Dedialectalisation of intonational patterns of yes-no questions in León, Zamora, Salamanca, and Palencia

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ARTICLE INFO	ABSTRACT
	This work studies intonational patterns of yes-no questions of five speakers from the provincial capitals of León, Zamora, Salamanca, Palencia and Valladolid using the Sp_ToBI annotation system. For the provinces studied, a co-occurrence of descending (L%) and rising (H%) question patterns is found. These patterns correspond to a traditional pattern and to the pattern of standard Spanish respectively, so the coexistence of both will lead us to propose a process of standardisation or dedialectalisation that is affecting the intonational patterns of the varieties of these peripheral territories in the northwest of Castile.

1. Introduction

The establishment of nation-states brings with it the sacralisation of interstate border limits, which are essential in delimiting the territory where the centralist public powers should apply their uniformisation policies (Valls, 2013, p. 68). Centralist policies attack not only the diversity of languages concentrated in a state, but also the diversity of dialects of the same language which spans the national geographic space: processes of linguistic substitution are accelerated, and dedialectalisation processes are generalised.

Varieties which are in the process of dedialectalisation undergo a progressive loss of idiosyncratic characteristics through assimilation to the prestigious variety (Valls, 2013, p. 69). In this process, the entire language is affected and there is a progressive loss of phonetic elements, including the adaptation of the intonational patterns of the standard or prestigious variety. This process can be documented at all language levels. This study focuses on the interrogative patterns of yes-no questions, in other words, questions to which the answer can be *yes* or *no*. The study of intonation in dedialectalisation processes is of interest as, on the one hand, intonation is a permeable element resistant to change, and on the other hand, it has not generally been taken into account in previous studies on the topic of dedialectalisation.

1.1. Intonation of yes-no questions

Spanish yes-no questions have, for the most part, been described as rising (Face, 2008, p. 192). Regarding geographic variety, this pattern has been defined for neutral questions in the peninsular south (Font-Rotchés & Mateo Ruiz, 2013) and for Castilian Spanish as a rising pattern, annotated according to Sp_ToBI[1] as L* HH% (Estebas-Vilaplana & Prieto, 2010, p. 27), as can be seen in Figure 1. In Cantabrian Spanish, however, the coexistence of the standard rising pattern which is characteristic of the Castilian variety, L* HH%, and the traditional falling pattern, H* HL%, has been

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[1] The intonational tagging system Sp_ToBI is explained in more detail in Section 2.

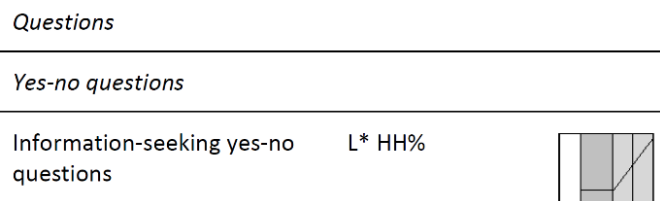documented (López Bobo & Cuevas-Alonso, 2010, p. 61), as shown in Figure 2.

Figure 1. Intonational patterns of yes-no questions in Castile Spanish, according to Estebas-Vilaplana and Prieto (2010, p. 45).
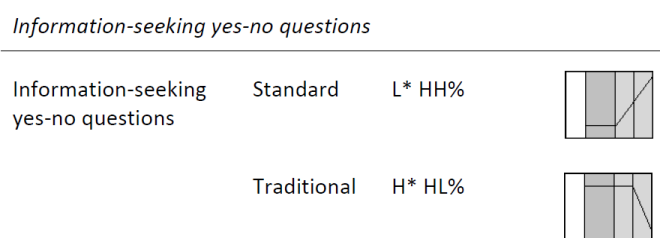

Figure 2. Intonational patterns of yes-no questions in Cantabrian Spanish, according to López Bobo and Cuevas-Alonso (2010, p. 81).

For Asturian, four different intonational patterns have been described for yes-no questions, each corresponding to a geoprosodic block: the western strip is characterised by a *hat pattern;* in the central strip a falling contour with two smooth intonational peaks; in the south-central strip the peaks are even more marked; and in the eastern strip the intonational contour finishes in a rise-fall movement (Roseano, 2020, p. 29). To summarise, all four intonational patterns described for yes-no questions in Asturian are falling.

The primary pattern found in Galicia for yes-no questions is H+L* L%, with the exception of Rías Baixas, where the principal pattern is L+H* L%; these patterns apply to both Galician and Galician Spanish (Fernández Rei, 2016; Pérez Castillejo, 2012).

For Spanish spoken in Madrid, Central Castilian, a rising pattern has been described, accounting for the majority of cases, between 75% and 66%. However, a falling pattern also appears in some situations (Elordieta & Romera, 2020, p. 210; Devís Herraiz, 2011).

1.2. Sociolinguistic situation and intonational patterns of Castile and León

This article will deal with yes-no questions in the provincial capitals of Valladolid, León, Zamora, Salamanca, and Palencia, situated in the autonomous region of Castile and León (see Figure 3).

Figure 3. Geographic location of the provinces of León, Zamora, Salamanca, Palencia and Valladolid in Castile and León; author's own.

At a demographic level, Castile and León is characterised by a constant loss of inhabitants and aging rates far higher than the Spanish average, as well as a reduced capacity to attract immigrant populations (Fernández Maíllo, 2019, p. 6).

Valladolid is the *de facto* capital of the autonomous community of Castile and León. In recent centuries, the city of Valladolid has been of great historical relevance for the Kingdom of Castile as an alternate capital city, headquarters of the Real Audiencia and occasional headquarters of the royal court and other itinerant institutions.

Since the creation of the autonomous community, Valladolid has accrued almost all of the transferred power, and is the only of the nine provinces which make up Castile and León which shows growth in demographic and economic terms (Llamazares, 2018); criticism of the capital's centralism by the remaining provinces has been considerable and constant (López de Uribe, 2021; Villalba, 2021; Fuentetaja, 2019).

Centralism in the province of Valladolid may also influence the process of dedialectalisation, given that it is the only province, of those analysed in this

study, which exhibits rising patterns for yes-no questions. The diffusion of linguistic innovations may occur as much by contagion[2] between adjacent territories (Britain, 2002) as through hierarchical spread from urban to rural areas, and from standard and prestigious varieties to those which are further from standard forms (Valls, 2013, p. 336).

León, Zamora, and Salamanca make up the Leonese region within the autonomous community (Otero Varela et al., 2020). This region, along with Asturias and Extremadura, maintains certain traces of Old Asturleonese (Menéndez Pidal, 1950).

This can also be noted in the falling intonational pattern of *Fala*, in both read speech (L* L%) and in conversational speech (L+H* L%) (Elordieta & Masa, 2020), with the addition of the H* L% pattern for younger speakers from Cáceres City (Elordieta et al., 2020, p. 232).

	Castilian (Valladolid)	Madrid	Cantabria	Galicia (general)	Galicia (Rías Baixas)	Extremadura (Cáceres)	León, Palencia, Asturias
Predominant	L* H%	L* H%	H* HL%	H+L* L%	L+H* L%	H* L%	¡H* L%
Alternative		H* LH%	L* H%			L+H* L%, L* L%	L* H%

Table 1. Summary of the nuclear configurations of yes-no questions by geoprosodic area.

For Salamanca, yes-no questions have been described as falling (Zamora Salamanca, 2018). In Palencia, a traditional falling intonation is found: ¡H* L%, similar to that of Oviedo, Lanzarote, and La Laguna (Fernández Planas et al., 2017), as well as the province of León (Elvira-García, 2020; Fernández Planas et al., 2020). Table 1 summarises the tonal patterns described for each of the Spanish geoprosodic areas.

2. Methods

For the present study, a set of 50 yes-no questions spoken by speakers born in León, Zamora, Salamanca, Palencia, and Valladolid were analysed. The questions were extracted from the AMPER corpus (Martínez Celdrán et al., 2003–2018). All participants were women, with the exception of the participant from the province of Salamanca. Participant age ranged from 20 to 36 years, and all had completed higher education. Of the 50 utterances analysed, 22 correspond to the participant from León, 4 to the participant from Zamora, 7 to the participant from Salamanca, 11 to the participant from Palencia, and 6 to the participant from Valladolid.

Two different methods were used for the collection of data: elicitation through a *Discourse Completion Task* is a method consisting of a questionnaire which can be administrated both in written form and orally, in which a specific scenario is presented with the intention of eliciting a specific speech act (Vanrell et al., 2018). The *Map Task* is a tool which gives access to a more spontaneous speech style than the *Discourse Completion Task* (Anderson et al., 1991). It consists of a collaboration task between two speakers who are given two similar maps and must ask each other questions to arrive at a point marked by the investigator (Prieto & Cabré, 2007–2012). In the corpus used for this study, one of the two speakers was the interviewer and the other the participant.

The individual utterances were cut using the program *GoldWave* and annotated using an automatic intonation tagger in *Praat* (Elvira-García et al., 2016; Boersma & Weenink, 1992–2021), which calculates the difference, in hertz, between points. The annotation follows the prosodic annotation system Sp_ToBI (Hualde & Prieto, 2015; Estebas-Vilaplana & Prieto, 2008), the basis of which is an autosegmental-metrical approach to the analysis of intonation. This approach describes intonational

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[2] Contagion in this article refers to the term as described by Taeldeman (2005), according to whom, in a contagious diffusion pattern model new characteristics are propagated through social networks as an expansive wave.

patterns using two tones: H and L, associated with metrically strong syllables and with the boundaries of the F0 contour; additionally, the asterisk (*) marks the stressed syllable and the percentage symbol (%) marks the boundary tones (Estebas-Vilaplana & Prieto, 2010). Having manually revised and corrected the automatically generated tags, this information was exported to an Excel spreadsheet using a *Praat* script, and the data was processed, and graphs generated using *R* in *R Studio*.

3. Results

Following analysis and tagging of the questions produced by the speakers from León, Zamora, Salamanca, Palencia, and Valladolid, four distinct nuclear configurations have been identified: high stressed syllable with a *plateau* and a final fall (¡H* L%), rising stressed syllable and final fall (L+H* L%), low stressed syllable and final rise (L* H%), and rising stressed syllable with a low rising final tone (L+H* LH%). The first two correspond to traditional falling patterns, the third to the standard Castilian Spanish pattern, while the final is a hybrid pattern. Each nuclear configuration will be analysed in detail.

The ¡H* L% pattern appears in all provinces, with the exception of Valladolid, and is prevalent in León and Salamanca. This can be observed in Figure 4, which shows the nuclear configuration for the yes-no question *¿Vas ya para yoga?* (Are you going to yoga already?), realised as [ˌbasjapaˈjoɣa], produced in the *Discourse Completion Task*. It shows a high *plateau* which rises on the final stressed syllable and then falls on the post-stressed syllable.

The L+H* L% pattern is present in all of the provinces included in the study and prevails in Palencia and Zamora. Figure 5 shows this nuclear configuration in the utterance *¿Bajo por el estanque?* (Shall I go down by the pond?), realised as [ˈbax̞opoɾelesˈtaŋk̞e], produced during the *Map Task*. It shows a rise in the stressed syllable and a falling boundary tone.
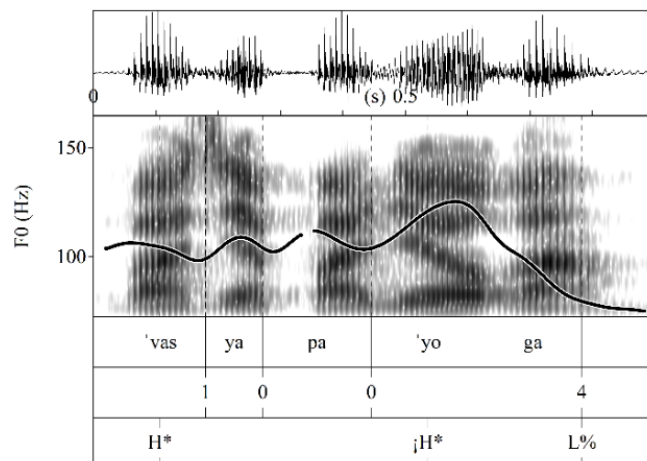

Figure 4. Interrogative sentence produced by the Salamanca informant showing the nuclear configuration ¡H* L%.

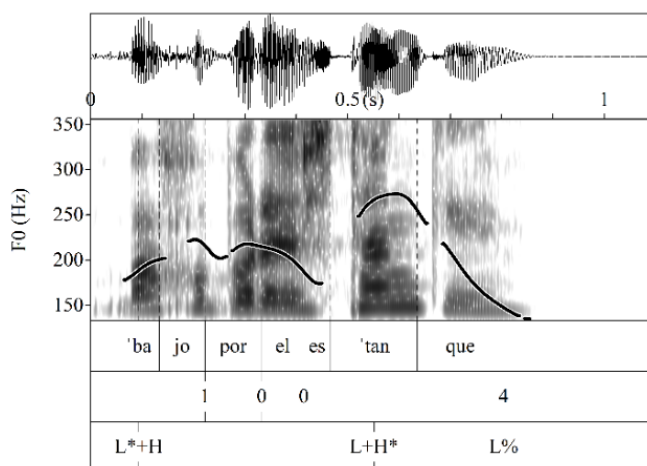**Figure 5.** Interrogative sentence produced by the Palencia informant showing the nuclear configuration L+H* L%.

The L* H% pattern corresponds to standard Castilian Spanish and is found in all of the provinces except Salamanca. It prevails only in Valladolid. Figure 6 shows this nuclear configuration in the utterance *¿Me podría decir la hora?* (Could you tell me the time?), realised as [mepoˈð̞ɾiað̞eˈθirlaˈoɾa], produced during the *Discourse Completion Task*. It shows a low tone with a high peak in the post-stressed syllable, a rising syllable, and, in the nuclear configuration, a very low tonal target followed by a rising post-stressed syllable which marks the boundary tone.
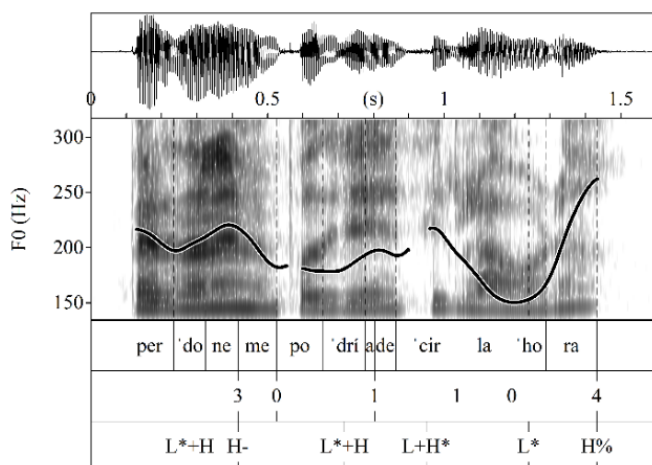
Figure 6. Interrogative sentence produced by the Valladolid informant showing the nuclear configuration L* H%.

Finally, hybrid patterns were identified, presenting a tonal configuration crossed between the traditional and standard forms. Figure 7 shows a L+H* LH% nuclear configuration. A first tonal accent with a rise in the stressed syllable is observed; a second tonal accent with a low stressed syllable and a rise in the post-stressed syllable and, for the nuclear configuration, a stressed syllable followed by a tone with a fall-rise. This final rise is characteristic of the standard pattern and is not as expected in relation to the rest of the nuclear configuration, which would be L+H* L%.
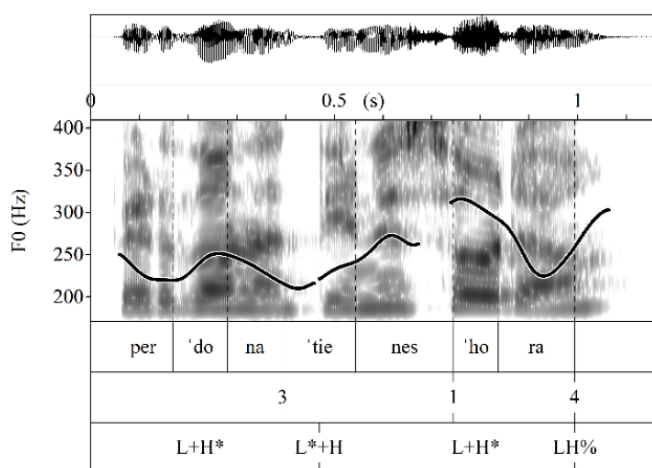

Figure 7. Interrogative sentence produced by the León informant showing the nuclear configuration L+H* LH%.

However, multiple cases of *tonal crowding* were identified among the examples analysed in other words, cases in which three or more tonal targets are associated with the same segmental element (Roseano, 2017). One way in which *tonal crowding* is resolved is through tonal compression, as exemplified in Figure 8, which features an utterance produced by the participant from León during the *Discourse Completion Task*. The question *¿Me puedes pasar el pan?* (Can you pass me the bread?) ends in a monosyllabic word which carries both the nuclear stress and the boundary tone. To correctly express the L+H* LH% pattern, which is characteristic of hybrid yes-no questions, the final vowel is lengthened so as to encompass the tones associated with the final syllable.
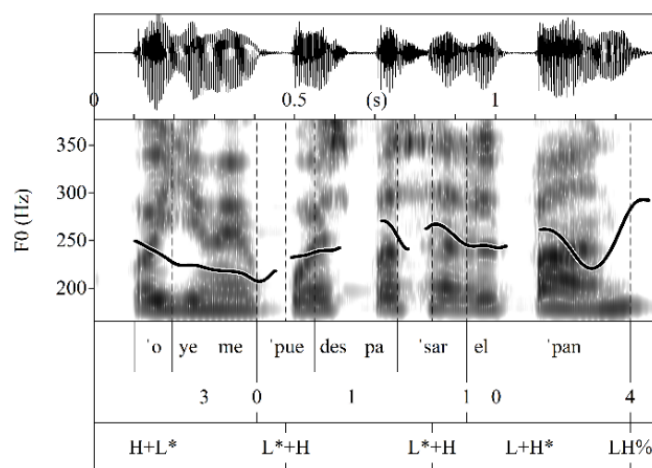

Figure 8. Interrogative sentence produced by the León informant showing tonal compression.

Tonal crowding can also be resolved through truncation, a process in which the vowel duration is maintained, but the final tone is not realised (Prieto & Ortega-Llebaria, 2009; Roseano & Cerdà-Massó, 2017). This is illustrated by the utterance shown in Figure 9, produced by the participant from Palencia during a *Discourse Completion Task*: *¿Voy por el río?* (Shall I go by the river?). In this case, due to the shortness of the final word, the falling boundary tone is not fully realised and only reaches a mid-tone (!H%), rather than the low tone (L%) which would be expected in that position given the traditional tonal pattern of Palencian Spanish (L+H* L%). The distance between the highest tonal peak in the nuclear pitch accent and the midpoint of the final vowel in the phrase is only 2 semitones, a low value compared to other utterances with no truncation, with upwards of 8 semitones difference between the tonal peak and the midpoint of the final vowel.
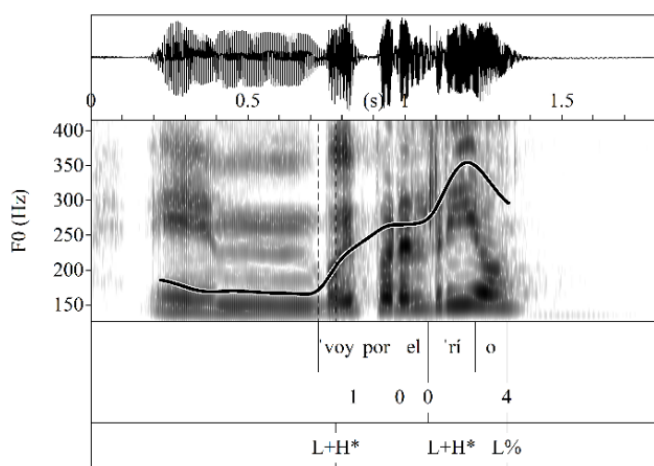
Figure 9. Interrogative sentence produced by the Palencia informant showing tonal truncation annotated phonologically (phonetically L+H* !H%).

Of the total set of utterances analysed, 26% present a rising boundary tone, whereas the remaining 74% present a falling boundary tone. As shown in Figure 10, the distribution of boundary tones differs according to the task carried out. Of the 23 utterances collected using the *Discourse Completion Task*, 48% show a rising boundary tone, while 52% exhibit a falling boundary tone. Conversely, for utterances collected from the *Map Task*, a rising boundary tone was identified in only 7% of the phrases, compared to the 93% of phrases which exhibit a falling boundary tone. Of the total number of utterances, those which were collected using the *Map Task* make up 54%, and those which were prompted make up 46%.
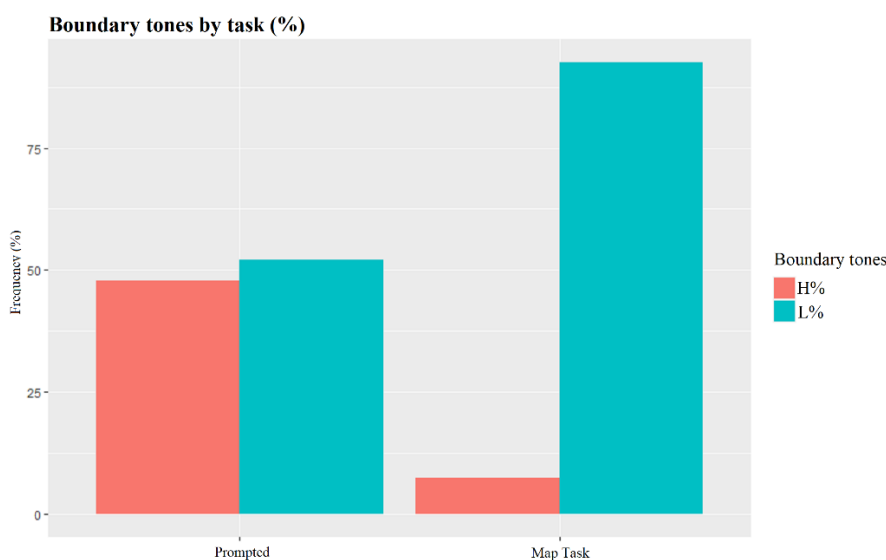

Figure 10. Boundary tones by task expressed in percentage.

Regarding the nuclear configuration, four variants were identified: ¡H* L%, L+H* L%, L* H%, and L+H* LH%. The nuclear configuration ¡H* L% accounts for 48% of the phrases; L+H* L% accounts for 26%; L* H% for 24%, and L+H* LH% for 2%. Figure 11 shows the relationship between the nuclear configurations and the task type. It can be clearly seen that of the utterances obtained via the *Discourse Completion Task*, those which show a standard L* H% intonational pattern predominate, making up 43% of cases, followed by the traditional ¡H* L% pattern, which makes up 39% of cases, and the other traditional pattern L+H* L%, which makes

up 13%. Of the phrases obtained through the *Map Task*, those which exhibit a falling boundary tone are prevalent. These are divided between the ¡H* L% pattern, which makes up 55% of cases, and the L+H* L% pattern, which makes up a further 37%. The standard pattern is residual for phrases obtained through this method, making up only 7% of the cases.

The difference between nuclear configurations according to data collection task is statistically significant: $\chi^2(3, 50) = 11.355$, $p < .001$.
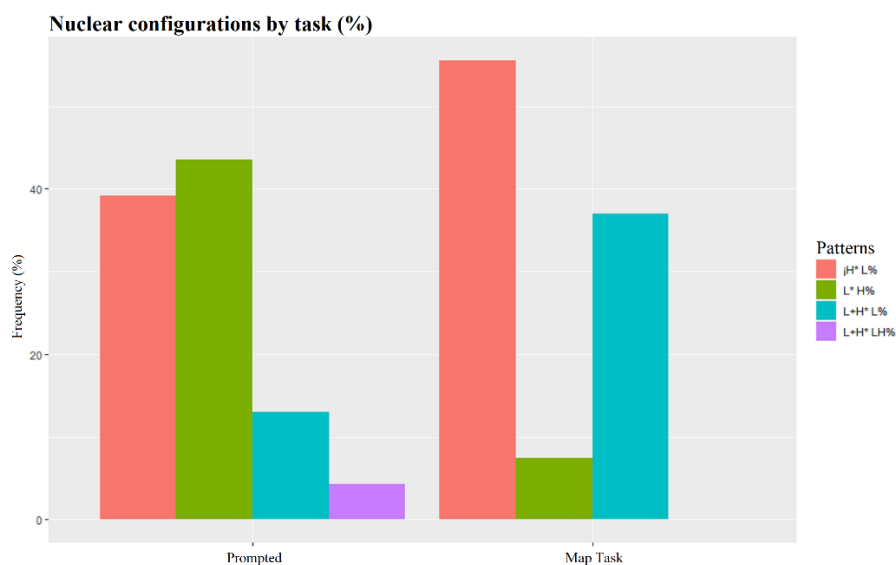
Figure 11. Nuclear configurations by task expressed in percentage.

When observing the disaggregated data by province, clear differences are noted. Figure 12 shows the different boundary tones by province. Valladolid is the only province in which rising patterns predominate for yes-no questions; rising patterns equate to 83% of cases, whereas falling patterns equate to 17%. In the remaining provinces, falling boundary tones prevail. Salamanca is the city with the highest percentage of falling interrogatives; in fact, the participant does not produce a rising interrogative at any point. In the remaining provinces, falling boundary tones also predominate, making up 82% of utterances for Palencia, 77% for León, and 75% for Zamora.
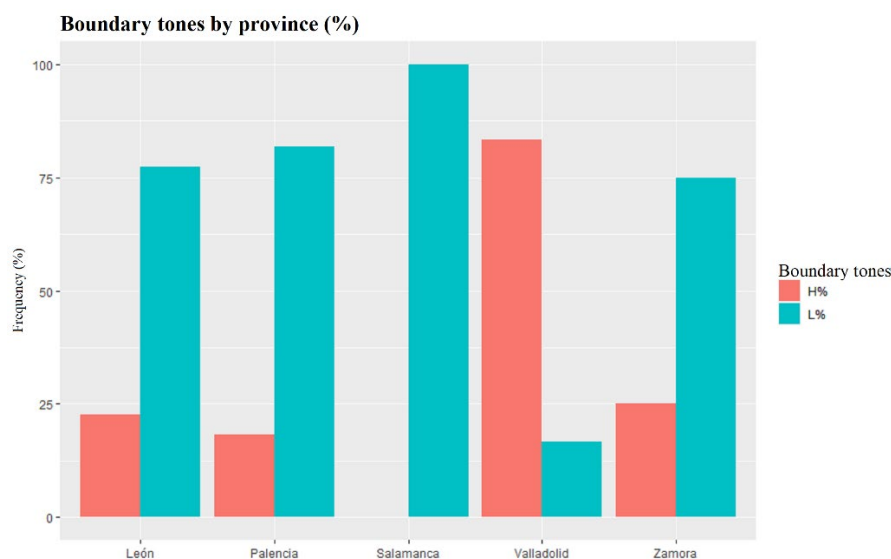

Figure 12. Boundary tones by province expressed in percentage.

When it comes to nuclear configuration, it can be established that the L* H% pattern predominates only in the data corresponding to the speaker from Valladolid; the ¡H* L% pattern predominates in León and Salamanca, and the L+H* L% pattern in Palencia and Zamora. In the province of León, the ¡H* L% pattern was present in 68% of cases, L* H% was present in 18% of cases, L+H* L% in 9%, and L+H* LH% in 5%. The data corresponding to Zamora show that in 50% of cases, the nuclear configuration was L+H* L%, with ¡H* L% and L* H% patterns each making up 25% of cases. In the data corresponding to the province of Salamanca, 57% of utterances featured the ¡H* L% pattern, while the remaining 43% featured the L+H* L% pattern. The data from Palencia shows that the

L+H* L% pattern occurred in 45% of cases, ¡H* L% in 36% of cases, and the standard L* H% pattern was produced in 18% of cases. Finally, in the province of Valladolid, the L* H% pattern was produced in 83% of cases, and the L+H* L% pattern in 17% of cases (Figure 13).

On the basis of these data, it can be concluded that the difference between provinces according to nuclear configuration is statistically significant: $\chi^2(12, 50) = 23.714$, $p = .022$.
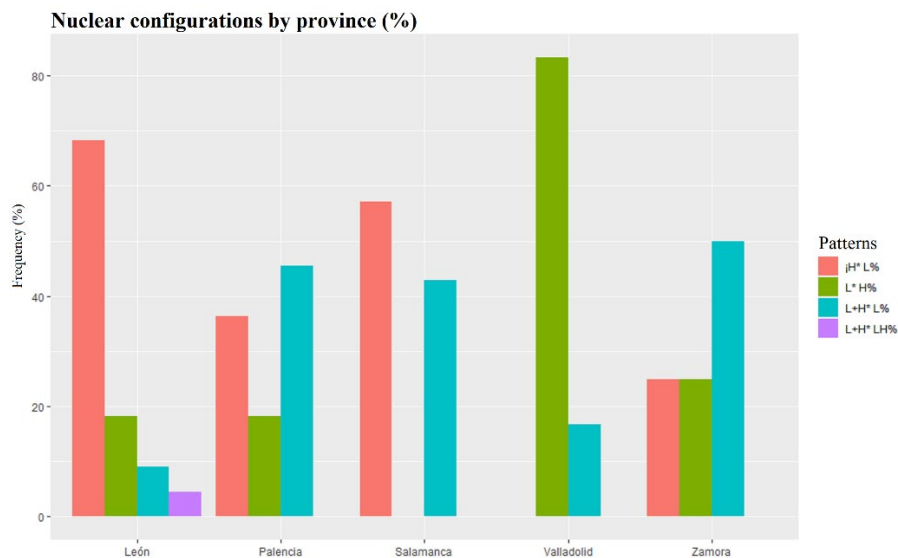
Figure 13. Nuclear configurations by province expressed in percentage.

To summarise these results, the data collected for each province, with the exception of Valladolid, was distributed in a similar manner to those shown in the graph in Figure 14, which corresponds to the province of León. When it comes to the prompted phrases, there is a clash between the falling and rising intonations, whereas among the phrases obtained through the *Map Task*, falling boundary tones are prevalent, regardless of the traditional intonational pattern previously described.

Figure 14. Boundary tones by task for León.

4. Discussion

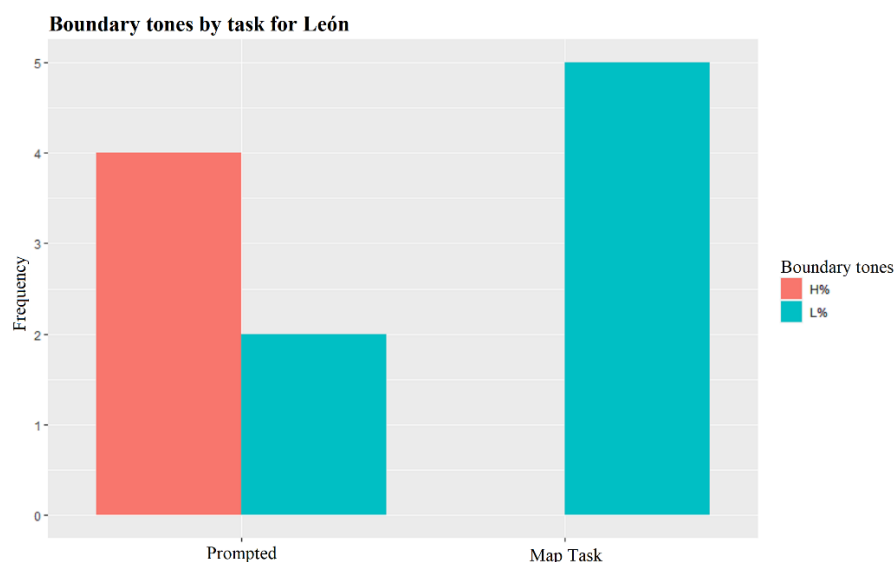Having observed the distribution of the different nuclear configurations according to data collection task type and province, it can be concluded that, currently, in the area studied, a process of dedialectalisation is occurring. The traditional pattern, featuring a falling boundary tone, is being substituted by the standard pattern, featuring a rising boundary tone.

Two traditional patterns appear, to a greater or lesser extent, in all of the provinces included in the study, with the exception of Valladolid, in which only the falling L+H* L% pattern was found. This L+H* L% pattern has been documented in Rías Baixas in Galicia (Fernández Rei, 2016) and as an alternative pattern in some parts of the province of Cáceres (Elordieta & Masa, 2020; Elordieta et al., 2020).

The other traditional pattern is ¡H* L%, and has been documented in León, Palencia, and Asturias (Roseano, 2020; Fernández Planas et al., 2020; Elvira-García, 2020), and, furthermore, has been documented in the Canary Islands (Dorta, 2013; Elvira-García et al., 2018). This pattern also appears in Extremadura, described as being present in two distinct intonations: "a pattern in accordance with that which characterizes standard Castilian Spanish" and "a pattern which resembles those associated with varieties of the north and of the peninsular west" (Congosto Martín, 2017, p. 4).

Cuevas Alonso and López Bobo (2011) propose the term 'traditional Asturleonese pattern' for the ¡H* L% pattern. These patterns are not unexpected, as these areas (Asturias, León, Zamora, Salamanca, Cáceres, and Badajoz) are traversed by the Vía de la Plata, a Roman road which led from Astorga to Mérida, structuring the western region of Spain and serving as a pilgrimage route to Santiago de Compostela and as a route of cultural transfer (Rabanal Alonso, 1994).

In the provinces studied, both traditional descending patterns (¡H* L% and L+H* L%) coexist with the standard Castilian Spanish rising pattern. Along with these patterns, a hybrid L+H* LH% pattern occurs which amalgamates the traditional pattern with a sharp rise at the end of the boundary tone. The emergence of these hybrid patterns has been documented in various geographical areas in which falling patterns for yes-no questions are found, such as León (Elvira-García, 2020), where a hybrid ¡H* LH% pattern appears. In Galicia, a pattern appears which is a hybrid between Castilian Spanish and Galician, with forms H+L* H% (Fernández Rei, 2016), L* H%, or L+H* H% (Pérez Castillejo, 2012). These hybrid patterns may correspond to the concept of *fudged lect* defined by Chambers and Trudgill (1980: 110) as "a fudge between the contending phone types of this change in progress", in other words, between the final falling and rising patterns. According to Røyneland (2010), this fudged lect emerges in situations of vertical dialectal convergence: in this case, the convergence of the intonation of the traditional dialect towards the standard intonation.

The pattern distribution is not casual, but rather relates to a criterion of formality or spontaneity. The more informal and spontaneous the context, the more likely it is that falling intonational patterns will appear in yes-no questions. This intonation is principally found in the phrases collected through the *Map Task*, as opposed to those collected through the *Discourse Completion Task*, in which both the traditional and standard patterns were produced. As previously indicated in Section 2 (Methods), the *Map Task* recreates a more informal, less mediated situation in which to elicit question forms, leading to a more informal speech style which, in this particular case, translates to a more traditional falling intonation.

The coexistence of intonational patterns is not unique to the geographical areas included in this study; it has also been analysed in other areas in which traditional falling patterns are produced for yes-no questions. In Cantabria, for example, it is stated that "the most prominent of Cantabrian prosody is the presence of two intonational models: the strong Castilianisation of urban areas explains the presence of a dominant pattern, with a toneme which is falling in assertive statements and rising in interrogative statements, similar to that observed in standard Castilian" and that "in contrast, rural areas share a falling toneme for both forms" (Cuevas Alonso & López Bobo, 2011, p. 46). In this way, a model of hierarchical diffusion emerges, in which the cities act as pockets of innovation from which novel features spread progressively from urban to rural areas, the latter usually more conservative at a linguistic level (Taeldeman, 2005).

In Elvira-García's (2020) analysis of the speech of a speaker from León using reading tasks, a *Discourse Completion Task* and a *Map Task*, the conclusion reached is that "the hybrid pattern is reserved for more formal or guided contexts, whereas the traditional pattern appears in more spontaneous tasks", and therefore, "the speaker codifies the hybrid pattern ¡H* LH% as more formal or of more careful speech, while the falling pattern is reserved for less formal contexts" (Elvira-García, 2020, p. 79). Regarding yes-no questions in *Fala Extremeña*, a similar distribution is observed: the rising intonation is prevalent in read speech, whereas the falling intonation prevails in conversational speech, especially in *Lagarteiru* and *Mañegu* (Elordieta & Masa, 2020).

Finally, it should be noted that unsurprisingly the only man, the participant from Salamanca, is the only speaker who does not produce a rising boundary tone, as women exhibit a lower level of stigmatized linguistic variables, and, in contexts of linguistic change, women tend to adopt prestigious forms more rapidly than men (Labov, 2001, p. 274). Therefore, women are more likely to be the first to adopt the rising intonational pattern for yes-no questions.

5. Conclusions

The results obtained show a process of dedialectalisation, or standardisation, which affects intonational patterns of yes-no questions in the provinces of León, Zamora, Salamanca, and Palencia. These areas exhibit a traditional falling pattern which is still prevalent, but which is being substituted by a rising contour pattern which corresponds with the standard Castilian form. The rising pattern is associated with more formal contexts and more careful speech, whereas the traditional pattern occurs more commonly in spontaneous speech. In addition to patterns which are strictly rising or falling, there are shades of grey, i.e. hybrid forms mixing the traditional falling pattern with the final rise of the standard pattern.

The spread of these features occurs both horizontally (by geographical advergence), and vertically (hierarchically, from urban to rural). However, the data from this study cannot confirm the hierarchical diffusion, as all informants originate from provincial capitals, cities with populations of between 60,000 and 300,000 inhabitants.

Therefore, it would be of interest to obtain a more extensive corpus so as to analyse in more detail the hierarchical expansion of the linguistic change, as well as the variable of gender in the speed of adoption of features of prestige.

6. References

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