THE INTONATION OF WH- QUESTIONS IN A LANGUAGE CONTACT SITUATION: THE CASE OF GALICIAN AND GALICIAN SPANISH BILINGUAL SPEAKERS

LA ENTONACIÓN DE LAS PREGUNTAS PARCIALES EN UNA SITUACIÓN DE CONTACTO LINGÜÍSTICO: EL CASO DEL GALLEGO Y EL ESPAÑOL DE GALICIA EN HABLANTES BILINGÜES

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ABSTRACT

Although language contact is one of the driving forces of language change at any level, little is known about how intonational change may be induced by language contact. This article describes the intonational consequences of the contact between Galician and Spanish. In order to achieve this goal, a corpus comprising 546 Wh- questions collected by means of the *Discourse Completion Task* is analysed. The data obtained from bilingual speakers show that the intonation patterns of Wh- questions in Galician Spanish are the same as in Galician, while they differ from the intonation patterns of Wh- questions in the other documented varieties of Peninsular Spanish (Central Peninsular Spanish, Manchego, Andalusian, Cantabrian, Asturian and Leonese Spanish). This suggests that there exists a direct intonational transfer phenomenon from Galician to the variety of Spanish spoken by bilingual speakers in Galicia.

Keywords: *intonational change, language contact, Wh- question intonation, Galician, Galician Spanish.*

RESUMEN

Aunque el contacto entre lenguas es una de las fuerzas impulsoras del cambio lingüístico en cualquier nivel, se sabe poco sobre dicho contacto lingüístico y sobre si puede inducir el cambio entonativo. En este artículo se describen las posibles consecuencias del contacto entre el gallego y el español a nivel entonativo. Para lograr este objetivo, se analiza un corpus que comprende 546 preguntas parciales recopiladas por medio del método llamado *Discourse Completion Task*. Los datos obtenidos de hablantes bilingües muestran que la entonación de las preguntas parciales en el español de Galicia coincide con la entonación de dichas preguntas en gallego y difiere de la entonación de las preguntas parciales en las demás variedades peninsulares de español cuya entonación ha sido estudiada (como el castellano central, el manchego, el andaluz, el cántabro, el asturiano y el leonés). Eso sugiere que existe transferencia entonativa directa del gallego a la variedad de español hablado por hablantes bilingües en Galicia.

Palabras clave: *cambio entonativo, contacto lingüístico, entonación de las preguntas parciales, gallego, español de Galicia.*

1. INTRODUCTION

Language contact is one of the driving forces of language change. As Thomason and Kaufman (1988:3) state, "contact-induced language change at all levels of linguistic structure is a pervasive phenomenon". Thomason (2001:11) goes a step further to claim that "all aspects of language structure are *subject to transfer from one language to another*, given the right mix of social and linguistic circumstances" (italics ours). In spite of this, the research about how intonational change may be induced by language contact is still scarce. In Colantoni and Gurlekian's (2004:108) words, "very few comments on intonational changes are included" even in the most comprehensive accounts of contact-induced change (see, for instance, Thomason and Kaufman, 1988). The present study aims at bridging the gap within the body of research works dealing with language change with regard to intonation, as it has not been given the attention that it deserves in specialised publications. The few research works dealing with intonation that have been published in the last five years concentrate on phenomena in English and a small group of well-researched languages –French, German, Dutch, Russian, among others–, while almost none pays attention to contact phenomena concerning other languages, although language contact affects, to different extents, the majority of languages.

A language contact situation may be observed when at least two different language varieties are spoken within the same social group in a given period of time, which may comprise one or several generations. In such a situation, one can encounter at least three sociolinguistic scenarios, each of which may give rise to a specific pattern of prosodic change. In the first scenario, the speakers of a linguistic community learn their first language and then, during a later period related to a second socialisation stage –this could happen relatively early, when they enter school, or at any other given point in life– they acquire their second language (see Barker, 2005; Devis Herraiz, 2008; De Leeuw *et al*., 2010, 2012; Simonet, 2011, among others). The second scenario is one in which the speakers have a similar competence in the two languages, which can thus be considered L1s, though they may use them for different purposes (see Queen, 2001; Colantoni and Gurlekian, 2004; O'Rourke, 2005; Hickey, 2008; Fagyal, 2010; Muntendam, 2013, among others). The third scenario corresponds to a situation where a part of a linguistic community is competent in both languages, while another part is monolingual (see Romera and Elordieta, 2013).

Each one of the three above-mentioned scenarios, all of which are based on a synchronic view of linguistic change, will allegedly give rise to a specific mechanism of prosodic change, described in Figure 1.

Direct transfer	Bilingual speakers who are either a) sequential bilinguals or b) non-sequential bilinguals dominant in one of the two languages involuntarily transfer some of the intonation characteristics of their L1 (dominant language) to the L2 (non-dominant language).
Fusion	Simultaneous bilinguals mix up intonational features belonging to each of their two languages and may develop an intonation system different from the ones used by monolinguals in each of the two languages.
Accommodation	A group of speakers of a given variety of L adopt certain characteristics of the variety of that same L as spoken by a different group of speakers.

Figure 1. *Mechanisms of intonational change due to language contact.*

1.1. Objectives

The first and most specific objective aimed at by this work has to do with the presentation, description and analysis of the case-study quoted above, where the two languages involved are Galician (henceforth G), on the one hand, and Galician Spanish (henceforth GS), on the other. In addition, our research seeks to cover a second, more general objective, which has to do with contributing to the in-depth study of intonation in language contact situations in a systematic way, thus enhancing the still scarce body of research whose main preoccupation has to do with the analysis of direct transfer relating to intonation.

This study is structured as follows: Section 2 deals with the current linguistic situation in Galicia, a territory where two languages co-exist. Section 3 is devoted to a detailed explanation of the methodology employed to obtain and analyse the data used in this research work, which correspond to Wh- questions in G and GS. Section 4 provides an overview of the intonation patterns of Wh- questions in a number of varieties of Peninsular Spanish, namely Central Peninsular Spanish, Manchego, Andalusian, Cantabrian, Asturian and Leonese. Section 5 presents the results; at the end of the section, two hypotheses that might shed some light on the results are put forward. In section 6, the two hypotheses are discussed in the light

of a comparison between the intonation of Wh- questions in G/GS and in the other mentioned varieties of Peninsular Spanish. Section 7 offers the conclusions.

2. THE LINGUISTIC SITUATION IN GALICIA

Galicia, a region located in the northwest coast of the Iberian Peninsula, is a territory where two Romance languages, namely Galician and Spanish, are spoken. Galician is the native language, while Spanish was imported at some point in History in the late Middle Ages.

During the Middle Ages, Galician-Portuguese had a high social status and was used –in sociolinguistic terms– as a high variety not only in Galicia but also in other parts of the Iberian Peninsula[1]. At the end of the Middle Ages, Galician entered a period of decadence due to political circumstances that favoured Spanish. The latter was first introduced in Galicia in the 14th and 15th centuries, when the Crown sent a good number of Castilian noblemen to this territory to rule it[2]. From that moment onwards, Spanish grew as the language of education and administration (see Azevedo Maia, 1986; Monteagudo Romero, 1999). As a result, from the 16th century until the 19th century, Galician had the sociolinguistic status of a low variety in a diglossic society (see Fishman 1980:4), insofar as it was spoken exclusively in private spheres, while its presence in written documents disappeared almost completely. In the 19th century, there was a linguistic revival, as some intellectuals and writers advocated for the use of Galician in all areas and fields. In the following century, with the Francoist dictatorship (1939-1975) and its intransigence towards any language other than Spanish, Galician was again confined to the status of low variety in a diglossic society. The last three decades

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[1] Galician and Portuguese were considered the same language from the 9th century until the 15th century (see Freixeiro Mato, 2002; Monteagudo Romero, 1999).

[2] Although the new members of the medieval Galician political elite came from Castile, very little is known about the social and demographic history of Spanish in the following centuries. The lack of information about such aspects is relevant for this research work, as in order to understand the features of present-day GS it would be important to know the historic, dialectological and sociolinguistic details of the penetration of Spanish into Galicia. Specifically, knowing which geographic variety of Spanish was imported into Galicia (whether it was the Central Peninsular variety or the Northern Peninsular variety) is crucial in order to understand the intonational characteristics of GS. For this reason, Section 4 describes the intonation of Wh- questions in several Peninsular varieties, while Section 5.5 presents a hypothesis that has to do with the possible causes of the attested GS intonation patterns in Wh- questions.

of the 20th century, corresponding to the re-enactment of the democratic regime, witnessed the progressive consolidation of the language, as it became a compulsory subject at school and it acquired the status of co-official language in Galicia, together with Spanish.

In contemporary Galicia, virtually the whole population –around 2.7 million people in 2017– can understand both languages, though the active use of Galician is gradually declining in favour of Spanish, especially as the younger generations are progressively turning to Spanish as their first language. Overall, one can affirm that the majority of Galician adults are active bilinguals, insofar as those who use both languages are the most relevant demographic group among speakers aged between 15 and 64 (Table 1). This is the main reason why the present paper focuses on bilingual speakers.

	Only Galician	Both Galician and Spanish	Only Spanish
Aged 15 to 29	19.78	46.57	33.64
Aged 30 to 49	23.07	47.52	29.42
Aged 50 to 64	35.42	43.07	21.52
Aged 65 and older	52.74	33.46	13.80
Total	31.20	42.55	26.25

Table 1. *Language(s) normally spoken by the adult Galician population (%) (the author's elaboration of the data published by the Instituto Galego de Estatística, 2014).*

Sociolinguistically speaking, there is a clear divide between rural areas, where Galician is the predominant language, and urban contexts, where the use of Spanish is widespread. Thus, big cities such as Vigo, A Coruña, Ourense, Lugo, Santiago de Compostela, and Pontevedra are predominantly Spanish-speaking areas (less than 40% of their inhabitants use Galician normally), and so are middle-sized towns. Conversely, villages and rural areas in general show a clear tendency towards Galician dominance (the rate of Galician speakers is above 80% in most rural areas) (Instituto Galego de Estatística, 2011-2014). Due to the important differences between the urban and rural areas, the data used to conduct this investigation were gathered in rural areas only.

2.1. Research about intonation in Galicia

Turning now to the specific research topic with which this paper deals, the intonation of Wh- questions in Galicia has not been fully analysed in the existing literature. Most studies on Galician intonation have delved into either very general issues (see Carril, 1973) or the intonation of statements and Yes/No questions (Fernández Rei, 2005; Fernández Rei *et al.*, 2007; Fernández Rei and Escourido, 2008; Pérez Castillejo, 2012; Fernández Rei, 2016), while the analysis of Wh- questions has been dealt with only partially. In this sense, Fernández Rei (1997: 250) points to the intonation of Wh- questions in Galician as showing a falling contour, where the Wh- word –which carries the first stress– shows a remarkably high pitch followed by a progressive fall. The intonation of this type of questions in GS is limited to a single exploratory study (see Fernández Rei, 1997) which does not approach the question of language-contact in full.

Given that Galicia is a territory where two languages are spoken, a systematic comparison of the intonation patterns of the questions at hand in the two languages is due. It is yet to be seen whether native G intonation has had an impact on the Spanish spoken in this territory, whether the intonation system of G and that of GS have stayed separate, or whether the intonation contours of the varieties of Spanish spoken outside Galicia have left a mark on the G patterns. Some exploratory studies on language contact in Galicia –none of which has analysed Wh- questions in depth– have found that "Galician conserves its own highly characteristic intonation, transferring it to the Spanish spoken in Galicia […], but seemingly not affected by contact with this variety of Spanish." (Fernández Rei, 2016:155-156). In the following sections (specifically in 5.5 and 6) Fernández Rei's (2016) hypothesis will be revisited, in order to then add a second hypothesis to it and test both of them in the light of the gathered data.

3. METHODOLOGY

The present study deals with different types of Wh- questions in G and GS (the classification of these questions is explored in 3.1.), recorded and acoustically analysed (as explained in 3.2.), and transcribed (unpacked in 3.3.). In order to draw a full picture of the intonational characterisation of Wh- questions as uttered by G and GS speakers, Section 4 provides an overview of the corresponding questions in other varieties of Peninsular Spanish (namely Central Peninsular Spanish, Manchego, Andalusian, Cantabrian, Asturian and Leonese).

3.1. Classification of Wh- questions

One of the best-known proposals for the classification of Wh- questions was put forward by Bolinger (1989). As observed in Figure 2, Bolinger divides these questions into original questions and reprise questions. Original Wh-questions contain a request for information and do not repeat information already present in the conversation. Reprise questions, on the other hand, repeat or request the repetition of information already present in the conversation. Reprise questions can be subclassified. According to Bolinger (1989) and Hualde (1992), echo questions repeat a question that has been previously asked, while reflex questions simply repeat a preceding non-question. Last, reclamatory questions request for repetition of a bit of information that has been alluded to at some point in the conversation.
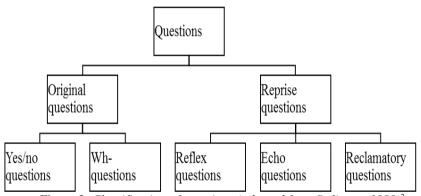

Figure 2. *Classification of questions (adapted from Bolinger, 1989)*[3].

Given that Bolinger's classification was not complete, as there were issues that his taxonomy did not contemplate, the classification used for this paper (presented in Table 2) incorporates further labels explored in Hualde (1992) and fills in the gaps in Bolinger (1989) with regard to politeness (Astruc, 2008), degree of surprise (Payrató, 2002; Prieto and Cabré, 2007-2012), and illocutionary force (Astruc *et al*., 2011; Prieto and Cabré, 2007-2012; Prieto and Roseano, 2018; Escandell and Prieto, forthcoming).

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[3]Although the present study does not deal with Yes/No questions (both original Yes/No questions and Reflex Yes/No questions), they have been included in the classification of questions in order to make the diagram complete. The intonation of original Yes/No questions in Galician is analysed in Fernández Rei (2016).

Question type
Neutral original question
Polite original question
Impolite original question
Counterexpectational original question
Neutral echo question
Counterexpectational echo question
Neutral reclamatory question
Counterexpectational reclamatory question
Neutral imperative question
Impolite imperative question
Insistent imperative question
Immaterial offer
Material offer

Table 2. *Wh- question types.*

3.2. Corpus and informants

The subjects of the study were seven speakers, four women and three men. All seven informants had completed their secondary education, and four of them held a BA degree. The age of the informants ranged from 18 to 42 (average age was 31, standard deviation 9). The informants who volunteered to carry out the task were bilingual adults whose dominant language is G, which they learned as children and continue using as adults, and whose second language is GS. Additionally, all of them came from rural or semi-rural areas and used G as their main language. Moreover, all seven informants came from the same geoprosodic area, defined as "Cluster 1" in Fernández Rei *et al.* (2016), which is indeed the largest and most populated geoprosodic zone in Galicia. Given all of these characteristics, in the light of the sociolinguistic situation described in Section 2, the chosen speakers are considered representative of the core category of speakers of GS, i.e. active bilinguals of rural origin coming from the "Cluster 1" geoprosodic area.

The method used to elicit the questions was the so-called *Discourse Completion Task* (Vanrell *et al*., 2018) implemented with prompted speech strategies. The informants were presented with real-life scenarios and were asked to reproduce the questions that they would utter in order to complete the conversational situation, as exemplified in (1). The questionnaire was based on Roseano *et al*. (2015), which elaborates on Prieto and Roseano (2010).

The informants had to utter thirteen questions in Spanish and thirteen questions in Galician –the scenarios were the same in both languages. From a segmental point of view, as usually happens in intonation studies, the utterances mostly contained voiced sounds. In addition, words with word-final stress were avoided in nuclear position in order to avoid possible tonal truncation or compression phenomena. The informants were required to do the task three times. The total number of recorded utterances was 546 (i.e., seven speakers x two languages x 13 conversational situations x three repetitions).

> (1) INTERVIEWER: You arrive to a city and fancy eating some fruit. You see a group of tourists with tangerines in their hands. You approach them to find out where they bought the tangerines. What would you ask them?
> PROMPTED ANSWER: Where did you buy those tangerines?
> *Onde mercaron as mandarinas?* (G)
> *¿Dónde compraron las mandarinas?* (GS)

The data were obtained through a number of recordings carried out using a PMD671 Marantz recorder connected to a Shure SM58 microphone. The sound archives were recorded in .wav format (mono) with a sampling frequency of 44,100 Hz. Intensity was then maximised. Once the recordings were completed, the recordings were segmented into utterances using Goldwave (2015) and the sound files were annotated in textgrids using Praat (Boersma and Weenink, 2016).

3.3. Acoustic analysis and intonational transcription

The transcription of the intonation of the recorded utterances could by no means be strictly phonological, as too little is known about the intonational phonology of Galician. For this reason, a more phonetic transcription of contours was adopted (see Hualde and Prieto, 2016) and initially implemented by means of a Praat script, namely *Eti-ToBI* (Elvira-García *et al*., 2016). Among other outputs, *Eti-ToBI* provides a phonetic labelling based on the ToBI systems. Such labelling was revised and corrected manually. Nevertheless, since no standard ToBI labelling system is established for Galician, it was decided that the tags provided by *Eti-ToBI* should be better combined with a more cautious representation. For this paper, contours are described by means of schematic representations associated with tags commonly used in the literature (Table 3).

Phonetic labelling of the nuclear configuration	Schematic representation	Tag and description
[L* L%]		Global fall or initial peak: after an F0 peak associated with the initial Wh- word, F0 falls to a low level and remains low until the end of the utterance.
[L* H%]		Final rise: this contour has a low tone in the last stressed syllable followed by a sharp rise to a high level in the post-tonic syllables.
[L* HL%]		Final rise-fall: this contour displays a nuclear low syllable followed by a shallow rise-fall in the post-tonic syllables.
[L+H* L%]		Final circumflex: the last stressed syllable displays a sharp F0 rise followed by a fall to the end of the utterance.
[H+L* L%]		Final fall or hat pattern: this contour usually displays a rise on the first word of the utterance, followed by a high plateau and a fall associated to the last stressed syllable.

Table 3. *Schematic representations and descriptions of the contours found in the corpus.*

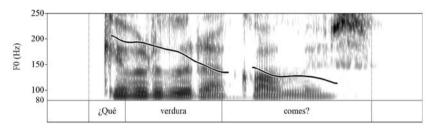The patterns specified in Table 3 are illustrated in Figures 3 through to 7 below.

Figure 3. *Global fall pattern: Spectrogram and F0 curve of the question ¿Qué verdura comes? ('What kinds of vegetables are you eating?).*
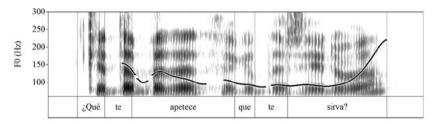
Figure 4. *Final rise pattern: Spectrogram and F0 curve of the question ¿Qué te apetece que te sirva? ('What would you like to drink?').*
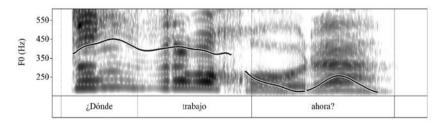
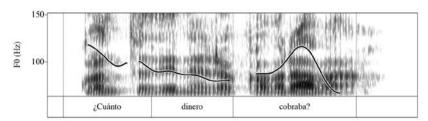Figure 5. *Final rise-fall pattern: Spectrogram and F0 curve of the question ¿Dónde trabajo ahora?! ('Where do I work now?!').*

Figure 6. *Final circumflex pattern: Spectrogram and F0 curve of the question ¿Cuánto dinero cobraba? ('How much did you earn?').*
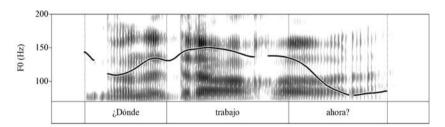

Figure 7. *Hat pattern: Spectrogram and F0 curve of the question ¿Dónde trabajo ahora? ('Where do I work now?').*

The data obtained were transferred to a database and analysed with SPSS.

4. THE INTONATION OF WH- QUESTIONS IN PENINSULAR VARIETIES OF SPANISH

In order to establish whether the intonation contours of GS are the result of the transfer of G intonation or they are the same as in the variety/ies of Spanish imported into Galicia in the last centuries, GS intonation must be compared with the intonation of the Spanish varieties spoken in the Iberian Peninsula. Some of them (like Central Peninsular Spanish, henceforth CPS, see Hualde and Prieto, 2015 for a review) have been described intonationally in detail, while others have been described in a smaller number of studies. This article shall deal only with the varieties of Spanish where Wh- intonation has been described, namely CPS (Estebas-Vilaplana and Prieto, 2010; Quilis, 1993; Hualde, 2005; Henriksen, 2009), Andalusian (Henriksen and García-Amaya, 2012), Manchego (Henriksen, 2014), Cantabrian (López-Bobo and Cuevas-Alonso, 2010), and Leonese (Henriksen, 2009). There is no available description of the intonation patterns of

Wh- questions in Asturian Spanish, but data are available in the *Interactive Atlas of Spanish Intonation* (Prieto and Roseano, 2009-2013). The remaining Peninsular varieties, for which there is no description of Wh- intonation, cannot be included in this study for obvious reasons, but future studies should take them into account. Those transcriptions which appear in previous studies have been uniformed according to the latest version of *Sp-ToBI* (Hualde and Prieto, 2016).

Neutral original Wh- questions in CPS are characterised by a global falling pattern whose nuclear configuration is transcribed L* L% in the *Sp-ToBI* labelling system (Estebas and Prieto, 2010; Quilis, 1993; Hualde, 2005; Henriksen, 2009). In Leonese, L* H% and L+H* L% are used (Henriksen, 2009), while in Manchego Spanish, H+L* L% and L+H* L% are documented (Henriksen, 2014). Further South, in Andalusian Spanish, H+L* L% and L+¡H* L% are documented (Henriksen and García-Amaya, 2012). Finally, Cantabrian Spanish uses H+L* L% (or *hat pattern*) for original Wh- questions (López-Bobo and Cuevas-Alonso, 2010). The same pattern, along with the rising L* H% one, is found also in neutral original Wh- questions in Asturian Spanish (Prieto and Roseano, 2009-2013).

Following Navarro Tomás (1950), and Estebas and Prieto (2010), polite original Wh- questions display a final rise (L* H%) in CPS, while the intonation of impolite original Wh- questions has not been analysed so far in such variety. Counterexpectational original Wh- questions have a nuclear circumflex pattern, possibly L+H* L%, in Navarro Tomás's (1950) description of CPS. Unfortunately, no information about the intonation of those question types is available in the literature about other Peninsular varieties.

Escandell (1999, 2002), and Estebas and Prieto (2010), among others, describe neutral reflex Wh- questions (as well as echo questions) in CPS as presenting a nuclear circumflex pattern, characterised by a rise to a higher F0 level (L+¡H* L%). The same pattern is found in Asturian Spanish (Prieto and Roseano, 2009-2013). Neutral echo questions display a rising L+H* H% pattern in Andalusian (Henriksen and García-Amaya, 2012), and a rising-falling pattern (L+H* !H%) in Cantabrian Spanish (López-Bobo and Cuevas-Alonso, 2010).

In CPS, counterexpectational reflex Wh- questions and counterexpectational echo questions display two different patterns, i.e. L+H* H% and L+H* LH% (Estebas and Prieto, 2010). No description of these question types has been offered for other Peninsular varieties.

The intonation pattern of reclamatory Wh- questions (both neutral and counter-expectational) has not been fully explored yet. This notwithstanding, the recordings of the map tasks published in Prieto and Roseano (2009-2013) show that they are characterised by a rising pattern (L* H%). In Prieto and Roseano (2009-2013), counterexpectational reclamatory Wh- questions are labelled "counterexpectational echo wh- questions" and are characterised by L* H% and H+L* L% configurations in Asturian Spanish. In Cantabrian Spanish, such questions display a rising L* H% nuclear configuration (López-Bobo and Cuevas-Alonso, 2010:72-73).

According to Estebas and Prieto (2010), imperative Wh- questions display a final falling pattern (H+L* L%) in CPS; it is not clear, though, whether impolite imperative Wh- questions show the same contour or a different one. As reported by the above authors, insistent imperative questions show a complex final contour (L+¡H* HL%). Neutral imperative Wh- questions also show falling patterns in Andalusian Spanish (namely H+L* L% according to Henriksen amd García-Amaya, 2012), Asturian Spanish (H+L* L% in the data contained in Prieto and Roseano, 2009-2013), and Cantabrian Spanish (!H+L* L% according to López-Bobo and Cuevas-Alonso, 2010).

It is worth pointing out that the research work on the intonation contours of Wh- questions in Spanish is still to be fully completed. In fact, the intonation of some existing sentence types has not been described in several of the above-mentioned varieties, which leaves the door open for further research.

5. RESULTS

This section presents the results following the order of the different Wh- question types comprised in Table 2. For each question type, the characteristics of the situations used to elicit the question are offered, the intonation patterns encountered are described and, whenever necessary, a number of considerations regarding pragmatic issues are presented.

5.1. Original Wh- questions

Neutral original Wh- questions typically ask for unknown/new information. In order to obtain this type of questions, the experiment controlled for factors related to social distance and familiarity of the interlocutors, which are the key factors in Brown and Levinson's (1987) Politeness Theory. In this sense, the informants

were presented with situations where they were supposed to be eliciting non-compromising information, as exemplified in (2).

> (2) INTERVIEWER: You are in a tourist village. You see some tourists holding tangerines in their hands. You want to buy some tangerines, and so you ask them where they bought them.
> PROMPTED ANSWER: Where did you buy those tangerines?
> *Onde mercaron as mandarinas?* (G)
> *¿Dónde compraron las mandarinas?* (GS)

From the intonational point of view, neutral original questions (Figure 8) tend to present the global fall pattern in GS (in 85.7% of the total), while the remainder 14.3% corresponds to the hat pattern. This finding points to the former as the default pattern for Wh- questions in GS. In G, the percentage of questions that show this pattern goes up to 95.2%, which indicates that neutral original questions in GS and G share the same intonational pattern, i.e. the global fall pattern.

Within this type of questions, it was necessary to check whether a varying degree of politeness would have an impact on the pattern used. For this purpose, the informants were presented with two situations where there was a contrasting degree of familiarity between the informant and his/her interlocutor. In the first case, illustrated in (3), s/he had to ask a compromising question to a hierarchically superior individual, which necessarily implied a high degree of politeness. In the second one, illustrated in (4), the informant had to ask a well-known person a non-compromising question that at the same time showed some annoyance and, hence, entailed a relatively impolite attitude on the part of the informant.

The types of questions exemplified in (3) and (4) differ from the intonational point of view. Polite questions (Figure 9) usually present a dominant global fall pattern in GS (66.7%), though there are some other patterns in use, namely the hat pattern (19.1%), the final circumflex pattern (9.5%), and the final rise-fall pattern (4.8%). In G, only three intonation patterns are used, namely the global fall pattern (61.9%), the hat pattern (33.3%), and the final rise pattern (4.8%), which is not observed in GS for this type of questions. Again, the global fall pattern is predominant when uttering polite original questions in G and GS.

(3) INTERVIEWER: A company has hired you. Today, the CEO of the company, a middle-aged man that you have never met, is sitting next to you at lunchtime. You start talking to each other and he tells you about the time when he used to work for a different company. You are curious about the wage he used to earn there, and so you ask him about that.
PROMPTED ANSWER: How much did you earn?
Canto diñeiro cobraba? (G)
¿Cuánto dinero cobraba? (GS)

(4) INTERVIEWER: You have a friend who is always asking you to do things for him, which annoys you. You two meet at university, and he immediately tells you that he needs you to do him a favour. You want to know what he wants and so you ask him showing that you are a bit annoyed.
PROMPTED ANSWER: What on earth do you want?
Que carallo queres? (G)
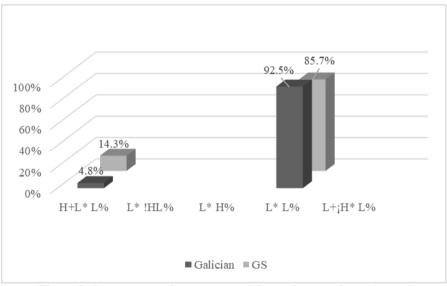*¿Qué carajo quieres?* (GS)

Figure 8. *Percentages of occurrence of the nuclear configurations of neutral original questions (N = 42).*
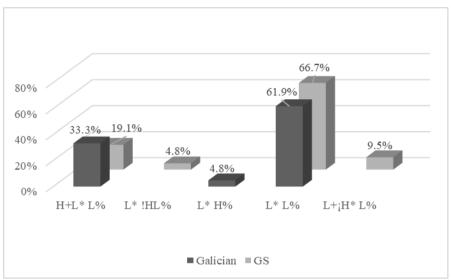
Figure 9. *Percentages of occurrence of the nuclear configurations of polite original questions (N = 42).*
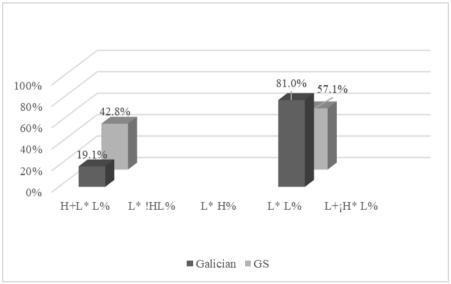

Figure 10. *Percentages of occurrence of the nuclear configurations of impolite original questions (N = 42).*

Regarding impolite original questions (Figure 10), the dominant pattern in GS is still the global fall one (57.1%), albeit with a slightly lower percentage than the one obtained for polite questions. The global fall pattern is followed by the hat pattern (42.8%), with a percentage that clearly surpasses the one observed for polite questions. In G, the global fall pattern is more pervading (81.0%), while the hat pattern shows only marginally (19.1%). Although in this case the percentages are much more conspicuous in G, we can conclude that the global fall pattern is the most widely used for impolite original questions in GS and G.

The last type of original questions that was elicited was counterexpectational questions. In the situations presented to the informants, they were supposed to be interacting with a good friend. The prompted question was a non-compromising type of question that showed surprise on the part of the person asking it, as illustrated in (5).

> (5) INTERVIEWER: You are talking to a friend who's telling you about her/his childhood. S/he tells you that, when s/he was a child, s/he was not allowed to go to school with pencils or pens. You are really surprised by this, as you cannot figure out how s/he managed to write and draw things. You ask her/him what s/he used to write things down.
> PROMPTED ANSWER: What on earth did you use to write things down?
> *E con que carallo escribías?* (G)
> *¿Y con qué puñetas escribías?* (GS)

As Figure 11 shows, the dominant intonational pattern for counterexpectational original questions in GS was the global fall pattern (47.6%), though both the hat pattern (28.6%) and the final circumflex pattern (23.8%) were used on a number of occasions. It is worth noting that in G, the circumflex pattern presents a slightly lower percentage of occurrence (9.5%), while the hat pattern presents exactly the same percentage of occurrence as in GS and the global fall pattern presents a slightly higher percentage than in GS (61.9%).

In sum, the data analysed regarding original questions reveal a high degree of coincidence between the patterns used in GS and G, as in all cases the global fall pattern is the most frequent one.
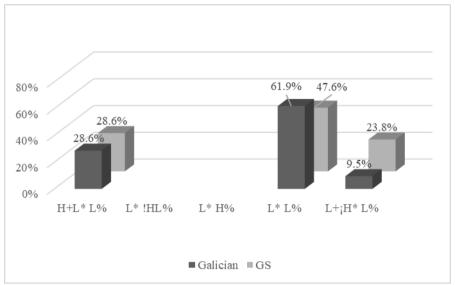
Figure 11. *Percentages of occurrence of the nuclear configurations of counterexpectational original questions (N = 42).*

5.2. Echo questions

Echo questions are so called because they repeat a question. The informants were presented with a conversational situation where they were supposed to be speaking to a friend of theirs in an informal scenario. Besides, the need of the informants to repeat a question as an interrogative in echo questions, illustrated in (6), was urged by the fact that the informants' friends had a sore throat, which made it difficult for her/him to understand their friend.

> (6) INTERVIEWER: You are talking to a friend. He tells you that he saw you last night, and then he asks you something. As he has a very sore throat, you are not sure you have understood, and so you need to ask him the question that you think he has asked you in order to make sure.
> INTERVIEWER (with a very sore throat): Where were you going last night?
> PROMPTED ANSWER: Where was I going last night?
> > *A onde ía antonte?* (G)
> > *¿A dónde iba anoche?* (GS)

In the case of neutral echo questions (Figure 12), the hat pattern is the most pervading pattern in both GS and G (90.5% and 76.2%, respectively). Besides, while GS shows a marginal occurrence of final rise-fall (4.8%) and final circumflex (4.8%), in G the final circumflex pattern is slightly more common (14.3%), with the global fall pattern as the marginal pattern (9.5%).

In order to check whether a non-neutral context could give rise to different intonational patterns, the informants were presented with a conversational context where the prompted interrogative utterance showed surprise regarding their friends' questions, i.e. they had to utter a counterexpectational echo question, exemplified in (7).

> (7) INTERVIEWER: You are talking to a friend of yours. All of a sudden, you friend asks you where you work now. You are surprised about the question, as s/he should know where you work. You ask her/him exactly the same questions that s/he has asked you showing your surprise.
> INTERVIEWER: Oh, by the way, where do you work now?
> PROMPTED ANSWER: Where do I work now?!
> *Onde traballo agora?!* (G)
> *¡¿Dónde trabajo ahora?!* (GS)

In counterexpectational echo questions (Figure 13) the hat pattern is the most common one, both in GS (71.5%) and in G (76.2%), followed by the final circumflex pattern (14.3% in both GS and G). One can observe the appearance of the rising pattern, which occurs in GS and is as frequent (14.3%) as the final circumflex pattern.

In general, as seen in the previous section for original questions, the most interesting result for the purposes of this paper is that data show once again a high degree of coincidence between the patterns used in GS and G.
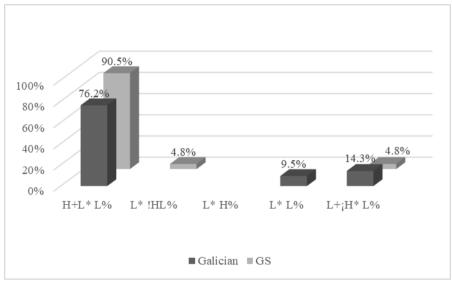
Figure 12. *Percentage of occurrence of the nuclear configurations of neutral echo questions (N = 42).*
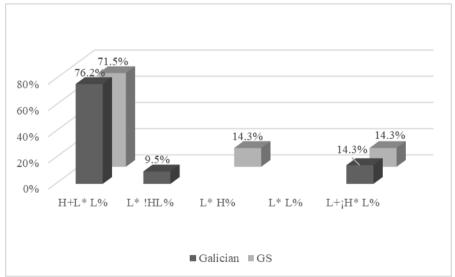

Figure 13. *Percentage of occurrence of the nuclear configurations of counterexpectational echo questions (N = 42).*

5.3. Reclamatory questions

Neutral reclamatory questions ask for the repetition of information that the interlocutor has already mentioned, either in the course of the current conversation or in previous occasions. They faced a situation where they had a memory flaw, as illustrated in (8).

> (8) INTERVIEWER: You are talking to a friend. He is telling you about a friend of his about whom he is always telling you stuff. You realise you cannot remember what his friend's name is, so ask your friend.
> INTERVIEWER: Last night we went out and had a few drinks. As usual, we had a great time.
> PROMPTED ANSWER: What did you say his name was?
> > *Como me dixeches que se chamaba?* (G)
> > *¿Cómo me dijiste que se llamaba?* (GS)

Reclamatory questions were also elicited in counterexpectational form, where the speaker was surprised by something mentioned by his/her interlocutor, which prompted him/her to ask for repetition, as exemplified in (9).

> (9) INTERVIEWER: You are talking to a friend of yours. He tells you that when his sister was a child, she used to drink a drink made with tar. You are utterly surprised by this. You ask your friend about the type of drink that his sister used to drink.
> PROMPTED ANSWER: What drink did you say she used to drink?!
> > *Que bebida bebía?!* (G)
> > *¡¿Qué bebida bebía?!* (GS)

As reflected in Figure 14, the majority of neutral reclamatory questions in GS presented the hat pattern (85.7%), which was also dominant in G with a slightly lower percentage of appearance (61.9%). In G, the global fall pattern was relatively frequent (38.1%). In GS, the global fall and the final circumflex pattern rarely appeared (9.5% and 4.8%, respectively).

In the case of counterexpectational reclamatory questions (Figure 15), the hat pattern was the most common one in both GS (47.6%) and G (57.1%), although the percentages of occurrence of the dominant pattern were lower than in the case of neutral reclamatory questions. The final circumflex pattern was relatively often used (38.1% in GS, 28.6% in G), while the global fall was much less widely used (14.3% in both GS and G).
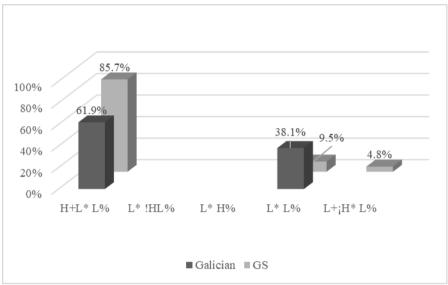
Figure 14. *Percentage of occurrence of the nuclear configurations of reclamatory questions (N = 42).*

5.4. Non-informational original questions

This group comprises the types of Wh- questions that show the illocutionary force of a command or an offer and therefore, are not genuine questions. In other words, the presence of a Wh- word and the resulting word order makes the elicited utterances into questions regarding their form, which may have an impact on the intonation patterns used to utter them.

5.4.1. Imperative questions

A Wh- question may have the illocutionary force of a command, i.e. the verbal act of asking somebody to do something. As happens with the other types of questions, the degree of politeness of imperative questions may vary depending on the degree of familiarity with the interlocutor as well as the degree of insistence of the command. The neutral case, illustrated in (10), is one in which the speaker asks something for the first time, and the speaker's interlocutor is a friend who is asked to do something simple, which does not entail any inconvenience. In (10), the speaker is not really asking 'why' his/her interlocutor is not passing him/her the

tangerines, but s/he is clearly asking the other person to pass him/her the fruit. The function of the interrogative form is mitigating the force of the command.
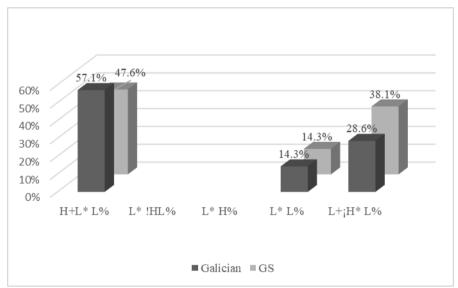

Figure 15. *Percentage of occurrence of the nuclear configurations of counterexpectational reclamatory questions (N = 42).*

(10) INTERVIEWER: You are having lunch with a bunch of friends. You fancy a tangerine for dessert. You realise you cannot reach the tangerines, as they are at the other end of the table. You ask your friend Manolo to get them to you.

   PROMPTED ANSWER: Manolo, please… Why don't you get me the tangerines?

   Manolo, por favor... Por que non me pasas as mandarinas? (G)

   Manolo, por favor... ¿Por qué no me pasas las mandarinas? (GS)

As Figure 16 evinces, the dominant intonational pattern in imperative questions is the global fall (95.2% in GS, 100% in G), while the hat pattern is clearly marginal in GS (4.8%).
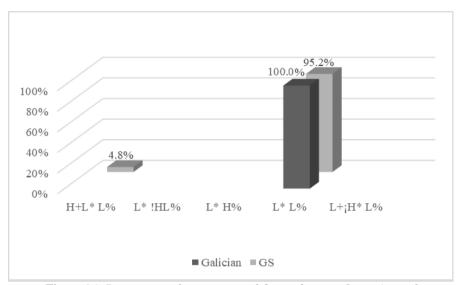
Figure 16. *Percentage of occurrence of the nuclear configurations of neutral imperative questions (N = 42).*

As happened with original questions, in the case of imperative questions the informants were presented with a conversational situation that prompted an impolite question in an informal situation (11), as well as with a situation that required a degree of insistence on the part of the informant (12).

(11) INTERVIEWER: You are talking to some friends at university. Another friend of yours arrives and interrupts you, as he usually does. You are really fed up with him. Today you want to show him that his attitude is annoying, and so you ask him to shut up.
PROMPTED ANSWER: But why don't you shut up?!

> *Pero... Por que carallo non me deixas?!* (G)
> *Pero... ¡¿Por qué carajo no te callas?!* (GS)

(12) INTERVIEWER: You are talking to a good friend of yours. You would like her to come round to yours, but he always says that he cannot come, as he has loads to do. Today you invite him again, and he says that he cannot. You ask him why he is not willing to come to yours.
PROMPTED ANSWER: Come on, why don't you come round to mine?

> *Vai, veña, home, por que non vés á casa?* (G)
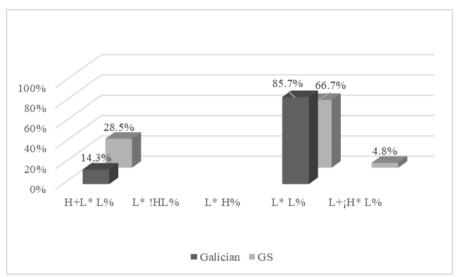> *Va, venga, hombre, ¿por qué no vienes a casa?* (GS)

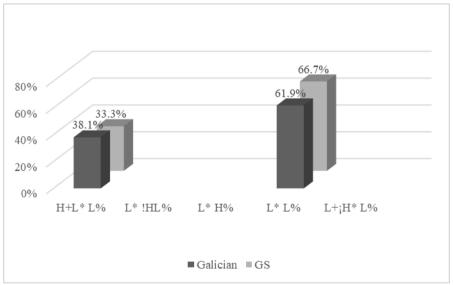Figure 17. *Percentage of occurrence of the nuclear configurations of impolite imperatives (N = 42).*

Figure 18. *Percentage of occurrence of the nuclear configurations of insistent imperatives (N = 42).*

Unsurprisingly, the dominant intonational pattern in the case of impolite imperative questions (Figure 17) and insistent imperative questions (Figure 18) is the global fall (66.7% to each of them in GS, 85.7% to impolite imperatives and 61.9% to insistent imperatives in G). In the case of impolite imperative questions, the hat pattern is relatively frequent in GS (28.5%), while it remains slightly lower in G (14.3%). Regarding insistent imperative questions, this pattern is roughly equally frequent (33.3% in GS, 38.1% in G). In both cases, the tendencies run parallel in the two languages studied.

5.4.2. Offer questions

The last group of Wh- questions that were elicited were not genuine questions, either, as they had the force of offers. In the first case, the informants were presented with a situation that required them to offer an immaterial good, such as a piece of advice, to their interlocutor (13). In the second one, the informants were prompted to offer a material good to their interlocutors (14). In both situations, the informants were supposed to be speaking to a friend of theirs with whom they got on well.

(13) INTERVIEWER: You are talking to a good friend of yours. She is telling you about the party that she's organising. She has decided she is going to invite many friends, and wonders whether she should invite someone else. She asks you about that, and you give her an idea.
INTERVIEWER: I have invited Ana, Laura, Pedro, Juan… Whom else do you think I should invite?
PROMPTED ANSWER: Why don't you invite Manolo?
Por que non convidas ao Manolo? (G)
¿Por qué no invitas a Manolo? (GS)

(14) INTERVIEWER: A friend of yours has come round to yours. You welcome her/him and ask him what s/he would like to drink.
PROMPTED ANSWER: What would you like to drink?
Que che apetece que che sirva? (G)
¿Qué te apetece que te sirva? (GS)

The predominant pattern for these questions, which have not been studied in other Peninsular varieties, was the global fall one, which attained 90.5% in both GS and G for immaterial offers (Figure 19), and 81% in GS and G for material offers (Figure 20). Figure 20 also shows that material offers present a wider variety of patterns than immaterial ones, with a relative low incidence of the rising pattern in G (14.3%), which becomes residual in GS (4.8%).
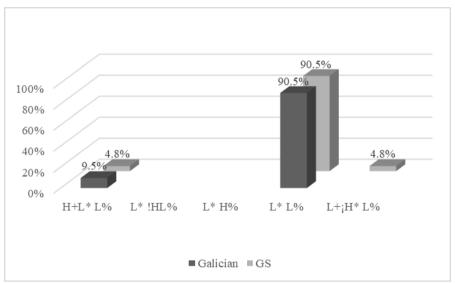
Figure 19. *Percentage of occurrence of the nuclear configurations of immaterial offers (N = 42).*
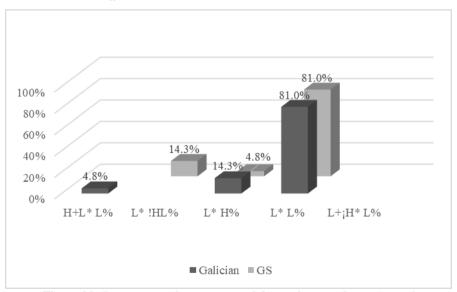

Figure 20. *Percentage of occurrence of the nuclear configurations of material offers (N = 42).*

5.5. Summary of the results and hypotheses

As the results explored in previous sections show, the intonation of Wh- questions in G and GS as uttered by bilinguals present a very high degree of coincidence. This is not chance and must therefore have a linguistic explanation. The hypotheses that can be put forward to explain the striking degree of coincidence between G and GS Wh- intonation patterns are two, which in this section are referred to as Hypothesis 1 (Hp1) and Hypothesis 2 (Hp2).

Hp1: *Area commonality hypothesis*. The similarity between G and GS Wh-intonation patterns can be explained in diachronic terms by postulating that the variety of Spanish imported into Galicia (see Section 2) displayed the same Wh-intonation patterns as present-day GS. In other words, the Wh- intonation of GS is the same as the Wh- intonation of some other variety (or varieties) of Spanish spoken outside Galicia (most likely either in the Central or in the Northern part of Spain, as Southern Spanish varieties are less likely to share intonational features with GS).

Hp2: *Direct transfer hypothesis*. As mentioned in Section 1, bilingual speakers involuntarily transfer some of the intonational characteristics of their dominant language to the non-dominant language. In this case, bilingual speakers with G as their dominant language transfer the intonation of G to GS. This would explain the similarity between G and GS Wh- intonation patterns.

6. DISCUSSION

The previous section has presented the results of the intonational analysis carried out in each of the studied utterances according to the classification of Wh-questions provided in section 3.1. In this section, the intonation of Wh- questions in G and GS is compared with the intonation of those sentence types in other varieties of Spanish spoken in the Iberian Peninsula. The comparison will be carried qualitatively in phonological terms (Section 6.1) and quantitatively from a more phonetic perspective (Section 6.2). At the end of this part (Section 6.3), the hypotheses put forward in Section 5.5 are discussed in the light of the results of such comparisons.

6.1. Phonological comparison

For the comparison of the intonations of Wh- questions in G, GS and other varieties of Spanish spoken in the Iberian Peninsula, the classification of Wh-questions provided in Table 2 is followed. For G and GS, the focus lies on the dominant pattern for each of the types of Wh- questions analysed. For other

varieties of Spanish, the patterns presented in Section 4 are re-visited. Table 4 offers and an overview of the comparison.

The first type of questions elicited was original questions, subdivided into neutral, polite, impolite and counterexpectational original questions. In this study, neutral original questions share the same dominant intonational pattern, i.e. the global fall pattern, in G, GS and CPS, as the three varieties use the L* L% tune. All other varieties of Spanish use different tunes, labelled as "hat pattern", "final circumflex" or "final rise". This means that, as far as the most basic type of Wh- questions is concerned, G and GS behave like CPS and differ from all other varieties. The global fall pattern is also predominant when the informants utter polite original questions in GS and G, which points to the fact that in GS and G politeness is not marked by means of changes in the nuclear configurations of the questions. In this regard, CPS differs from GS and G, as the former tends to present a rising nuclear pattern to enhance the degree of politeness of the Wh- question, i.e. rising intonation is associated to politeness in Wh- questions in CPS. Regarding impolite original questions, the global falling pattern is the most widely used one in GS and G; since there are no data available for CPS, this comparison cannot be fully drawn. Last, counterexpectational original questions are realised by means of a dominant falling pattern in GS and G, while in CPS the circumflex pattern is the dominant one, which might indicate that CPS marks the degree of surprise intended by the speaker by means of this intonation pattern.

The second big group of questions elicited in this study was that of echo questions, subdivided into neutral and counterexpectational questions. In GS and G, the dominant pattern is the hat pattern (i.e., H+L* L%). In the other varieties of which there are data, the dominant pattern is the circumflex one, which can appear in different forms (L+H* L% in Andalusian Spanish, L+¡H* L% in Asturian Spanish and L+H* !H% in Cantabrian Spanish).

The third group of questions that was prompted in this study comprised reclamatory questions, subdivided into neutral and counterexpectational questions. As happened with the previous group, GS and G present the hat pattern (H+L* L%) as the dominant pattern for reclamatory questions. In the rest of the varieties, neutral and counterexpectational reclamatory questions are mostly realised with a rising pattern (L* H%), which in Asturian coexists with the H+L* L% tune, predominant in G and GS.

The fourth and last big group of questions elicited included non-informational questions, i.e. utterances that have an interrogative form and the illocutionary force of a command or an offer. This type of Wh- questions was subclassified into imperative questions –neutral, impolite and insistent–, and offer questions – material

and immaterial. In the case of neutral imperative questions, the dominant intonational pattern is the global fall one (L* L%) in GS and G, while other varieties (Andalusian, Asturian, Cantabrian and Central Peninsular Spanish) prefer the hat pattern. Regarding insistent imperatives, G and GS show again a preference for the global fall pattern, while CPS prefers a complex tune (L+¡H* LH%).

As a final remark, the overwhelming majority of Wh- intonations described in this Section end with a low tone (L%), and can thus be considered falling. This is not surprising, since the intonation of Wh- questions usually describes a falling pattern in all Romance languages (Frota and Prieto, 2015), including Spanish varieties (Prieto and Roseano, 2010). The only Wh- question that displays a rising tune (albeit only in some varieties) is reclamatory questions, which are also the only rising Wh- questions in other language families (see Bolinger, 1989, for English).

Summarising, the intonation patterns of G and GS Wh- questions are the same. They differ, at least phonologically, from the patterns used in neighbouring varieties. The cases where the intonation patterns of G and GS coincide, at least partly, with the patterns used in other Peninsular varieties are only two: 1) G and GS share the nuclear configuration of neutral original questions with CPS; 2) one of the two nuclear configurations used in Asturian Spanish for counterexpectational reclamatory questions is also the dominant one in G and GS.

6.2. Dialectometric comparison

In order to test the capacity of a phonetic comparison to bring up the existence of further similarities between Galician and the variants of Spanish at hand, a dialectometric analysis was carried out. For this purpose, a broad phonetic transcription of intonational patterns was used (as suggested by Hualde and Prieto, 2016, and implemented for dialectometric purposes in Prieto and Cabré, 2013, and in Roseano *et al*., 2017). The broad phonetic transcriptions were processed by means of Gabmap (Nerbonne *et al*., 2011, Leinonen *et al*., 2016), a web application that allows users to make mappings and statistical analyses of dialect data. The statistical analyses carried out by the application are multidimensional scaling (or MDS) and cluster analysis. MDS explores the extent to which the studied varieties form a *continuum*, while cluster analysis classifies the varieties and defines linguistic areas (in this case, geoprosodic areas). The two techniques are, thus, complementary, insofar as MDS displays *continua*, while cluster analysis can be used to divide such *continua* into blocks. The result of the application of MDS analysis to the broad phonetic transcriptions of intonational contours is represented in a virtual bidimensional space map (Figure 20). Figure 20 shows that G and GS virtually overlap, which means that their intonation patterns are

extremely similar. Additionally, the intonational varieties that appear more closely connected to G and GS are Asturian Spanish and CPS.

Wh-question type	Andal.	Manch.	Astur.	Cantabr.	Leon.	CPS	GS	Galician
Neutral original	H-L* L%, L-¡H* L%	H-L* L%, L-H* L%	H-L* L%, L* H%	H-L* L%	L* H%, L-H* L%	L* L%	L* L%	L* L%
Polite original						L* H%	L* L%	L* L%
Impolite original							L* L%	L* L%
Counterex. original				L-H* !H%		L-H* L%	L* L%	L* L%
Neutral echo	L-H* H%		L-¡H* L%	L-H* !H%		L-¡H* L%	H-L* L%	H-L* L%
Counterex. echo						L-H* H%, L-H* LH%	H-L* L%	H-L* L%
Neutral reclam.			L* H%, H-L* L%	L* H%		L* H%	H-L* L%	H-L* L%
Counterex. reclam.						L* H%	H-L* L%	H+L* L%
Neutral imperative	H-L* L%		H-L* L%	H-L* L%		H-L* L%	L* L%	L* L%
Impolite imperative							L* L%	L* L%
Insistent imperative						L-¡H* HL%	L* L%	L* L%
Immaterial offer							L* L%	L* L%
Material offer							L* L%	L* L%

Table 4. *Predominant intonation patterns for each type of Wh-question (empty cells mean that no descriptions are available).*
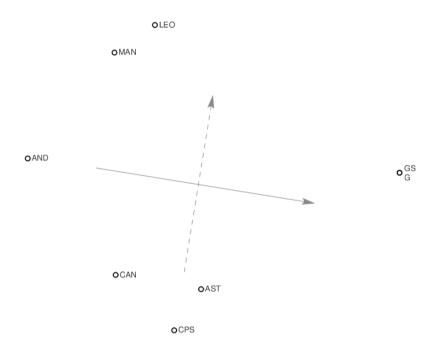
Figure 20. *MDS mapping of the intonation patterns used for Wh-questions in some Romance varieties of the Iberian Peninsula (G = Galician, GS = Galician Spanish, AST = Spanish spoken in Asturias, CPS = Central Peninsular Spanish, CAN = Cantabrian Spanish, AND = Andalusian Spanish, MAN = Manchego Spanish, LEO = Spanish spoken in León).*

The cluster analysis provided in Figure 21 (which uses the complete-linkage clustering methods) divides the continuum into geoprosodic blocks. As can be observed in Figure 21, it is confirmed that G and GS form a clearly separated block. The other two blocks include a) Asturian, Cantabrian and CPS (which is the variety that lies closer to G and GS), b) Leonese, Manchego and Andalusian Spanish. Since this paper does not aim at discussing the classification of the varieties spoken outside Galicia, no conclusions regarding the second and the third cluster are to be provided.
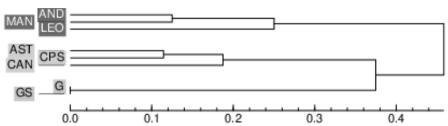
Figure 21. *Dendrogram representing the result of the cluster analysis of the tunes used in Wh- questions in some Romance varieties of the Iberian Peninsula (G = Galician, GS = Galician Spanish, AST = Spanish spoken in Asturias, CPS = Central Peninsular Spanish, CAN = Cantabrian Spanish, AND = Andalusian Spanish, MAN = Manchego Spanish, LEO = Spanish spoken in León).*

The most relevant conclusion of this study is that, both in phonological terms (Section 6.1) and in phonetic terms (Section 6.2), the intonation patterns of Wh- questions in G and in GS are extremely similar. In addition, they clearly differ from the intonation patterns of Wh- questions in other Spanish varieties spoken in the Iberian Peninsula. Moreover, the intonation patterns Wh- questions in G and GS coincides only occasionally with those in other Spanish varieties.

6.3. Evaluation of the results

As observed in Section 5, the intonation patterns of Wh- questions in G and GS are strikingly similar. Such a finding entailed the additional task of finding the way to account for that high degree of similarity. In order to find an answer, two hypotheses, called the *area commonality hypothesis* (Hp1) and the *direct transfer hypothesis* (Hp2), were put forward. In order for Hp1 to be true, the intonation of Wh- questions would have to be the same in at least one other Spanish-speaking area outside Galicia. The results of the qualitative/phonological (Section 6.1) and quantitative/phonetic (Section 6.2) analyses show that that is not the case. It must therefore be inferred that the data do not support Hp1[4]. On the other hand, the high

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[4] Hp1 should be tested with a broader dataset including not only information-seeking Yes/No questions (which show the existence of a dialectal continuum, as stated in López Bobo *et al.*, 2012, Bleortu and Cuevas Alonso, 2014, 2015; Fernández Rei, 2018; Roseano, 2018), but also Wh-questions as well as a rich set of other sentence-types that –with very few exceptions– have been neglected so far in geoprosodic studies about Peninsular Spanish, like confirmation-seeking Yes/No questions, reflex questions, broad focus

degree of coincidence between G and GS as spoken by bilinguals can be explained in terms of direct transfer (Hp2), which has been described in a number studies that deal with similar language contact situations (see Section 2 for a review).

7. CONCLUSIONS

As stated in the Introduction, the research work presented in this paper aimed at covering two main objectives. The more specific objective comprised the presentation, description and comparative analysis of the intonational patterns of Wh- questions in G and GS, which was carried out in Section 5. The analysis provided has proven that G and GS mostly use two intonation contours in Wh- questions: the *global fall* and the *hat pattern*. These two contours account for roughly 90% of the intonation patterns that this paper has described. In addition, this paper has proven that the Wh- question intonation contours in G and GS are extremely similar.

The second objective was of a more general and theoretical kind, and aimed at finding an explanation for the intonational situation described above. As observed in Section 6, the *direct transfer* hypothesis has proven to be the best option available, insofar as GS does not use the intonation of other Peninsular varieties of Spanish but adopts the intonation of G Wh- questions. In fact, the analysis of 546 Wh- questions in G and GS collected by means of the DCT method has shown that the intonational patterns of the observed types of Wh- questions in G are transferred to Wh- questions in GS.

These findings confirm those of previous studies, in particular those by Fernández Rei (2016:155-156), which have found that "Galician conserves its own highly characteristic intonation, transferring it to the Spanish spoken in Galicia […], but seemingly not affected by contact with this variety of Spanish".

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statements, statements of the obvious, uncertainty statements, suspended sentences, unsubordinated sentences, orders, vocatives, and so on. Such enlarged comparison will be possible when the data about all these sentence types are available for Peninsular varieties.

8. REFERENCES

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