtain confirmation of information that the interlocutor may have provided before or that the speaker may imagine (i.e., they

<sup>&</sup>lt;sup>3</sup> Elordieta *et al.* (2020) also hypothesize that the presence of final falling intonational contours in absolute interrogatives in the more southern variety of Cáceres (in Extremadura) could be a feature inherited from Asturian-Leonese or Galician.

were not confirmation-seeking questions). They were not produced as echo, counter-expectational, surprise or rhetorical questions, either.

The recordings took place in quiet rooms in the subjects' workplaces or homes. A Tascam DR-100 digital recorder was used, with an in-built microphone set to unidirectional mode pointing to the experimental subjects.

We segmented the recordings into declarative utterances and absolute and partial interrogative utterances. Only complete utterances were considered, without any interruptions or gaps of any kind. Here we are only presenting results from absolute questions, since those are the focus of our comparative study with Basque Spanish absolute questions. The other types of sentences will be analysed in the future for another project.

### 4. RESULTS

A total of 175 absolute interrogative utterances of the information-seeking type were obtained from the seven speakers of Madrid Spanish. Only the final F0 contours were analysed, that is, the tonal sequence formed by the nuclear accent and the final boundary tone. Table 1 shows the types of nuclear contours found in our data, with a count of the number of utterances displaying such contours as well as the percentages represented by those numbers over the total of 175 information-seeking questions. The final rising contours are presented in the left-hand column, and the final falling configurations are presented in the right-hand column.

There were 116 absolute interrogative utterances with a rising final contour, which is two thirds of the 175 interrogatives analysed (66.3%). Two intonational contours stand out over the others: L+H\* H% and L\* H%, which together amount to roughly over half of the total number of absolute interrogatives in Madrid Spanish (52%). L+H\* H% is formed by a rising nuclear accent followed by a high boundary tone, and L\* H% constitutes an upward movement like the former contour but without a rising nuclear pitch accent (i.e., it is a later rise). Less frequent are H\* H% and circumflex falling-rising contours (H\* LH%, H+L\* H% and L+H\* LH%).

<sup>&</sup>lt;sup>4</sup> The prenuclear region will be considered in future work. Interesting differences may be found between Basque Spanish and other varieties.

Rising nuclear contours	Falling nuclear contours
L+H* H%	H* L%
N = 56 (32%)	N = 29 (16.5%)
L* H%	L+H* L%
N = 35 (20%)	N = 18 (10.3%)
H* H%	H+L* L%
N = 11 (6.3%)	N = 5 (2.8%)
H* LH%	L+H* HL%
N = 11 (6.3%)	N = 3 (1.7%)
H+L* H%	H*+L L%
N = 2 (1.1%)	N = 2 (1.1%)
L+H* LH%	L* L%
N = 1 (0.5%)	N = 2 (1.1%)
Total: 116 (66.3%)	Total: 59 (33.7%)

Table 1. Number of rising and falling nuclear tone configurations obtained in the corpus of 175 information-seeking yes/no questions in Madrid Spanish, in the left-hand and right-hand columns, respectively. Their percentages of occurrence over the total are provided in parentheses

Figures 3 and 4 provide examples of information-seeking absolute interrogatives with a rising ending. Figure 3 shows a L+H\*H\* configuration, corresponding to a male speaker, and Figure 4 shows a L\*H\* contour from female speakers.

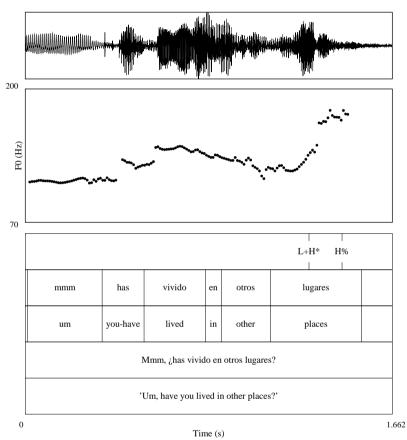


Figure 3. Rising final contour of absolute interrogative statement; male speaker from Madrid.

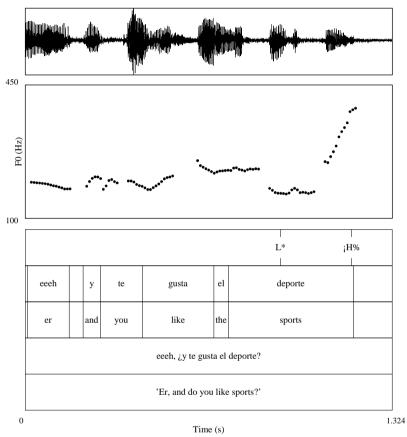


Figure 4. Rising final contour of absolute interrogative statement; female speaker from Madrid.

On the whole, 59 sentences featured a falling final contour (33.7% of the total). Most of the contours were  $H^*L\%$  and  $L^+H^*L\%$ , and less frequent were  $H^+L^*H\%$ ,  $L^+H^*HL\%$ ,  $H^*+LL\%$  and  $L^*L\%$ . Figure 4 shows an example of a falling final contour.

No significant differences with respect to the gender of the speakers were detected.

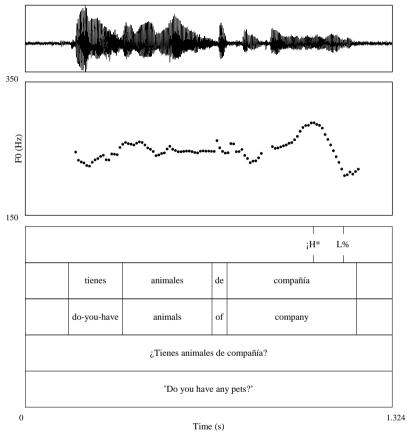


Figure 5. Falling final contour of absolute interrogative statement; female speaker from Madrid.

We provide an attempt to achieve a more simplified landscape of final contours, under the hypothesis that some of the nuclear configurations described are allophonic variants. For example, among the rising contours:

- L+H\* H% and H\* H% could be variants of the category (L+)H\* H%
- L\* H% and H+L\* H% could be variants of (H+)L\* H%
- H\* LH% and L+H\* LH% could be variants of (L+)H\* LH%

Among the falling nuclear contours:

- H\* L% and L+H\* L% could be variants of (L+)H\* L%
   To these, we could add L+H\* HL% (i.e., with a later final fall). Hence, (L+)H\* (H)L%)
- H+L\* L% and L\* L% could be variants of (H+)L\* L%

Table 2 reflects this more simplified scenario.

Rising nuclear contours	Falling nuclear contours
(L)+H* H%	(L+)H* (H)L%
N = 67 (38.3%)	N = 50 (28.5%)
(H+)L* H%	(H+)L* L%
N = 37 (21.1%)	N = 7 (4%)
(L+)H* LH%	H*+L L%
N = 12 (6.8%)	N = 2 (1.1%)
Total: 116 (66.3%)	Total: 59 (33.7%)

Table 2. Simplified classification of rising and falling nuclear tone configurations in information-seeking yes/no questions in Madrid Spanish.

### 5. DISCUSSION

The quantitative results of our data for the Spanish spoken in Madrid show that rising final contours are more common than rising-falling circumflexes in neutral information-seeking absolute interrogatives. These results are in contrast with the data obtained by Torreira and Floyd (2012), another study based on conversational speech. They found a majority of falling final contours in spontaneous speech for these sentences. However, the absolute (i.e., yes/no) interrogatives with falling final configurations were more common when the interrogatives continued the topic of the conversation. They appeared to respond to a previous question, provide news receipt, initiate a repair, check the listener's attention during a telling, or provide a pre-announcement during a telling. That is, they did not seem to qualify as neutral, genuine information-seeking questions. Interestingly, Torreira and Floyd (2012)

claimed that absolute interrogative sentences that initiate a topic of conversation ("topic proffers", they called them) tend to present rising final contours. Indeed, the absolute interrogative statements in our study may fall more into this pragmatic category, since the speakers acted as interviewers by asking successive questions about different aspects of the interviewees' lives, without any need to continue a topic of conversation. This conclusion is consistent with that reached by Henriksen et al. (2016) for conversational speech in the more southern Manchego Spanish. They observed a higher frequency of rising final contours in interrogative utterances in which the content of the question was attributable to the speaker, in other words, a genuine information-seeking question (cf. Escandell, 1998, 1999, 2017).

A possibility to bear in mind is that the different type of speech observed in the two studies is responsible for this disparity. In Torreira and Floyd's (2012) case, the conversations were apparently spontaneous between two or more speakers, while the conversations in our study were semi-directed, albeit in a seemingly natural style of an interview. What is relevant to the main objective of our research is that the methodology used in the research on Basque Spanish was the same as that followed for Madrid Spanish, and therefore we must conclude that the results of both studies are directly comparable.

Two main conclusions can be drawn from the results we have obtained based on data from interview conversations in Madrid Spanish. First, we verified that the rising contours typically described for neutral information-seeking absolute interrogatives in Central (and Southern) Castilian Spanish are predominant in Madrid Spanish. Thus, our study constitutes an important contribution to the knowledge of the prosody of absolute interrogatives in Spanish. On a final note, although our results indicate that final falling configurations are a minority among pragmatically neutral, information-seeking absolute interrogative utterances in Madrid Spanish, investigating the nature of the factors that condition the occurrence of final intonational contours is a matter that deserves further research.

Second, given the fact that the data on Madrid Spanish and those on Basque Spanish are fully comparable, it seems reasonable to conclude that the higher frequency in Basque Spanish of falling circumflex tones in information-seeking absolute interrogative statements is typical of this variety. In other words, we can corroborate the position of Romera and Elordieta (2019) and Elordieta and Romera (2020), who attributed the vast majority of rising-falling circumflex final contours in Basque Spanish to influence from the Basque language, since these contours are typical of this language.

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