Sp_ToBI

Coordinator: **Eva Estebas-Vilaplana.** ***Participants:*** **Luisa Astruc, Valeria Arana, Bettiana Blazquez, Mercedes Cabrera, Alejandra Dabrowski, Ana Estrella, Leopoldo Labastía, M. Dolores Ramírez Verdugo, Francisco Vizcaíno Ortega.**

The aim of our talk is to present some of the latest findings in the transcription of Sp_ToBI in four different varieties of Spanish: Castilian (Cast-Sp), Canarian (Can-Sp), Argentinian (Arg-Sp) and Ecuadorian (Ecu-Sp). In particular, we analyse the tone shapes associated to stressed syllables and to phrase edges in the following intonation contours: 1) declarative sentences (including sentences with a long subject), 2) contrastive sentences, 3) yes-no questions (including a disjunctive), 4) wh-questions, 5) commands (including an exhortation) and 6) reiterative sentences. The different types of sentences were elicited in a semi-spontaneous way, that is, we presented several contexts to the speakers and they were asked to reply according to each situation. Finally, we will also discuss the intonation patterns of Madrid Spanish collected and analysed within the international research project AMPER (*Atlas Multimedia de la Prosodia del Espacio Románico*, Multimedial Prosodic Atlas on Romance Areas).

1. Cast-Sp

In Cast-Sp, we have found two levels of prosodic structure, the intonation phrase (marked with H%, !H% or L%) and the intermediate phrase (marked with H-, !H- and L-). This is in line with the works of Nibert (2000) and Hualde (2002) but differs from Sosa (1999) and Beckman et al. (2002) who do not advocate for an intermediate level of phrasing in Spanish. In the corpus of sentences that have been examined, we have found the following pitch accents: L+H*, L+!H*, H+L* and L* in nuclear position and L*+H, L+H* and L+>H* in prenuclear position. The combinations of nuclear accents and edge tones found in our corpus are the following. In declarative sentences prenuclear accents show an early rising F0 movement with a delayed peak (L+>H*). This accent, proposed in Face and Prieto (2006/2007), contrasts with the late-rising accent (L*+H) typical of prenuclear yes-no questions and the early rising accent with non-delayed peak (L+H*) found in the nuclear position of contrastive and reiterative sentences and in the nuclear and prenuclear positions of disjunctive sentences. The final pitch movement of a declarative shows a progressively falling contour beginning after the last prenuclear accent. We have described the final accent of a declarative as L+!H* (followed by L-L%) rather than H+L* on the basis that single-accented declaratives are analysed as L+H*L-L%. This combination is also found for contrast. Finally, if the declarative has a long subject an intermediate phrase marked with H- signals the end of the subject. Yes-no questions are analysed as L*+H in prenuclear position followed by L* H-H%. Disjunctive sentences show L+H* pitch accents both in prenuclear and in nuclear positions ending with L-L% edge tones. An H- phrase accent is produced after the first phrase of the disjunction. Wh-questions and commands show the same tonal structure, namely, L+>H* in prenuclear position followed by H+L* L-L%. Reiterative sentences are described as a prenuclear L+>H* followed by L+H* H-H%. Other tonal combinations that have been found in our data include L*H-L% (for an exhortation) and L+H*H-!H% (for a sustained tone).

2. Can-Sp

In Can-Sp, following Sosa (1999) and Beckman et al. (2002), we propose only one level of prosodic structure, the intonation phrase (marked with H%, !H% or L%). In addition to the nuclear pitch accents aforementioned for Cast-Sp, we have also found the tonal shape H+H* (as in Sosa, 1999) in such position. In prenuclear position, we haven't found L*+H and L+>H* in our variety in these utterances, but only L+H* and H*. The combinations of nuclear accents and edge tones found in our corpus for declarative intonation with prenuclear L+H* or !H* are the following: L* or H+L* L%. We leave open the question as to whether or not the early rise with delayed peak, that is, L+>H*, functions as a contrastive unit both across sentence types and across different sections of the intonation contour. As for contrastive focus and exhortation, the most explanatorily and descriptively adequate phonological representation in nuclear position is L+H* L%. A recurrent feature of Can-Sp interrogative utterances is found across a wide variety of question types; thus, yes-no questions, wh-questions, and reiterative questions all show H+H* L% in the nuclear contour. In relation to the prenuclear section, this is accounted for by either L+H* or H*, the sequence of the latter being the series which best describes observed high sustained pitch. The type which exhibits a different behaviour is the alternative question, whose nuclear pattern is L+H* H% for the first option offered, and H+L* or L* L% for the second option. We analyse these two parts as a single utterance with two intonation phrases. The contour in Can-Sp commands stands in sharp contrast with that of Cast-Sp, for its nuclear tonal sequence is L*+H !H% .

3. Arg-Sp

Buenos Aires Spanish presents some typical characteristics which result from the interaction between Spanish and Italian due to immigration in the early twentieth century. Two levels of prosodic structure have been found to occur in this variety (i. e. the intermediate phrase and the intonation phrase). Declarative sentences present a variety of pitch accents in pre-nuclear position (H*, H*+L, L*+H, L+H*), and H* or L* in nuclear position, with a predominance of the latter. A typical configuration for declaratives is %L H*+L !H*+L L* L-L% (the slide pattern discussed by Gurlekian and Colantoni, 2004). The pre-nuclear tones in yes-no questions observed so far are H*, H*+L, L*+H, combined with the nuclear tones H*, L+H*. Yes-no questions in this variety of Spanish present a typical configuration: the voice rises from the tonic syllable to the post-tonic, and then it falls, but not to the baseline. This has been represented by the following sequence: H* H-L%. Wh-questions are characterised by a low ending (an L* nuclear accent and L-L%), preceded by H* or H*+L pre-nuclear accents. A common configuration of tones in wh-questions is %L H* L* L-L%. As regards imperative intonation, commands are issued on a variety of nuclear tones: L*, H*, and L*+H, preceded by H*, H*+L or L*+H pre-nuclear tones. The combinations of nuclear tone, phrase accent and boundary tone are the following: L* L-L%, H* L-L%, L*+H L-L% or H* H-H%. Requests are often intoned with a L*+H or a H*+L nuclear tone. Pre-nuclear accents include H*, H*+L and L*+H. A common combination of nuclear tone, phrase accent and boundary tone in requests is L*+H L- L%, representing a rise within the tonic syllable and a fall in the post-tonic.

4. Ecu-Sp

When analyzing Ecu-Sp, in general, and our Quito-Spa data, in particular, we have found the following pitch accents: H*, L+H*, L+!H*, H+L*, L+¡H* and L* in nuclear position and L*+H, L+H* and L+>H* in prenuclear position. The combinations of nuclear accents and edge tones that we have analyzed are the following. In Ecu-Sp declarative sentences, we have represented prenuclear rises as L+>H* (with a delayed peak), since the F0 maximum was found to be located after the accented syllable, as also reported in Estebas-Vilaplana (2006). Doing so, we have followed the studies of Prieto, van Santen and Hirschberg (1994, 1995), Nibert (2000) and the recent studies of Face and Prieto (2006/2007). The final pitch trajectory of declarative sentences shows a falling contour that begins after the last prenuclear accent. This contour has been described as L+!H* followed by L-L% edge tones. On other hand, declarative sentences with a long subject show an H- phrase accent after the subject, as in Cast-Sp. Ecu-Sp yes-no questions are characterized by a nuclear pitch accent such as L*+H followed by high edge tones (H-H%). Disjunctive sentences show L+H* in prenuclear position followed by a nuclear L*. The falling edge tones of these sentences are described as L-L%. Partial interrogatives or wh-questions are described as L+>H* or H* in prenuclear position followed by L+¡H* L-L% or L+H* H-H%. Commands also show L+>H* in prenuclear position but are followed by a nuclear L* and L-L% edge tones.

5. Madrid Spanish – AMPER Spain

Finally, the results of Madrid Spanish are presented following the methodology of the AMPER project. Using three different stimuli, we elicited collaborative dialogues (with a Map Task), semi-spontaneous speech (with a directed interview), and read speech (with a script). The semi-spontaneous and the read corpus contain declaratives, questions, requests, commands, and exhortations. The Map Task contains information-seeking and confirmation-seeking questions (respectively ‘queries’ and ‘checks’, as in Grice and Savino, 2003). Declaratives have L+H* and L+!H* nuclear accents. In our data, declaratives, especially in reply to a question, may end in a small rise, which we have analysed as (L-H%). Exhortations and commands may have different combinations of nuclear accents and terminal tones. We have found exhortations which we transcribe as L+H* L-L%, and some commands with a L+H* nuclear accent, followed by falling terminal tones (L*+H L+H* L-L%). All types of questions, frequently have intermediate accents between the prenuclear and the nuclear ones. Wh-questions can have a rising-falling (‘circumflex’) boundary as in L+>H* L+H* H-L%. Reiterative questions may also have early rising pre-nuclear and nuclear accents and a rising-falling boundary tone (‘circumflex’ tone), L+H* L+H* H-L%. Yes-no questions show more than one possible combination of nuclear accent and terminal tones. Rising boundary tones (H-H%), tend to be used in formal registers and falling boundary tones (L-L%) in less formal contexts. Politeness and deference tends to be conveyed by means of very wide pitch excursions. Yes-no questions elicited with a Map Task fall into two types: information-seeking (queries) and confirmation-seeking (checks). Pre-nuclear accents are: (L+>H*), a simple rise (H*), and a late rise L+H*. Checks usually receive the L+>H* pre-nuclear accent. Query questions receive the late-rising pre-nuclear accent (L+H*) and may be introduced by ‘que’ and followed by a falling boundary tone (L+H* L-L%). Since L+H* is also used for the pre-nuclear accent of declaratives, which is phonetically different and also contrastive, we might need a different label for this one, in line with the proposal in Face and Prieto (2006/2007). Nuclear accents, for

both types of yes-no questions, are (L*), and also L+H*. Rising boundary tones are most common (H-H%), although sustained and falling boundary tones are also found in the data. We have also found tag questions, which are used to request information and which are always accented and followed by a small rise; some instances of expletives ('jolín'), of vocatives ('hombre'), and of other extra-sentential elements, which receive a non-prominent intonation or a very compressed pitch range.

REFERENCES

Beckman, Mary, Díaz-Campos, Manuel, Tevis McGory, Julia, and Morgan, Terrell (2002). "Intonation accross Spanish in the Tones and Break Indeces Framework". *Probus*, 14. 9-36.

Colantoni, L. and J. A. Gurlekian (2004). "Convergence and intonation: historical evidence from Buenos Aires Spanish". *Bilingualism: Language and Cognition*, 7. 107-119.

Estebas Vilaplana, Eva (2006): *"Word edge tones in Spanish prenuclear accents"*, *Estudios de Fonética Experimental*, 15. 11-42.

Face, Timothy and Pilar Prieto (2006/2007). "Rising accents in Castilian Spanish. A revision of Sp_ToBI". *Journal of Portuguese Linguistics*, 5.

Grice, M. and Savino, M. (2003) "Map Tasks in Bari Italian: Asking Questions about Given, Accessible and New Information". *Catalan Journal of Linguistics*, 2. 153-180.

Hualde, José Ignacio (2002). "Intonation in Spanish and the other Ibero-Romance Languages: overview and status quaestionis". Carolina Wiltshire and Joaquim Camps (eds.). *Romance Phonology and Variation.* Amsterdam: Benjamins. 101-116.

Nibert, Holly (2000). *Phonetic and Phonological Evidence for Intermediate Phrasing in Spanish Intonation.* PhD Thesis. Univeristy of Illinois at Urbana-Champaign.

Prieto, Pilar, J. van Santen and Julia Hirschbergh (1994): "Patterns of F0 peak placement in Mexican Spanish", *Proceedings of the ESCA/IEEE Workshop on Speech Synthesis*, New Paltz, New York. 33-37.

Prieto, Pilar, J. van Santen and Julia Hirschbergh (1995): "Tonal alignment patterns in Spanish", *Journal of Phonetics*, 23. 429-451.

Sosa, Juan Manuel (1999). *La entonación del español*. Madrid: Cátedra.