INTONATIONAL ANALYSIS OF THE VARIETY OF SPANISH SPOKEN IN CÁCERES

APROXIMACIÓN ENTONATIVA AL ESPAÑOL HABLADO EN CÁCERES

GORKA ELORDIETA
University of the Basque Country (UPV/EHU)
(Spain)
gorka.elordieta@ehu.eus

LUCÍA MASA
University of the Basque Country (UPV/EHU)
(Spain)
lucia.masa@ehu.eus

MAGDALENA ROMERA
Public University of Navarre
(Spain)
magdalena.romera@unavarra.es

ABSTRACT

The intonation of Extremaduran Spanish is one of the most underexplored aspects of this variety of Peninsular Spanish. Intonational studies based on read speech have been carried out (Congosto Martín, 2007a, 2007b, 2016), but an analysis based on spontaneous speech remains to be undertaken, although this is also true of most other dialects and varieties. In accordance with the Sp_ToBI model of intonational analysis (Beckman *et al.*, 2002; Estebas-Vilaplana and Prieto, 2008, 2010; Hualde and Prieto, 2015), this work analysed the main intonational patterns of declarative utterances and absolute and partial interrogative utterances in the conversational speech of four speakers aged between 26 and 27 years from the city of Cáceres. We extracted a total of 120 declarative sentences, 55 absolute interrogatives and 56 partial interrogatives. We observed several differences with respect to Castilian Spanish, such as high boundary tones in declarative sentences and low or falling final contours in absolute interrogatives. Thus, the Spanish of Extremadura has noteworthy characteristics that distinguish it from central Castilian Spanish.

Keywords: intonation, Spanish ToBI, Extremaduran variety, spontaneous speech.

RESUMEN

La entonación del español extremeño es uno de los aspectos menos explorados de esta variedad de español peninsular. Se han realizado estudios de entonación basados en habla leída (Congosto Martín, 2007a, 2007b, 2016), pero queda por realizar un análisis basado en habla espontánea, como para la mayoría de los otros dialectos y variedades del español. De acuerdo con el modelo de análisis entonacional Sp_ToBI (Beckman *et al.*, 2002; Estebas-Vilaplana y Prieto, 2008, 2010; Hualde y Prieto, 2015), este trabajo analizó los principales patrones entonacionales de enunciados declarativos y enunciados interrogativos absolutos y parciales en el discurso conversacional de cuatro hablantes de entre 26 y 27 años de la ciudad de Cáceres. Extrajimos un total de 120 enunciados declarativos, 55 interrogativos absolutos y 56 interrogativos parciales. Observamos varias diferencias con respecto al castellano, como los tonos de frontera altos en oraciones declarativas y los contornos finales bajos o descendentes en oraciones interrogativas absolutas neutras o de búsqueda de información. Así, el español de Cáceres tiene características que lo distinguen del castellano central.

Palabras clave: entonación, ToBI español, variedad extremeña, habla espontánea.

1. INTRODUCTION

The linguistic variety of Extremadura has been characterized and classified in different ways. Zamora Vicente (1960) considered it a transitional variant of Spanish with elements from other languages and dialects (Leonese, Portuguese, Castilian and Andalusian), while Viudas Camarasa (1980) considered it a dialect. González Salgado (2003a: 733) proposed the following definition: "Extremaduran used to be a transitional form of Spanish that evolved into a regional form over time".

This variety has been subject to town- and county-wide phonetic and phonological studies by several authors (Zamora Vicente, 1943 and Fernández de Molina Ortés, 2014; Cummins, 1974; Ariza Viguera and Salvador Plans, 1992; Flores del Manzano, 1992; Kireva and Gabriel, 2015, 2016; Kireva, 2016). Some scholars have considered Extremaduran as a variety with its own characteristics, which differentiate it from other varieties (Viudas Camarasa, 1980; Viudas Camarasa *et al.*, 1987; González Salgado, 2003b; Ariza Viguera, 2008; Montero Curiel, 2008, among others).

With respect to intonation studies of Extremaduran Spanish, Canellada (1941) was the first author to point out that the average pitch of Extremaduran speakers was higher than that of the Castilian variety. Many decades later, Grasso (2007) claimed that there is no difference between the intonation of Extremadura and the intonation of the standard variety in declarative and absolute interrogative sentences. However, Congosto Martín (2016) confirmed the existence of two different final patterns in absolute interrogative sentences. On the one hand, a final rising pattern, similar to that described for Castilian Spanish (Face, 2008; Estebas-Vilaplana and Prieto, 2008, 2010; Hualde and Prieto, 2015, among others) and, on the other hand, a falling or rising-falling final pattern. Furthermore, this author highlighted the presence of final vowel lengthening as a distinctive feature of absolute interrogatives in the province of Badajoz, specifically in Don Benito (Congosto Martín, 2007a).

Despite these studies, no attempt has been made to analyse spontaneous speech in Extremaduran Spanish. There is evidence of differences between read and spontaneous speech (Face, 2003; Rao, 2006), and we decided to analyse the intonation of declarative statements, absolute interrogatives and partial interrogatives in the spontaneous speech of speakers from the city of Cáceres, with a view to establishing comparisons with the abovementioned studies and broadening our dialectological understanding of this variety.

2. METHODOLOGY

2.1. Selection of speakers

Four speakers (two men and two women) from the city of Cáceres were recorded. They were speakers with higher education between the ages of 26 and 27, who had lived in Cáceres throughout their lives, except for one of the men, who had lived in Badajoz for five years while at university.

2.2. Data collection

Each speaker was recorded for an average of one and a half hours with an Olympus DM-550 digital recorder with a built-in omni-directional microphone. The interview was conducted in two ways, following the technique of direct and reverse interviews used in Romera and Elordieta (2013, 2019) and Elordieta and Romera (2020a, 2020b) to elicit conversational data. In the first part, the interviewer (the first author¹) asked questions to the experimental subject (we call it the "direct interview"), and in the second part, the subject asked questions to the interviewer of the first part, that is, the first author (we call it the "reverse interview"). To encourage spontaneity, the questions were not provided with a script, but rather in a list of topics to talk about. The topics were: "personal information", "important life events", "trips", "interests and hobbies", "work/study", "family", "opinions about their hometown" and "Extremadura". As a result of this methodology, it was possible to extract declarative utterances from the direct interview and absolute and partial interrogative utterances from the reverse interview.

The declarative and interrogative utterances were segmented from the recorded signal. They had to be complete sentences, without interruptions from the other participant and without any disruptions or digressions. 232 sentences were obtained: 120 declarative sentences (30 per speaker), 55 absolute interrogatives (an average of 13 per speaker) and 57 partial interrogatives (an average of 14 per speaker).

2.3 Data analysis

For the data analysis, the Autosegmental-Metrical model and the Tones and Break Indices (ToBI) transcription system were followed, specifically the one for the

¹ The first author is also a speaker of the Spanish variety of Cáceres, where she was born and raised and where her family lives. This way, we avoided a possible accommodation effect that could have arisen if she had been a speaker of another variety.

intonational analysis of Romance languages (Frota and Prieto, 2015). We carried out a phonetic analysis of the main intonation contours of the speech of Cáceres, with the program *Praat* (Boersma and Weenink, 2018).

3. RESULTS

3.1. Declarative utterances

The predominant final tone or contour in declarative sentences was L^* L% (Figure 1), which is also typical of Castilian Spanish (Hualde and Prieto, 2015)².

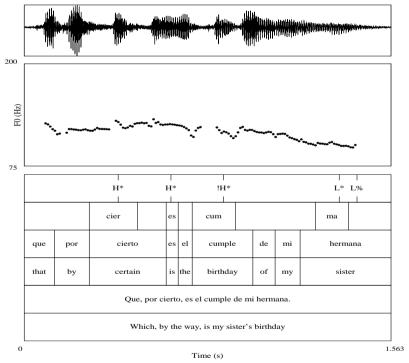


Figure 1. Example of declarative utterance with a final falling contour, pronounced by a man.

² The tiers in the figures in this article indicate the following, from top to bottom: tones, tonic syllables, words, word translation, sentence, and sentence translation.

However, a close phonetic examination allowed us to observe other nuclear configurations, which were classified into four tonal types. We show them in Table 1. "Low" are nuclear contours where the pitch is low on the syllable with nuclear accent and the boundary tone is also low (L*L%). "Rising" are contours in which the nuclear accent is low, falling, high or rising and is followed by a high boundary tone, which can be of different heights (L*H%, L*!H%, H+L*H%, H*H%, L+H*H%). Nuclear contours with the final tonal sequence LHL were labelled "Circumflex". This sequence may be formed by a rising nuclear accent followed by a low boundary tone or a downstepped high boundary tone (L+H*L%, L+H*!H%), or by a low nuclear accent followed by a falling boundary tone (L*HL%). The last group, "Falling", consisted of the falling contour H*L%.

Type of nuclear configuration	Nuclear contours and frequency of occurrence		Overall frequency of occurrence of nuclear configuration
Low	L* L%	54%	54%
Rising	L* H% L+H* H% H* H% H+L* H% L* !H%	4% 13% 3% 1% 2%	23%
Circumflex	L+H* !H% L+H* L% L* HL%	5% 11% 2%	18%
Falling	H* L%	5%	5%

Table 1. Types of nuclear configurations in declarative utterances and their percentages of occurrence.

An example of a final low F0 contour was shown in figure 1. Figure 2 shows an example of rising tone L+H* H%, pronounced by a man.

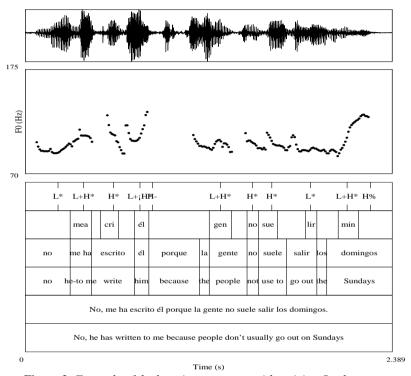


Figure 2. Example of declarative utterance with a rising final contour, pronounced by a man.

To facilitate an interpretation of the data, we could make a distinction between contours that end in a low or falling tone, on the one hand (formed by low, circumflex and falling types), and contours that end in a rising tone, on the other (rising type). Although the former are predominant, with a cumulative frequency percentage of 77% (54% + 18% + 5%), the presence of rising tones in declarative statements is undeniable, at 23%, i.e., about a quarter of the total declarative final contours.

3.2. Absolute interrogative utterances

In this modality, we observed up to 11 different nuclear configurations at the phonetic level. As with declaratives, the contours were classified as "low", "rising",

"circumflex" and "falling" (see table 2). The noteworthy differences with respect to declarative utterances were observed in the rising contour and falling contour groups. In the former group, a $H^*LH\%$ configuration was observed, and in the latter, the tones $H^*!H\%^3$, $H^+L^*L\%$ and $H^*+LL\%$ were found.

Type of nuclear configuration	Nuclear contours and frequency of occurrence		Overall frequency of occurrence of nuclear configuration
Low	L* L%	18%	18%
Rising	L* H% L+H* H% H* LH% L* !H%	4% 9% 2% 2%	17%
Circumflex	L+H* !H% L+H* L%	4% 18%	22%
Falling	H*!H% H*L% H+L*L% H*+LL%	6% 28% 5% 4%	43%

Table 2. Types of nuclear configurations in absolute interrogative utterances and their percentages of occurrence.

As with declaratives, it was possible to draw a distinction between low/falling tones, on the one hand (which includes low, falling and circumflex types), and rising tones on the other. When the former were added together, the percentage of occurrence came to 83% (18% + 22% + 43%), against 17% for the latter. In other words, low and falling tones were clearly dominant in absolute interrogative utterances in conversational speech, and rising tones were in the minority. This is a striking result

* !H% was a contour in which the boundary tone showed a pi

³ H*!H% was a contour in which the boundary tone showed a pitch level not as low as a L% but lower than the nuclear pitch accent.

that we will go on to discuss in section four, since it is at odds with Central Castilian Spanish and southern varieties, which have been described to present rising endings in absolute interrogative sentences. The contour is represented as L* H% (see Estebas-Vilaplana and Prieto, 2010; Hualde and Prieto, 2015, among others; cf. also the recent study by Elordieta and Romera, 2020b, who find that L+H* H% is even more frequent in Madrid Spanish). Figure 3 illustrates the intonation contour of an absolute interrogative utterance with a falling contour (H* L%), pronounced by a woman.

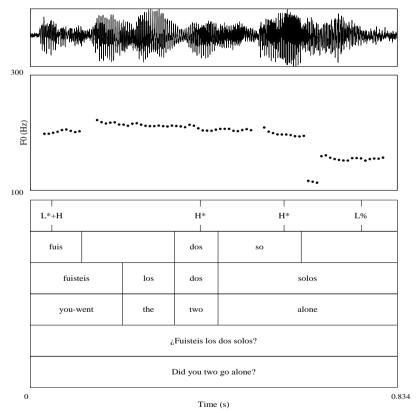


Figure 3. Example of absolute interrogative with a falling final contour, pronounced by a woman.

3.3. Partial interrogative utterances

We observed up to nine nuclear configurations in partial interrogative utterances. As with the previous utterance types, we established a phonetic classification, which is reflected in table 3. Rising final contours were found to be predominant (51%), although the total percentage of low and falling contours (including falling circumflex tones) was 49% (32% + 12% + 5%). In other words, rising endings occur almost as frequently as low or falling endings. Figures 4 and 5 show examples of partial interrogative statements with a falling and a rising ending, respectively.

Type of nuclear configuration	Nuclear contours and frequency of occurrence		Overall frequency of occurrence of nuclear configuration
Low	L* L%	32%	32%
Rising	L* H% H+L* H% L+H* H% H* H%	24% 12% 16% 9%	51%
Circumflex	L+H* L% L+H* HL% L+H* !H%	3% 2% 7%	12%
Falling	H* !H%	5%	5%

Table 3. Types of nuclear configurations in partial interrogative utterances and their percentages of occurrence.

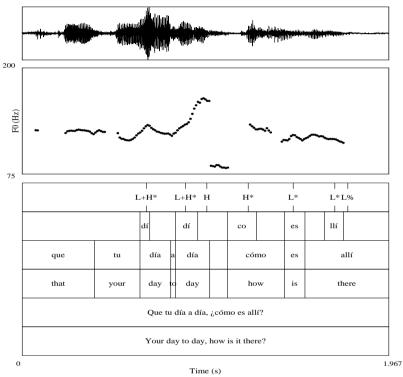


Figure 4. Example of partial interrogative with a low final contour, pronounced by a man.

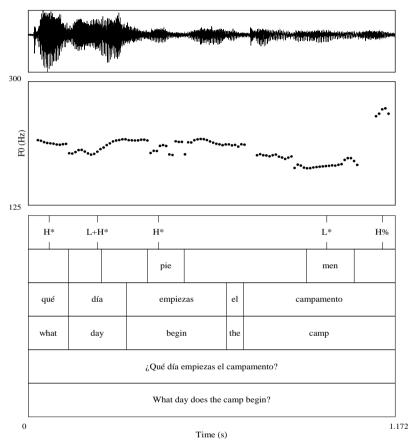


Figure 5. Example of partial interrogative with a rising final contour, pronounced by a woman.

4. DISCUSSION AND CONCLUSIONS

With respect to declarative utterances, 54% corresponded to the contour that has also been documented for Standard Spanish, i.e. L* L%. The nuclear contour L+H* L%, described by Face (2002, 2008), occurred with a frequency of just 8.3%. Low or falling final contours predominated in the conversational speech of Cáceres (77%), but the most notable finding was that rising final contours accounted for up

to 23% of the total. Furthermore, these rising contours occurred in all speakers. The question to be answered is whether this rising boundary tone stems from pragmatic factors or is an inherent feature of the Extremaduran variety of Spanish.

In Castilian Spanish, the main nuclear configuration described in absolute interrogative sentences is L* H%, at least in read speech or through the discourse-completion task technique (Navarro Tomás, 1966, 1999; Quilis, 1993; Sosa, 1999; Face, 2004, 2008; Estebas-Vilaplana and Prieto, 2008, 2010; Henriksen 2010; Hualde and Prieto, 2015). However, this configuration occurred in just 4% of our cases. Congosto Martín (2007a, 2007b, 2016) also documented L+H* H% in the city of Cáceres, a contour that accounted for 9% of those we observed. Altogether, the occurrence of rising tones was very low, with a percentage of 17%.

Low or falling final contours dominated clearly, since they made up a percentage of 83%. Within this type, the most common was H* L%, with a percentage of occurrence of 28%. L+H* L% and L+H*!H% (with a boundary tone that involves a slight fall with respect to the nuclear high tone) amounted to 22%, and L* L% accounted for 18% of the tones. In this regard, it is interesting to note that Congosto Martín (2016) recorded the circumflex contour L+H* L% in the Alburquerque-Cáceres area. In addition, the same author also observed the contour L* L% in the Don Benito area, in the province of Badajoz, where interrogatives are marked by a higher pitch than declaratives and a lengthening of the final vowel.

Falling contours in absolute interrogatives have been associated with pragmatic meanings of obviousness and repetition in Castilian Spanish (cf. Estebas-Vilaplana and Prieto, 2010; Hualde and Prieto, 2015). Escandell-Vidal (1998, 1999, 2017) reported that circumflex final contours (L+H* L%) are found in Spanish with the pragmatic nuance of "meaning attributed to another", i.e. someone other than the speaker. That is, they are not genuine information-seeking questions but are biased or oriented towards confirming, repeating or reformulating information that the speaker has inferred from their conversation partner(s), based on explicit or implicit verbal or non-verbal statements.

Following this approach, and turning to spontaneous speech, Henriksen *et al.* (2016) found that in the Spanish variety spoken in Castile-La Mancha 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. Final rising contours were found in utterances in which the content of the question is attributable to the speaker (in other words, a genuine information-seeking question).

In our study, we selected pragmatically neutral statements that genuinely sought to elicit information, that is, they were information-seeking interrogatives. Torreira and Floyd (2012) found that up to 79% of the final contours of absolute interrogatives in spontaneous conversation in the Spanish spoken in Madrid were rising-falling circumflexes, in the form L+H* L%. These authors carried out a preliminary analysis of a subgroup of absolute interrogative questions with a circumflex ending and concluded that this contour occurs more frequently in absolute interrogative sentences in which the initial topic of conversation is continued and in which the speaker is "maintaining the course of action". They appear with discourse functions such as 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.

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, like those traditionally described. 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.

Finally, a recent study by Elordieta and Romera (2020b) on conversational speech in Madrid Spanish concluded that rising final configurations were indeed more frequent than final falling contours in information-seeking absolute interrogatives in a two-thirds vs. one-third comparison (66.3% vs. 33.7%, respectively). Since we followed the same methodological technique in the present study and obtained the same kind of information-seeking yes/no questions, the prevalence of final intonational falls in Cáceres Spanish contrasts directly with the prevalence of final rises in Castilian Spanish (represented by Madrid Spanish).

At this point, we can only offer an exploratory explanation for the dominance of final falling configurations in information-seeking absolute interrogatives in Cáceres Spanish, and this will be that these contours are a trait of Asturian-Leonese or Galician. The part of the Iberian Peninsula that corresponds to Cáceres was occupied between the XIth and XIIIth centuries by settlers from northwestern regions, who were speakers of Galician and Asturian-Leonese. This was part of the process known as "The Reconquest", which was the northern Christians' conquering of territories that had been conquered earlier by the Arabs. The path from north to south was already facilitated by a paved route from Roman times called the Silver

Way (*Vía* or *Ruta de la* Plata, in Spanish), which joined the cities of Mérida, to the south of the current province of Cáceres, and Astorga, in Leon, which was later used in medieval and modern times as a means of communication between northwestern and southwestern Spain. Several dialectological studies have shown the presence of linguistic features from Asturian-Leonese (especially in the lexicon) in the northern part of Extremadura, in the province of Cáceres (Zamora Vicente, 1960; Viudas Camarasa, 1980; Viudas Camarasa *et al.*, 1987; Montero Curiel, 1997; Quijada González, 2006, among others).

We want to point out that modern Asturian is described as having final falling contours in absolute interrogatives, with an absence of rising contours (Alvarellos *et al.*, 2011). Falling contours in absolute interrogatives are also a feature of Asturian Spanish and the hybrid linguistic variety called *Amestáu*, and is represented in the ToBI framework as H+L* L%, but also H*+L or even L+H* L%. Some references are Muñiz Cachón (2002-2003, 2013, 2019), López Bobo *et al.* (2005, 2008a, 2008b, 2012), Muñiz Cachón *et al.* (2006-2007-2008), Díaz Gómez *et al.* (2007), Muñiz Cachón and Alvarellos Pedrero (2008), Cuevas-Alonso and López-Bobo (2010), Alvarellos Pedrero *et al.* (2011) and Troncoso-Ruiz and Elordieta (2017). Thus, it could be suggested that the predominance of final falling intonational contours in absolute interrogatives in Cáceres Spanish may be a remaining feature of Asturian-Leonese.

Galician also has final falling configurations in absolute interrogatives, transcribed as H+L* L% (cf. Fernández Rei *et al.*, 2005; Fernández Rei, 2007, 2016, 2019; Escourido *et al.*, 2009; Pérez Castillejo, 2012, 2014; Hernández, 2020; Hernández *et al.*, 2020). However, Moutinho *et al.* (2009) report a L+H* L% nuclear contour for the border area of southern Galician and northern Portuguese. L+H* L% is also found in the Portuguese variety of Castelo Branco, neighboring the province of Cáceres (Crespo-Sendra *et al.*, 2015). Thus, a hypothesis could be that speakers of Galician coming down to the northern part of Extremadura could have left a trait (together with the possible influence of the bordering dialect of Portuguese). In fact, in the language of Galician-Portuguese origin known as Fala, spoken in the northwestern corner of the province of Cáceres, information-seeking yes/no questions end in a falling or rising-falling configuration, (L)+H* L% (Masa and Elordieta, 2017; Elordieta and Masa, 2020).

Thus, even though the influence of the intonation of Asturian-Leonese and Galician on the variety of Spanish spoken in Cáceres may only be a hypothesis, we believe that it deserves being taken into consideration.⁴

In the partial interrogative sentences of mainland Spanish, the characteristic tone is L*L%, although L*H% is also common. Navarro Tomás (1999), Estebas-Vilaplana and Prieto (2010) and Hualde and Prieto (2015) attributed a nuance relating to courtesy or a greater level of interest in the answer to the boundary tone H% in partial interrogatives (cf. also Henriksen 2009). Both contours made up the majority of the cases compiled for this study on Cáceres Spanish, in line with findings relating to Central Castilian Spanish. However, the high frequency of partial interrogatives ending in a final rising configuration (51%) is noteworthy, if we compare it to the low frequency of final rises in absolute interrogatives in this Extremaduran variety (17%). If the rising contour in partial interrogatives (L* H%) is associated to politeness or courtesy in Castilian Spanish, as argued by the authors above, we could explain the high frequency of final rises in partial questions in Cáceres Spanish precisely to a desire on the part of the questioner to be polite and courteous or to show interest. After all, this pragmatic feature of courtesy can be learned in Castilian Spanish, which all our speakers are exposed to. The unmarked pattern in partial interrogatives in Castilian Spanish is a falling configuration, so any deviation from this pattern can be learned to have a pragmatic nuance. However, if the norm for absolute interrogatives in Castilian Spanish is to end in a rise, there is no association of a final rise with a pragmatic meaning of courtesy, politeness or desire to show interest. Thus, our Cáceres Spanish speakers have no reason to end in a rise in absolute interrogatives in order to sound more polite and display the usual final falling configurations of Cáceres. This might be a potential explanation for the difference in the degree of final rises between the two types of interrogatives.

To finish with partial interrogatives, it is important to note the presence of circumflex tones, which accounted for 17.5% of our cases. Escandell-Vidal (2011) argued that the circumflex contour expresses a nuance relating to repetition. This is not consistent with our data, since the partial interrogative statements from our recorded conversations did not constitute repetitions or expressions of insistence.

In summary, and as reflected in table 4, the predominant contour in the declarative sentences compiled for this study was in line with findings for Castilian Spanish, i.e. L* L%. However, 22% of our data revealed rising tones that could be indicative of

⁴ We refer the reader to Elordieta and Romera (2020a) for a summary of final falling information-seeking absolute interrogatives in northern Spanish, especially Basque Spanish.

a hallmark of the Spanish of Cáceres. On the other hand, in absolute interrogative sentences, the modality with the widest dialectal variations in Spanish, we found that the majority of the cases analysed were tones characterized by a tonal fall, whether or not they were preceded by a rise. This result is differs vastly from the findings for Castilian Spanish, which is characterized by a tonal rise in this sentence modality, so this may represent another intonational characteristic of Cáceres Spanish. Finally, in the partial interrogative sentences, we found the same contours as those documented for Standard Spanish, i.e. L* L% and L* H%.

	Declaratives	Absolute interrogatives	Partial interrogatives
Most frequent final contours	L* L% (54%)	H* L% (28%) L+H* L% (18%) L* L% (18%)	L* L% (32%) L* H% (24%)

Table 4. Summary of the most frequent nuclear contours for each type of sentence.

Finally, we consider it necessary to emphasize that in this work we have proceeded to carry out a phonetic analysis of the intonation curves, following the recommended guidelines for the analysis of the intonation of Romance languages (Frota and Prieto, 2015). This is not a phonological study of the intonation of Cáceres Spanish, which would consist of investigating which final tonal configurations are phonetic variants of the same category. For the moment, we present this first step, that of phonetic analysis, and we leave for future work the important task of addressing possible relevant phonological generalizations based on what was found in this previous phonetic analysis (see Hualde and Prieto, 2016 for a similar approach).

ACKNOWLEDGEMENTS: This work would not have been possible without the invaluable collaboration of our speakers. We are also indebted to two anonymous reviewers for providing constructive and helpful feedback, as well as to Yolanda Congosto for discussion on the historical influence of Asturian-Leonese and Galician.. The research presented is framed within the goals and activities of the Research Group in Theoretical Linguistics (HiTT) at the University of the Basque Country and I-Communitas (Institute for Advanced Social Research) at the Public University of Navarre. The work was partly funded by the Ministry of Science and Innovation (FFI2016-80021-P), the Basque Government (IT1396-19) and the University of the Basque Country (Euskal Herriko Unibertsitatea) (GIU18/221).

5. REFERENCES

- ALVARELLOS, M.; C. MUÑIZ, L. DÍAZ, and R. GONZÁLEZ (2011): «La entonación en las variedades lingüísticas de Asturias: estudio contrastivo», *Revista Internacional de Lingüística Iberoamericana*, 9, pp. 111-120.
- ARIZA VIGUERA, M. (2008): *Estudios sobre el extremeño*, Cáceres, Servicio de Publicaciones de la Universidad de Extremadura.
- ARIZA VIGUERA, M. and A. SALVADOR PLANS (1992): «Sobre la conservación de las sonoras en la provincia de Cáceres», *Zeitschrift für Romanische Philologie*, 108, pp. 276-292.
- BECKMAN, M.; M. DÍAZ-CAMPOS, J. T. McGORY and T. A. MORGAN (2002): «Intonation across Spanish, in the Tones and Break Indices framework», *Probus*, 14, pp. 9-36.
- BOERSMA, P. and D. WEENINK (2018): *Praat v.6.0.39*, www.praat.org [30/07/2020]
- CANELLADA, M. J. (1941): «Análisis de la entonación extremeña», *Revista de Filología Española*, XXV, pp. 79-91.
- CONGOSTO MARTÍN, Y. (2007a): «Primeras aportaciones a la descripción prosódica del extremeño: Interrogativas absolutas sin expansión en el habla de Don Benito (Badajoz)», in M. González González, E. Fernández Rei and B. González Rei (eds.): *III Congreso Internacional de Fonética Experimental*, Santiago de Compostela, Xunta de Galicia, pp. 255-211.
- CONGOSTO MARTÍN, Y. (2007b): «Interrogativas absolutas/declarativas en las hablas extremeñas. Estudio entonativo contrastivo», in J. Dorta (ed.): *La prosodia en el ámbito lingüístico románico*, Santa Cruz de Tenerife, La página ediciones, pp. 271-297.
- CONGOSTO MARTÍN, Y. (2016): «Modelos entonativos de las interrogativas absolutas en el habla de Extremadura», *Loquens*, 3(2).
- CRESPO-SENDRA, V.; M. CRUZ, J. CASTELO and S. FROTA (2015): «Asking questions across European and Brazilian Portuguese varieties: information-seeking and counterexpectational yes-no questions», *ProVar Workshop on Prosodic Variation*, Lisbon.

- CUEVAS-ALONSO, M. and M. J. LÓPEZ-BOBO (2010): «Alineamiento, acento y tiempo en asturiano central», *Lingüística Española Actual*, 32, pp. 35-64.
- CUMMINS, J. (1974): El habla de Coria y sus cercanías, Londres, Tamesis Books Limited.
- DÍAZ GÓMEZ. L.; C. MUÑIZ CACHÓN, M. J. LÓPEZ BOBO, R. GONZÁLEZ RODRÍGUEZ and M. CUEVAS ALONSO (2007): «La entonación en dos zonas rurales del centro de Asturias», *Archivum*, LVI, pp. 263-289.
- ELORDIETA, G. and M. ROMERA (2020a): «The influence of social factors on the prosody of Spanish in contact with Basque», *International Journal of Bilingualism* [https://doi.org/10.1177/1367006920952867] (online first, September 14th, 2020).
- ELORDIETA, G. and M. ROMERA (2020b): «The intonation of information-seeking absolute interrogatives in Madrid Spanish», *Estudios de Fonética Experimental*, XXIX, pp. 195-213.
- ESCANDELL-VIDAL, V. (1998): «Intonation and procedural encoding: The case of Spanish interrogatives», in V. Rouchota and A. Jucker (eds.): *Current issues in Relevance Theory*, Amsterdam, John Benjamins Publishing Company, pp. 169-203.
- ESCANDELL-VIDAL, V. (1999): «Los enunciados interrogativos. Aspectos semánticos y pragmáticos», in I. Bosque and V. Demonte (eds.): *Gramática descriptiva de la lengua castellana*, Vol. 3, Madrid, Espasa-Calpe, pp. 3929-3991.
- ESCANDELL-VIDAL, V. (2011): «Verum focus y prosodia: cuando la duración (sí que) importa», *Oralia*, 14, pp. 181-202.
- ESCANDELL-VIDAL, V. (2017): «Intonation and evidentiality in Spanish polar interrogatives», *Language and Speech*, 60, pp. 224-241.
- ESCOURIDO PERNAS, A.; E. FERNANDEZ REI, M. GONZÁLEZ GONZÁLEZ and X. L. REGUEIRA FERNÁNDEZ (2008): «A dimensión prosódica da oralidade: achega dende AMPER», in E. Fernández Rei and X. L. Regueira Fernández (eds.), *Perspectivas sobre a oralidade*, Santiago de Compostela, Consello da Cultura Galega / Instituto da Língua Galega, pp. 75-93.

- ESTEBAS-VILAPLANA, E. and P. PRIETO (2008): «La notación prosódica del español: Una revisión del Sp_ToBI», *Estudios de Fonética Experimental*, XVII, pp. 263-283.
- ESTEBAS-VILAPLANA, E. and P. PRIETO (2010): «Castilian Spanish Intonation», in P. Prieto and P. Roseano (eds.): *Transcription of intonation of the Spanish language*, Munich, Lincom Europa, pp. 17-48.
- FACE, T. (2002): «Intonational marking of contrastive focus in Madrid Spanish», Munich, Lincom Europa.
- FACE, T. (2003): «Intonation in Spanish declaratives: differences between lab speech and spontaneous speech», *Catalan Journal of Linguistics*, 2, pp. 115-131.
- FACE, T. (2004): «Intonation of absolute interrogatives in Castilian Spanish», *Southwest Journal of Linguistics*, 23, pp. 65-79.
- FACE, T. (2008): The Intonation of Castilian Spanish declaratives and absolute interrogatives, Munich, Lincom Europa.
- FERNÁNDEZ DE MOLINA ORTÉS, E. (2014): *El habla de Mérida*, doctoral dissertation, Universidad de Extremadura.
- FERNÁNDEZ REI, E. (2007): «On the transcription of Galician intonation», paper presented at *Phonetics and Phonology in Iberia* 2007, University of Minho.
- FERNÁNDEZ REI, E. (2016): «Dialectal, historical and sociolinguistic aspects of Galician intonation», *Dialectologia*, 6, pp. 147-169.
- FERNÁNDEZ REI, E. (2019): «Galician and Spanish in Galicia: Prosodies in contact», *Spanish in Context*, 16, pp. 438-461.
- FLORES DEL MANZANO, F. (1992): «Modalidades de habla extremeña en la Sierra de Gredos», in M. Ariza, R. Cano, J. M. Mendoza and A. Narbona (eds.): *Actas del II Congreso Internacional de Historia de la Lengua Española II*, Madrid, Pabellón de España, pp. 121-134.
- FROTA, S. and P. PRIETO (eds.) (2015): *Intonation in Romance*, Oxford, Oxford University Press.

- GONZÁLEZ SALGADO, J. A. (2003a): «La conciencia lingüística de los hablantes extremeños», in B. Aracil Varón, C. Alemany Bay, R. Mataix Azuar, P. Mendiola Oñate, E. Valero Juan and A. Villaverde Pérez (eds.): Con Alonso Zamora Vicente (Actas del Congreso Internacional "La lengua, la Academia, lo popular, los clásicos, los contemporáneos...") II, Alicante, Universidad de Alicante, pp. 725-736.
- GONZÁLEZ SALGADO, J. A. (2003b): «La fonética de las hablas extremeñas», *Revista de Estudios Extremeños, LIX* (2), pp. 589-619.
- GRASSO, A. (2007): Analisi segmentale e soprasegmentale delle parlate dell'Estremadura (Spagna), Master's thesis, University of Torino.
- HENRIKSEN, N. (2009): «Wh-intonation in Peninsular Spanish: multiple contours and the effect of task type», *Journal of Portuguese Linguistics*, 8, pp. 47-74.
- HENRIKSEN, N. (2010): Question intonation in Manchego Peninsular Spanish, doctoral dissertation, Indiana University.
- HENRIKSEN, N.; M. E. ARMSTRONG and L. GARCÍA-AMAYA (2016): «The intonational meaning of polar questions in Manchego Spanish spontaneous speech», in M. E. Armstrong, N. Henriksen and M. del M. Vanrell (eds.): *Intonational grammar in Ibero-Romance*, Amsterdam and Philadelphia, John Benjamins Publishing Company, pp. 181-205.
- HERNÁNDEZ, E. (2020): The effects of bilingualism on intonation in Galician and Spanish, Master's thesis, Florida State University.
- HERNÁNDEZ, E.; C. GONZÁLEZ and A. MUNTENDAM (2020): «Language contact and the intonation of yes/no-questions in Galician and Spanish: The effects of age, gender and language dominance», paper presented at *Intonation, Language Contact and Social Factors (ILCSF20)*, University of the Basque Country, October 23-24, 2020.
- HUALDE, J. I. and P. PRIETO (2015): «Intonational variation in Spanish: European and American varieties», in S. Frota and P. Prieto (eds.): *Intonation in Romance*, Oxford, Oxford University Press, pp. 350-391.
- HUALDE, J. I. and P. PRIETO (2016): «Towards an International Prosodic Alphabet (IPrA)», *Laboratory Phonology*, 7(1), pp. 1-25.

- KIREVA, E. (2016): «El español hablado en Olivenza ¿Una variedad en vías de asimilación al estándar?», Estudios de Lingüística del Español, 37, pp. 236-262.
- KIREVA, E. and CH. GABRIEL (2015): «Speech rhythm and sentence type: Analyzing the durational properties of Olivenza Portuguese, Olivenza Spanish, and Castilian Spanish», *Proceedings of the 18th International Congress of Phonetic Sciences*, Glasgow, UK University of Glasgow.
- KIREVA, E. and CH. GABRIEL (2016): «Intonational convergence in information-seeking yes-no questions: the case of Olivenza Portuguese and Olivenza Spanish», in *Proceedings of Speech Prosody*, Boston, pp. 390-394.
- LÓPEZ-BOBO, M. J. and M. CUEVAS-ALONSO (2010): «Cantabrian Spanish intonation», in P. Prieto and P. Roseano (eds.): *Transcription of intonation of the Spanish language*, Munich, Lincom Europa, pp. 49-85.
- LÓPEZ-BOBO, M. J.; M. CUEVAS-ALONSO, A. ARIAS-CACHERO CABAL and C. BLEORȚU (2012): «El patrón entonativo norteño. Evidencia del español hablado en Galicia, Asturias y Cantabria», *Language and Literature*. *European Landmarks of Identity*, 11(2), pp. 358–364.
- LÓPEZ BOBO, M. J.; M. CUEVAS ALONSO, M. DÍAZ GÓMEZ and M. VIEJO LUCIO-VILLEGAS (2008a): «Prosodia del occidente de Asturias: Secuencias con estructura Sujeto-Verbo-Objeto», *Archivum, LVII*, pp. 1-32.
- LÓPEZ BOBO, M. J.; M. CUEVAS ALONSO, L. DÍAZ GÓMEZ and M. VIEJO LUCIO-VILLEGAS (2008b): «Análisis contrastivo de la prosodia del asturiano central y occidental», *Language design: Journal of theoretical and experimental linguistics. Special issue 2: Experimental prosody*, pp. 267–282.
- LÓPEZ BOBO, M. J.; R. GONZÁLEZ RODRÍGUEZ, M. CUEVAS ALONSO, L. DÍAZ GÓMEZ, and C. MUÑIZ CACHÓN (2005): «Rasgos prosódicos del centro de Asturias: Comparación Oviedo-Mieres», *Estudios de fonética experimental*, 14, pp. 169–199.
- MASA, L. and G. ELORDIETA (2017): «Aproximación a la entonación de a fala», *Estudos de Lingüística Galega*, 9, pp. 87-110.
- MONTERO CURIEL, P. (1997): El habla de Madroñera, Cáceres, Universidad de Extremadura.

- MONTERO CURIEL, P. (2008): El extremeño, Madrid, Arco Libros.
- Muñiz Cachón, C. (2002–2003): «Rasgos fónicos del español hablado en Asturias». *Archivum: Revista de la Facultad de Filología*, 52–53, pp. 323–349.
- MUÑIZ CACHÓN, C. (2013): «La entonación asturiana n'el marcu de les llingües romániques: los atles prosódicos», *Lletres Asturianes*, 109, pp. 11-29.
- Muñiz Cachón, C. (2019): «Prosody: A feature of languages or a feature of speakers? Asturian and Castilian in the center of Asturias», *Spanish in Context*, 16, pp. 462-474.
- MUÑIZ CACHÓN, C. and M. ALVARELLOS PEDRERO (2008): «Una nota peculiar en la prosodia asturiana: la entonación oriental», in A. Turculet (ed.): *La variation diatopique de l'intonation dans le domain roumain et roman*, Iaşi, Editura Universitatii "Alexandru Ioan Cuza", pp. 103-122.
- Muñiz Cachón, C.; R. González Rodríguez, L. Díaz Gómez and M. Alvarellos Pedrero (2006-2007-2008): «Prosodia gallego-asturiana en enunciaos SVO», *Revista de Filoloxía asturiana*, 6, 7, 8, pp. 335-349.
- NAVARRO TOMÁS, T. (1966)³: *Manual de entonación española*, México, D.F., Colección Málaga.
- NAVARRO TOMÁS, T. (1999)²⁷: *Manual de pronunciación española*, Madrid, Consejo Superior de Investigaciones Científicas.
- PÉREZ CASTILLEJO, S. (2012): «Estudio sociofonético de los tonemas de las interrogativas absolutas en el castellano de Galicia», *Estudios de Lingüística*, 26, pp. 235-268.
- PÉREZ CASTILLEJO, S. (2014): La entonación del español de Galicia desde una perspectiva sociofonética, doctoral dissertation, University of Minnesota.
- QUIJADA GONZÁLEZ, D. (2006): «Los apellidos de Montehermoso y su trasfondo histórico y demográfico», *XXXV Coloquios Históricos de Extremadura*, Trujillo, C.I.T. Trujillo, pp. 523-538.
- QUILIS, A. (1993): Tratado de fonología y fonética españolas. Madrid, Gredos.

- RAO, R. (2006): «On the intonation's relationship with pragmatic meaning in Spanish», in T. L. Face and C. A. Klee (eds.): *Selected Proceedings of the 8th Hispanics Linguistics Symposium*, Somerville, Cascadilla Proceedings Project, pp. 103-115.
- ROMERA, M. and G. ELORDIETA (2013): «Prosodic accommodation in language contact: Spanish intonation in Majorca», *International Journal of the Sociology of Language*, 221, pp. 127-151.
- ROMERA, M. and G. ELORDIETA (2019): «Las interrogativas absolutas circunflejas en el español del País Vasco y su correlación con actitudes lingüísticas», Congreso Internacional I ALFALito "Dinámicas lingüísticas de las situaciones de contacto", Universidad Autónoma de Madrid.
- SOSA, J. M. (1999): La entonación del español, Madrid, Cátedra.
- TORREIRA, F. and S. FLOYD (2012): «Intonational meaning: the case of Spanish yesno questions», *5th European Conference on Tone and Intonation*, Oxford.
- TRONCOSO-RUIZ, A. and G. ELORDIETA (2017): «Prosodic accommodation and salience: the nuclear contours of Andalusian Spanish speakers in Asturias», *Loquens*, 4.
- VIUDAS CAMARASA, A. (1980): *Diccionario Extremeño*, Cáceres, Servicio de Publicaciones de la Universidad de Extremadura.
- VIUDAS CAMARASA, A.; M. ARIZA VIGUERA and A. SALVADOR PLANS (1987): *El habla en Extremadura*, Mérida, Editora Regional.
- ZAMORA VICENTE, A. (1943): *El habla de Mérida y sus cercanías*, Madrid, Anejo XXIV de la Revista de Filología Española.
- ZAMORA VICENTE, A. (1960): Dialectología Hispánica, Madrid, Gredos.