Declarative utterances in Buenos Aires Spanish

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Abstract

This chapter aims to explore an aspect of the interface between prosody and pragmatics by examining the contribution of intonation to the process of utterance interpretation in spontaneous speech. Buenos Aires Spanish has three nuclear pitch accent + boundary tone configurations associated with declarative utterances: (a) high-falling (H+L* L%); (b) low (L* L%); (c) rising-falling (L+H*+L L%). All three can be used to assert a given state of affairs, but each encodes a different pragmatic meaning, associated with the strength and emphasis with which the state of affairs is communicated and with the type of cognitive effect to be achieved by the utterance. The prosodic analysis is carried out using the Autosegmental-Metrical approach, and the pragmatic analysis follows Relevance Theory.

Keywords: intonation – pragmatics – falling intonation – relevance

Index terms: assertions – Argentinean Spanish – falling nuclear tone configurations – procedural encoding – propositional attitude – Relevance Theory – speech acts – spontaneous speech

1. Introduction

There is widespread agreement that intonational meaning is mostly pragmatic, in the sense that intonation makes a significant contribution to the inferential process of utterance interpretation. Intonation supplies both paralinguistic and properly linguistic input to this process. It not only provides indexical information about the speaker, but also about the way an utterance contributes to the propositional content and to the construction of discourse (House, 2006).

Understanding an utterance involves decoding and inferring the speaker's intended meaning: what set of contextual assumptions the speaker intended the hearer to use in interpreting his utterance, what he intended to say, what he intended to imply, and his intended attitude to what was said and implied (Wilson, 1994). The speaker's intended attitude has been extensively studied by Speech Act Theory (Searle, 1969).

Recent developments in pragmatic theory have opened promising avenues in the study of intonational meaning. Among them, Relevance Theory (Sperber & Wilson, 1995, Wilson & Sperber, 2004), a cognitive neo-Gricean approach to pragmatics, has made interesting proposals regarding the interpretation of speech acts and the contribution of intonation to the process of understanding the speaker's meaning. At the same time, progress in intonational phonology has enhanced our understanding of the range of pragmatic meanings that can be encoded by intonation. The articles in Prieto and Roseano (2010), for instance, explore the nuances of pragmatic import encoded by different tone configurations in several varieties of Spanish.

This chapter aims to examine the different nuclear accent plus boundary tone configurations involved in making assertions in Buenos Aires Spanish (BA Spanish) using the

framework provided by the Autosegmental-Metrical Theory of intonation and Relevance Theory. The special status of the nuclear accent – the last pitch accent in the intonational phrase – is recognised (Ladd, 2008: 131-134,257-259), as the nuclear accent configuration is considered to affect the pragmatic value of the whole intonational phrase.

The data consists of spontaneous speech, which provides a fully contextualised example of the way intonation is used in the variety of Spanish under scrutiny. As Face (2003) has pointed out, there are major differences between the intonation of Spanish declaratives in lab speech and spontaneous speech. Differences in the length and complexity of the utterances, the type of rising pitch accent, F0 peak alignment, downstepping, final lowering and deaccenting make spontaneous speech worth exploring, especially when an attempt is made to relate intonation to its pragmatic meaning (see also Henriksen, Armstrong & García Amaya, this volume).

This chapter is organised as follows. First, the theoretical frameworks used in the intonational and pragmatic analyses are introduced. The next section presents the data and the methodology employed. Then, three intonational configurations are discussed and contrasted in relation to different aspects of the pragmatic framework adopted. Some quantitative information is presented, and the pragmatic effects are evaluated in the light of universal aspects of falling intonation and particular aspects of the variety under discussion. Finally, the relative contribution of each of these configurations is summarised, along with the role they play in the identification of illocutionary force and propositional attitude.

2. Theoretical background

The prosodic analysis of the data is carried out in the Autosegmental-Metrical (A-M) framework of intonational phonology (Ladd, 2008; Pierrehumbert, 1980). Intonational contours are interpreted in terms of high (H) and low (L) tonal targets, and are made up of two types of units: pitch accents (T*), associated with prominent syllables, and boundary tones (T%) at the edge of intonational phrases (IPs).[1] An application of the A-M framework to the analysis of intonation in BA Spanish, using the Sp_ToBI transcription system, can be found in Gabriel et al., (2010).

The pragmatic analysis follows Relevance Theory (RT) (Sperber and Wilson, 1995; Wilson and Sperber, 2004), an inferential theory of cognition and communication which has been developed from Grice's proposals. Information is relevant when it connects with other (background) information the hearer has – the context – in a productive way, yielding cognitive effects, or improvements in the hearer's representation of the world. These effects are mainly of three types: contextual implications, or conclusions that cannot be derived from new information or from the context independently, but only from a productive combination of both, revisions leading to the strengthening of background information, and revisions leading to the abandonment of background information. Revisions modify the strength with which assumptions are held, that is the degree of confidence with which they are entertained: they either make them stronger (more certain), thus strengthening them, or weaker (less certain), and may lead to their abandonment.[2] Relevance can be assessed in terms of the impact of new information within the

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[1] The data in this paper is segmented both into intonational phrases and intermediate phrases, using the criteria in Gabriel, Feldhausen and Pešková (2011) to segment the latter.
[2] An assumption is a mental representation of a state of affairs which is treated by the mind as a true, or probably true, description of the actual world (Sperber & Wilson, 1995: 74).

context of already existing information. The more cognitive effects information triggers, the greater the relevance. Processing information involves cognitive effort of perception, memory and inference. The greater the effort, the less relevant the information will appear to be; the lesser the effort, the more relevant it will appear to be. Greater effort will be acceptable only when it leads to greater cognitive gain.

Languages contribute two types of input to the process of pragmatic interpretation: conceptual and procedural. Procedural devices (discourse connectives, pronouns, determiners, etc.) encode processing instructions which reduce cognitive effort by guiding the hearer to the speaker's intended interpretation (Blakemore, 1987; Wilson & Sperber, 1993; Leonetti & Escandell-Vidal, 2004). Intonation has also been analysed as a procedural device with pragmatic import (Escandell-Vidal, 1998, 2002, 2011a, 2011b; Espinal&Prieto, 2011; House, 1990, 2006; Wilson & Wharton, 2006, among others). The procedural dimension has also had an impact on the way speech acts are viewed in RT: Sperber and Wilson (1995) recognize only three genuinely linguistic, communicative generic speech acts, which, they claim, are universal: *saying*, *asking* and *telling (someone) to*. Illocutionary force indicators such as mood, word order or intonation do not encode specific speech acts, but just set the inferential process on the right track. Guided by the Principle of Relevance, these general indicators interact with contextual information to derive rich and precise inferences about the speaker's intended illocutionary force and propositional attitude: asserting, denying, asking, inviting, threatening, etc. (Wilson & Sperber, 2012: 210-229).

3. The data and methodology

This paper presents data that is part of ongoing research into the pragmatic role of prosody in the spontaneous spoken discourse of Buenos Aires Spanish. The central hypothesis is that different intonational choices guide the hearer towards the most relevant interpretation of an utterance. Intonation signals which parts of utterances are relevant in their own right by having cognitive effects, and which act as context or background in which to process the most relevant information (Labastía, 2006, 2011).

The data in this paper consist of two TV interviews of well-known Argentinean personalities – a writer, poet and radio broadcaster (Alejandro Dolina) and an actress (Soledad Silveyra) – broadcast on a Buenos Aires cable channel. The interviews were divided into sections which roughly correspond to a common topic and which comprise several utterances. They were transcribed auditorily, separating the text into intonation phrases and intermediate phrases, and marking the nuclear tone configurations. Key instances of the nuclear tone configurations under scrutiny were analysed using Praat (Boersma & Weenick, 2010) to corroborate auditory impressions. The intonational phrases were labelled using the Sp_ToBI transcription system applied to BA Spanish (Gabriel et al., 2010). The author of this chapter checked the transcriptions and labelling of the examples used in this paper, which are considered to be representative of this variety of Spanish, with local colleagues for reliability. The prosodic analysis was interpreted in the RT framework, paying special attention to the cognitive effects of the intonational phrases bearing the falling nuclear tone configurations. The context of the utterances analysed is summarised before presenting each example.

The following transcription conventions are used: intonational phrase boundaries are indicated by means of slant bars, and intermediate phrases are separated by means of brackets. The intonational phrases are numbered to facilitate reference to particular IPs in each example. Capital letters are used for pitch-prominent syllables. The Sp_ToBI transcription is placed on the following line, and the pitch accents are aligned to the prominent syllables. The syllables with the nuclear tone configurations under discussion are written in bold type.

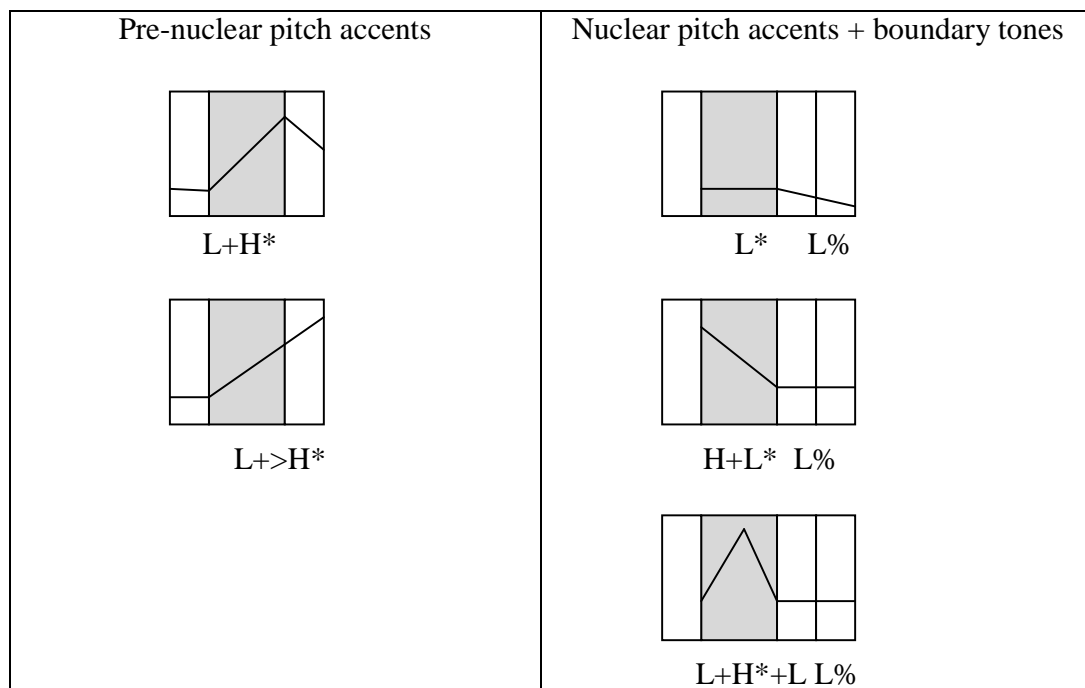| Pre-nuclear pitch accents	Nuclear pitch accents + boundary tones
L+H*	L* L%
L+>H*	H+L* L%
	L+H*+L L%

Figure 1: Schematic representation of the main prenuclear and nuclear pitch accents, and boundary tones in Buenos Aires Spanish (Gabriel et al., 2010).

4. Analysis of the data

The typical contour in broad focus statements in BA Spanish consists of a series of downstepped rising accents ending in a low nuclear accent and low boundary tone (Colantoni &

Gurlekian, 2004). Unlike in most Spanish varieties, the peak in the prenuclear rising accent L+H* in BA Spanish is reached within the bounds of the accented syllable (Hualde & Prieto, forthcoming), though a pitch accent in which the peak is aligned to the posttonic syllable L+>H* can also be found in prenuclear positions in different sentence types (Gabriel et al., 2010). The typical nuclear accent can be either a falling accent H+L* – in which the pitch accent rises at the beginning of the accented syllable and then falls throughout the rest – or a low-pitched accent L*, both followed by a L% boundary tone. Figure (1) presents a schematic representation of the main pitch accents and boundary tones in BA Spanish. Example (1) and figure (2) show an instance of the typical contour in broad focus declaratives.

(1)   S. Silveyra: / me amiGUÉ con el suiCIdio de mi MAdre /
                             L+H*   L+!H*   L*   L%
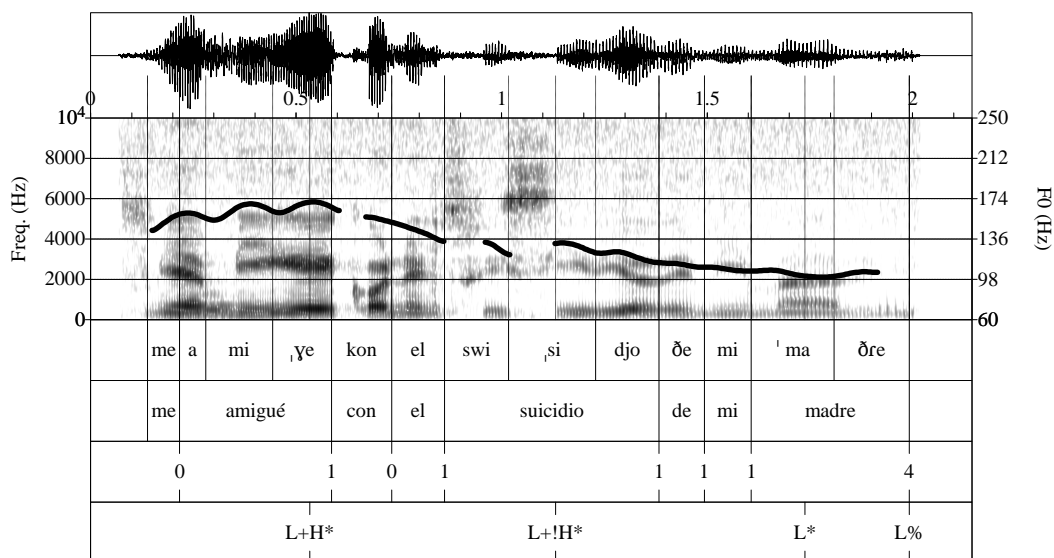   'I came to terms with my mother's suicide'

Figure 2: Waveform, spectrogram and F0 trace of a statement with downstep in Buenos Aires Spanish.

In narrow focus statements with a contrastively focused constituent, in contradiction statements, in statements of the obvious and in exclamatives, a common nuclear pitch accent is one in which the F0 rises and falls within the limits of the tonic syllable, L+H*+L, followed by a L% boundary tone, which may be enhanced by means of an increase in pitch range (Gabriel et al., 2010) and/or length (Kaisse, 2001). IP 1 in example (3) and figure (3), as well as figure (4), all below, provide two examples of narrow focus signalled through deaccenting and/or nuclear pitch accent type.

In RT, an utterance involves at least two relationships: the relationship between its propositional form and a thought of the speaker's, and the relationship between that thought and what it represents. The propositional form of an utterance can be a description of an actual state of affairs, attributable to the speaker or to someone else. The notion proposed in RT is 'saying that P', which is weaker than asserting, but which accommodates non-literal (metaphoric) and ironic uses as well. Clark (2007) attempts an explanation of the tones of Southern British English in RT terms, and proposes that a fall signals that the proposition expressed is entertained as either a description of a state of affairs or as an interpretation of a thought of someone other than the speaker at the time of utterance. Though not universal, this characterisation may apply to several Western European languages and may be extended to the data under scrutiny here. General as it is, this starting point can form the basis of an explanatory account of the meaning of falling tones in BA Spanish, which we adopt for our work.

4.1 Assertions and the H+L* L% nuclear configuration

Let us begin by exploring the meaning of the H+L* L% or falling configuration. In example (2), the interviewee, a writer, poet and radio host, explains the origins of his love for art and intellectual activities. He has already characterised the members of his family as whole-hearted *dilettanti*, and as voracious readers. He explains that his was a large extended family, and he was always surrounded by relatives who came to stay with his family for a period of time, then left, then other relatives also came and did the same. They were all very good story-tellers. Then he adds the following:

(2)   A. Dolina: /1 (mi CAsa teNÍa)   (un si ES no ES de teAtro) /
                     L+H*   L+!H*!H-   L+H*L+!H*   **H+L* L%**[3]
       'My home had the flavour of the theatre'

       /2(haBÍa)   (MUchos persoNAjes)/
           L+H* !H- L+H*   **H+L* L%**
       ' there were many characters'

       / 3 alGUnos de Ellos /   4 MUY pintoREScos /
           L+H*   L+H* !H% L+H*   **H+L* L%**
       'some of them   very colourful'

In these intonational phrases, the interviewee introduces a specific characteristic of his family: he asserts a state of affairs which is meant to advance the point under discussion – his interest for the arts and the intellectual – by providing more specific information, which may help the public to picture the kind of environment he was brought up in and understand how he

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[3]The !H- phrase accent and the !H% boundary tone represent a mid tone, in which the final countour in the intermediate phrase or intonational phrase is characterised by a slightly falling or rising movement to a mid target (Hualde & Prieto, forthcoming). Gabriel et al. (2010) use M- and M% for these boundary tones. This phrase accent/boundary tone is often preceded by L+H*in nuclear position, giving the effect of a suspensive configuration. Declaratives in Spanish spontaneous speech are made up of long complex sentences divided into multiple prosodic phrases. The L+H* !H% configuration appears in incomplete assertions, and marks the content of the IP as non-final. The content in this suspensive configuration fails to make an assertion in itself, but is used to construct the context in which an assertion will eventually be made with one of the three falling configurations discussed in this paper. Similar considerations apply to the rising L+H* H% configuration (Labastía, 2011).

developed a taste for art and literature. The information is uttered with the H+L* L% nuclear tone + boundary tone configuration, which, together with declarative syntax, helps make manifest the way the utterance will achieve its relevance: by leading to the derivation of contextual implications concerning the way his artistic interests developed. It may also lead to such weak implicatures as 'the members of his family were very special people, who instilled in him the desire to be original' or 'the members of his family were a source of inspiration for his future creative activities.[4]

Example (3) comes from the beginning of the interview of a well-known actress. The interviewee is talking about a crucial moment in her life: her children are leaving home to strike out on their own, and she is selling her house, where they all live together. It's a very special time. This could be a hard time for her, but it is not. After discussing the empty nest syndrome which women suffer when their children leave home, she claims it is not happening to her, because she is actively involved in her work as an actress. People who meet her tell her how well they find her. She concludes the opening section of the interview by saying the following:

(3)   S:/1(y yo CREo que a lo meJOR) (TIEne que **VER**)(con este momento)(NO)[5]
                    L+H*   L+!H*!H- H*   **!H+L***L-   L- L*H%
               'and I believe that perhaps   it has to do with this time, right?'

        /2 con que emPIEzo /3 (de alGUna maNEra)   (a viVIR para **MÍ**)/
                    L+H* H%   L+>H* L+>H* H-   H*   **H+L* L%**
        'with the fact that I'm starting   somehow   to live for myself'

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[4] Relevance Theory distinguishes between strong and weak implicatures. Strong implicatures are implications whose recovery is essential in order to arrive at a relevant interpretation. Weak implicatures help in the construction of a relevant interpretation, but their recovery is not itelf essential because the utterance suggests a range of similar possible implicatures, any of which would lead to a relevant interpretation (Wilson and Sperber, 2004).
[5]This transcription presupposes that deaccenting – movement of the nuclear pitch accent to non-final positions in the intonational phrase – does occur in Buenos Aires Spanish (Labastía, 2006). The treatment of tags follows Beckman & Pierrehumbert (1986: 293-298).

In these three intonational phrases, the actress explains why she is well despite the situation she is in. Phrases 1 and 3, both with a H+L* L% nuclear configuration, provide the information which will enable the audience to derive rich cognitive effects in the form of contextual implications: she will now start leading a different lifestyle, free from the cares and worries of a mother with children to look after. Once again, the falling nuclear tone and low boundary tone guide the hearer to interpret these two phrases as descriptions of states of affairs, and to derive cognitive effects from the information conveyed by the utterance. Figure (3) shows the waveform, spectrogram and F0 trace of IP 1 with a H+L* L% configuration in example (3).
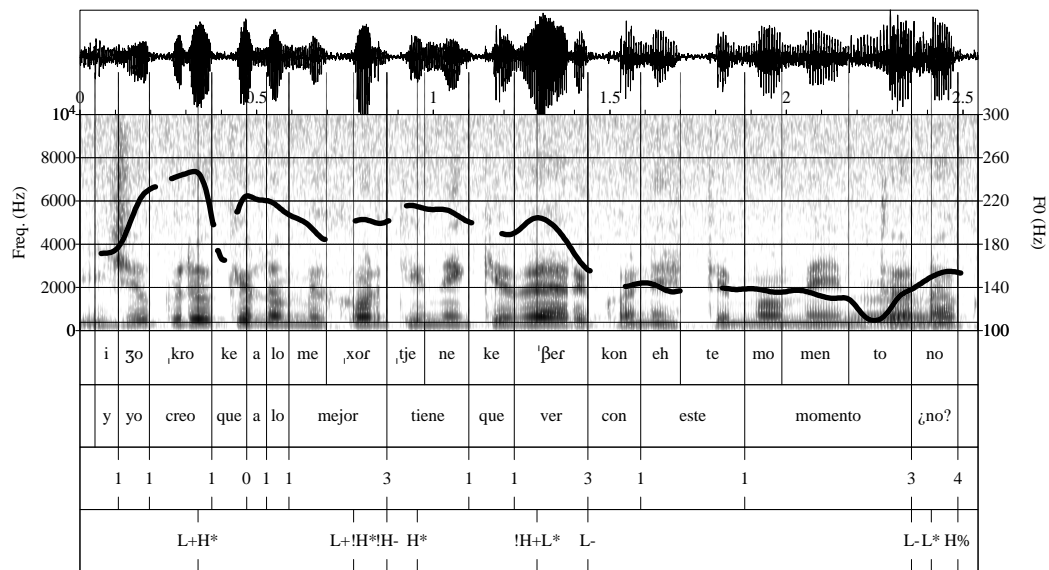

Figure 3: Waveform, spectrogram and F0 trace of IP 1 from example (3) above, with a !H+L* L% nuclear configuration and post-nuclear deaccenting.

To sum up, together with other indicators (word order, mood, etc.), the H+L* L% configuration instructs the hearer to process the intonational phrase as an assertion, or in RT terms, as a case of 'saying that P.' Frequently, though not exclusively, the cognitive effects to be

derived from the propositional content in combination with the context (made up of previous discourse here) are contextual implications. As we will see, the other two falling configurations can be understood as modulations on the act of 'saying that P.'

4.2 Assertions and the L* nuclear configuration

The procedural meaning of the low L* L% configuration is better understood when it is contrasted with that of the H+L* L% configuration discussed above. In example (4), the interviewee has been talking about fanaticism, and how important humour is in avoiding it. At one point in the discussion, he asserts the following:

(4) A. Dolina: /1 me paREce que / 2 el compoNENte del senTIdo del huMOR /
                      L+H*   !H%   L+H*   L+!H*   !H+L* L%
'It seems to me that   the sense of humour component'

/ 3 o senTIRse a Uno MISmo /4 como riDÍculo en alGUnas situaCIOnes /
      L+H* L+!H* !H+L* L%   L+H*   L+!H*   L+!H* !H%
'or feeling oneself   ridiculous in some situations'

/ 5 eliMIna el RIESgo / 6 del CRÍmen pasio**NAL** /
     L+H*   L+!H* !H%   L+H*   **L* L%**
'eliminates the risk   of a crime of passion'

The whole utterance in example (4) constitutes a sentence. Units 2-4 make up a complex subject/topic for the sentence (which can be inferred from previous discourse) and phrases 5 and 6 are the predicate/focus, where the main information lies, and which contributes most to the cognitive effects of the utterance, in this case a contextual implication: if you are able to laugh at your own shortcomings, you are less likely to take yourself too seriously, and therefore be

blinded by your passions. The interviewee himself confirms this interpretation by next stating it in so many words: "To become a criminal, one has to take oneself very seriously." In comparison with the H+L* L% in examples (1) to (3) above, the L* L% in phrase 6 sounds much more assertive and conclusive. It is as if, with this pronouncement, the speaker left no room for further discussion of the issue. As far as he is concerned, his opinion will not be contradicted or challenged.

As we discussed in section 2 above, assumptions (mental representations) are held with different degrees of confidence: we think of them as more or less likely to be true (Sperber & Wilson, 1995: 75-83). Our intuitions about the relative strength of assumptions surface in different linguistic expressions such as: 'I'm fairly certain that P', 'I very much doubt that P', etc. We propose that, in using the L* L% configuration, the speaker is conveying a high degree of certainty about the assertion he is making. The result is a categorical, almost irrefutable statement. This idea is also reinforced by the fact that this tone configuration very often appears at the end of a declination sequence, marking the end of a processing unit (House, 1990) and of a conversational turn. If the speaker keeps his turn, the first pitch accent in the following phrase will be fairly high, and the pitch range will be expanded, signalling the beginning of a new processing unit and declination trend (Labastía, 2011: 383-413).

We find another instance of the use and meaning of the L* L% configuration in example (5), where the actress, at the beginning of the interview, mentions the fact that she is selling her house and her sons are moving away. The interviewer wants to know if they are the children from her marriage to Jaramillo. She confirms it, but refuses to continue speaking about the issue:

(5)   O'Donnell: /1 (JaraMIllo AMbos) (NO) /
                          L+H* H+L* L-   L* H%
                    'Jaramillo both of them, right?'

S. Silveyra: /2 AMbos Jara**MI**llo /3**SI**/
      H*   **L* L% L* L%**
      'both Jaramillo, right.'

O'Donnell: /4 (HIjos)(de su matriMOnio con JaraMIllo) /
      H* !H-   L+H*   L* L%
      'sons from your marriage to Jaramillo'

S. Silveyra: /5 eXACta**MEN**te /6 y BUEno /7 hemos deciDIdo ESto /…
      L+H*   **L* L%**   L+H* H%   L+H* H* H%
      121 Hz 52 Hz   207 Hz
      'Exactly.   And well,   we have decided this…'

At the time of the interview, the actress and Jaramillo had been separated for some time, but this was still a sensitive issue for her, which is why she confirms that her two sons are by her ex-husband but refuses to continue talking about it. The increased strength of the L* L% configuration serves to convey her unwillingness to discuss the issue any further. The L* L% configuration appears in phrases 2, 3 and 5. IP 5 where the actress goes back to the topic of her decision to sell the house where they live, also marks the end of the sequence. This can be observed in the marked contrast between the low pitch of nuclear L* in 5, only 52 Hz, and the high value and increase in range of phrase 6, where the H of L+H* peaks at 207 Hz. Example (1) and figure (1) above show an instance of the L* L% configuration uttered by the same speaker in the phrase "I came to terms with my mother's suicide."

In conclusion, while H+L* L% marks the pragmatic value of the tone unit as (part of) an assertion, L* L% marks it as a categorical assertion, which reflects the speaker's strong commitment to their belief in the fact which is being asserted. The L* L% configuration modulates the value of the assertion, adding an element of strength which is absent from assertions with a H+L* L% configuration.

4.3 Assertions and the L+H*+L L% configuration

As discussed in the previous section, the H+L* L% configuration helps to identify the utterance as an assertion, while L* L% marks it as a categorical assertion. What does the complex rising-falling L+H*+L L% configuration contribute to the interpretation of the act of 'saying that P'? We can begin discussing its contribution by looking at example (6), the very first IPs in the interview of the Argentinian actress Soledad Silveyra. The interviewer, Mario O'Donnell, asks a question about a decision the actress has recently made with her two sons: to sell the house where they live.

(6)   O'Donnell: /1 (COmo es Eso) (de venDER) (la CAsa GRANde) /?
                        H*   L+!H*!H-   H+L* L- L+H*   H+L* L%
                        'What about this issue of selling   the large house?'

        S. Silveyra: /2 **AY**/   3 es TOdo un mo**MEN**to /
                        L+H*+L L%   L+H*   **L+H*+L L%**
                        'Oh!   It's quite a time!'

The actress answers with an interjection (IP 2) and says that it's a very special, extraordinary time (IP 3). Both IPs bear the L+H*+L L% configuration and have an exclamative ring. Why has the interviewee chosen to use that configuration, and not H+L* L% or L* L%? She wants to emphasise how special a time it is. As she will later explain, her grown-up sons are leaving home and becoming independent, and she will, in a way, start living for herself, without the worries associated with motherhood. At the same time, it is a very rewarding time: she is at the peak of her career as an actress. Later on in the course of the interview, the actress confirms this interpretation (see example (3) above). The use of L+H*+L L% helps to convey the high degree of relevance of the information in the IP. Relevance is not only a classificatory concept but also a

comparative one: a phenomenon can be more relevant to an individual than other phenomena which he may be processing at a certain time, making relevance a matter of degree (Sperber & Wilson, 1995: 123-132). The L+H*+L L% contour helps to convey the fact that the information in the IP is highly relevant to the speaker. Figure 4 shows an instance of an emphatic statement, also by Silveyra, with the L+H*+L nuclear tone and post-nuclear deaccenting, followed by a L-phrase accent, on the phrase "and it's quite a time in the life of a woman."
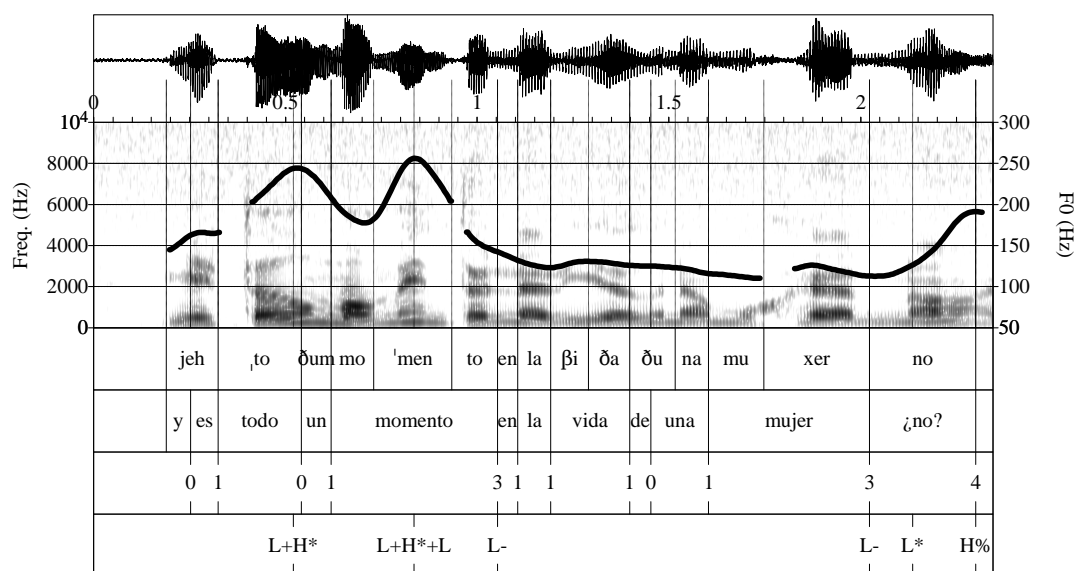
Figure 4: Waveform, spectrogram and F0 trace of the statement " and it's quite a time in the life of a woman, isn't it?", with a L+H*+L L- configuration and post-nuclear deaccenting.

In example (7), Alejandro Dolina answers a question about the Internet and the world of computers, the impact of which was beginning to be felt in Argentina at the time of the interview, and how artists like himself might fit into that world. Dolina believes that these changes are unavoidable, and adds the following:

(7)   A. Dolina: /1 lo seGUNdo /2 es que haBRÁ que ejerciTAR la inteliGENcia /
                        L+H* !H%   L+H*   L+!H*   L+!H* !H%
                'Secondly,   we will have to exercise our intelligence'

        /3 en Ese senTIdo /4 si HAY vaLOres que esTÁN en RIESgo /
           L+H*   L* L%   H*   !H*   L+!H*   H+L* L%
        'in that sense.   If there are values which are at risk'

        /5 y eviDENtemente los HAY /6 (pero **SIEM**pre)(están en riesgo) /
              L+H*   L+H* !H%   **L+H*+L L-**   **L%**
        'and evidently there are   but they're **always** at risk'

        /7 (hay que VER) (por QUÉ LAdo) (se los PUEde salVAR) /
                 L+H* !H-   L+H* H* !H-   L+H*   L* L%
        'we'll have to see   in what way   they can be saved.'

Having affirmed that the changes brought about by the computer era cannot be undone, he talks about using one's intelligence to save values which may be at risk. In IP 6, he states that they are always at risk, and uses the L+H*+L L% configuration to mark this idea as highly relevant. The audience might have inferred that these values are in danger specifically because of the advent of the computer and the Internet, but the interviewee wants to contradict that assumption and assert that they have always been at risk, even without the effect of the recent technological advances. The intended cognitive effect is a contradiction, where the new information, in this case provided by the utterance, gives evidence against an assumption, weakens its strength, and may lead to its abandonment (Sperber & Wilson, 1995: 108-117). The opposite effect is a reinforcement, where new information provides further evidence for an existing assumption, and therefore strengthens it. We propose that L+H*+L L%, often coupled with post-nuclear deaccenting and narrow focus, which is fairly marked and infrequent in a language like Spanish, but not impossible, guides the hearer to see the relevance of an utterance as a reinforcement or a contradiction of previously

existing, contextual information.[6] Example (8), which continues from (7), provides evidence in favour of this interpretation. Dolina has spoken about the reaction of some 'poetic' people against technological development. He thinks that advances like the Internet *can* be used in favour of poetry, despite some commonplace aspects of these advances:

(8)   A. Dolina: /1 se PUEde lleGAR a comba**TIR**/   2 la vulgari**DAD**de /
                    L+>H* L+!H*   **L+H*+L L%**   **L+H*+L L%**
                    'One can even fight   the vulgar side of'

        /3 (o CIERto asPECto vulGAR) (en el mundo moderno) /
               L+>H*   !H*   H+L* L-   !H%
        'ora certain vulgar side to the modern world'

        4 utiliZANdo el inter**NET**/
               L+>H*   **L+H*+L L%**
        'using the Internet'

        /5 que si usTED QUIEre   /6(**TIE**ne)(un aspecto vulgar) /7 NO neGUEmos/
               L+H*   H+L* !H% **L+H*+L L-**   **L%**   H*   L* L%
        which, if you like,   **does** have a vulgar side   let's not deny it.

In IPs 1 to 4, the interviewee talks about fighting the vulgar aspect of the modern world through the Internet itself, and he uses the L+H*+L L% configuration in IPs 1, 2 and 4. The effect is that of contradicting the assumption, which he attributes to these 'poetic' people, that all of these advances, even the Internet, should be rejected because they affect their sensitivity to the poetic side of life. At the same time, he does agree with these people that the modern world has a vulgar side, and emphasises this idea using the L+H*+L L% configuration in IP 6 which, together with deaccenting, highlights the affirmative polarity of the proposition. This interpretation is

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[6] Post-nuclear deaccenting involves moving the position of the nuclear pitch accent from the end of the IP to an earlier position. This change is possible because the deaccented items are part of the background information which is already present in, or which can be inferred from, the information explicitly given in previous discourse. In example (7), 'being at risk' can be deaccented because it was previously mentioned explicitly in IP 4 (Labastía, 2006).
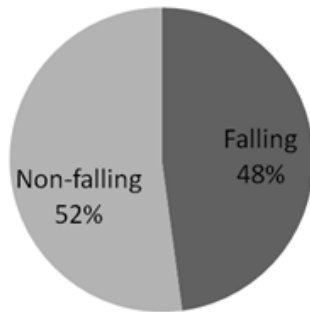
confirmed by the propositional content of IP 7: "let's not deny this fact," which also contradicts the assumptions of those who might think otherwise with a very categorical L* L% configuration.

To sum up, the L+H*+L L% configuration marks the assertion as highly relevant, and guides the hearer in the derivation of rich cognitive effects, frequently reinforcements and contradictions of background information attributed to the speaker himself or to other(s). Other factors, such as post-nuclear deaccenting, may also play a role in the derivation of these cognitive effects.

4.4 Relative frequency of falling nuclear configurations

Figure 5 below shows the frequency of occurrence of falling nuclear pitch accents in the whole of both interviews. Of the 1,636 intonational phrases in Dolina's 49-minute interview, and the 1,509 intonational phrases in Silveyra's 41-minute interview, the results are similar for both speakers: There is a fairly equal proportion of non-falling and falling nuclear configurations. Among the falling nuclear configurations, H+L* L% seems to be the most frequent, followed by L* L%. L+H*+L L% appears to be the least frequent of the three.
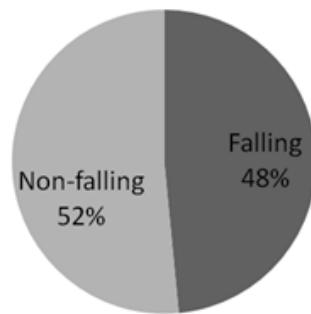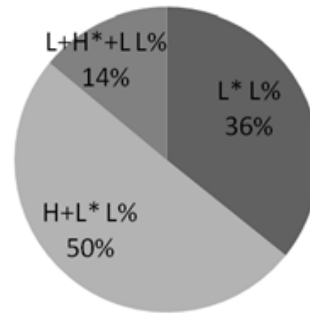
Figure 5: Frequency of occurrence of the three falling nuclear pitch accents in Buenos Aires Spanish

Table 1 compares absolute and normalised duration of the three types of falling pitch accent and pitch height/range for some intonational phrases in the examples above.[7] The L+H*+L L% nuclear configuration appears to be the longest for both speakers. For Dolina, there is not much difference between the duration of H+L* L% and L+H*+L L%, but the difference in pitch range is striking. For Silveyra, instead, there is a marked difference in duration, but H+L* L% has a wider pitch range than L+H*+L%.

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[7] In normalising duration for Silveyra, example (6), the interjection "Ay" in IP 2 was not considered because it was unusually long (512 ms.) and would have distorted the measurements. Besides, interjections may not be considered to be part of language proper, since they exist, as it were, on the edge of language (Wharton, 2009).

Dolina: Examples (Average syllable duration: 150 ms. – normalised duration: 0.51)	Accent type	Absolute duration	Normalised duration	Pitch height/ range
(7.3) En ese sen**TI**do	L* L%	245 ms.	0.86	60 Hz
(7.4) si hay valores que están en **RIES**go	H+L* L%	293 ms.	0.99	115-94 Hz
(7.6) pero **SIEM**pre están en riesgo	L+H*+L L%	297 ms.	1.00	178-53 Hz

Silveyra: Examples (Average syllable duration: 155 ms., normalised duration: 0.43).	Accent type	Absolute duration	Normalised duration	Pitch height/ range
(1) Me amigué con el suicidio de mi **MA**dre.	L* L%	231 ms.	0.65	100 Hz
(3.1) Y yo creo que a lo mejor tiene que **VER** con este momento.	H+L* L%	225 ms.	0.63	206-160 Hz
(6.3) Es todo un mo**MEN**to.	L+H*+L L%	357 ms.	1.00	134-120 Hz

Table 1: Duration and pitch height/range for selected examples of the three falling nuclear pitch accents in Buenos Aires Spanish

These data confirm Kaisse's (2001) observations that the L+H*+L nuclear pitch accent can be realised as either a lengthened nuclear syllable or with an increased pitch range, or as a combination of both.[8] In either case, the effect is that of rendering the prosodic stimulus more salient than with the other nuclear configurations.

5. Discussion

The use of falling or low intonation for assertions is fairly universal across languages. Gussenhoven (2002, 2004) has proposed that the association of high pitch with uncertainty and questioning and low pitch with certainty and asserting, is an informational interpretation of a frequency code, an aspect of the universal part of intonation which is expressed in its phonetic implementation and which is grammaticalised in many languages in rising and falling contours

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[8]Kaisse (2001) dubs the L+H*+L pitch accent (Gabriel et al., 2010) as 'the long fall', and analyses it as H*+L.

(see also Astruc, Vanrell & Prieto, this volume). However, the types of falling pitch accents used in each particular language or dialect to indicate an assertion need not coincide, nor does the association of these pitch accents with a specific meaning. That is, these aspects may be part of the intonational phonology of particular languages or dialects.

The difference in BA Spanish between the falling H+L* L% and low L* L% configurations, on the one hand, and the complex rising-falling L+H*+L L% configuration, on the other, is part of the intonational grammar of this particular dialect. The rising-falling configuration, usually pronounced with a wider pitch range and greater duration, may also reflect a grammaticalisation of the informational interpretation of the effort code (Gussenhoven, 2002, 2004), which associates wider pitch excursion with the importance of (parts of) the message and emphasis. This grammaticalisation is often found in the expression of focus: focused information is associated with relatively wide pitch excursions, and given information with the relative absence of pitch movement in the post-focal portion of the utterance. The expression of focus through pitch accents and absence of focus through deaccentuation will depend on the intonational grammar of each language (Ladd, 2008) and, as Gussenhoven (2002) points out, this distinction applies to Germanic languages to a greater extent than it does to Romance languages. The complex L+H*+L L% configuration is often followed by a deaccented 'tail' in the IP in BA Spanish (see example in figure 4 above). In fact, while the low and falling configurations can be found in statements in different varieties of Spanish (Hualde & Prieto, forthcoming), the rising-falling configuration typical of BA Spanish is not found in any of the other varieties discussed in Prieto and Roseano (2010).[9] As Horn (1984) has pointed out, unmarked forms tend to be used for ordinary situations, whereas marked forms – in this case the complex rising-falling pattern within

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[9] Prieto (2014) proposes a tritonal L+H*+L pitch accent in the L'Alguer variety of Catalan for narrow focus statements, which contrasts with the broad focus L+H* pitch accent.

the bounds of the tonic syllable – are used for marked or extraordinary situations. In fact, Gabriel et al. (2010) capture this fact when they link this tone to utterances with narrow focus, with a contrastive or emphatic reading, contradiction statements, exclamative statements and statements of the obvious.This pitch accent often, though not exclusively, occurs on marked lexis in the data analysed here, for instance in superlative adjectives such as 'peligro**SÍ**simo' (very very dangerous), and grammar, for example in 'ni **MUE**bles teníamos' (Not even furniture did we have). It is not a coincidence that the L+H*+L L% contour is used both for contrastive focus and for emphatic statements. Both emphasis and contrast derive from the fact that this contour is often used to guide the interpretation process toward the achievement of two types of contextual effects: contradictions and reinforcements. In both cases, assumptions attributed to the audience or to others are contradicted or reinforced, hence the contrastive or emphatic flavour of the intonational phrases which convey that information.

The meaning of intonation has often been associated exclusively with grammatical distinctions such as grammatical mood. However, as Escandell-Vidal (2011) points out, establishing a grammatical contrast cannot be the only way to determine the linguistic status of a unit, as different procedural units contribute processing instructions on different levels of pragmatic interpretation: explicit content, context and illocutionary force. The studies collected by Prieto and Roseano (2010) on different varieties of Spanish show that there are systematic relations between different contours and meanings such as obviousness, surprise and uncertainty. Henriksen, Armstrong & García-Amaya (this volume) report on different nuclear configurations used to signal speaker-attributed thoughts or other-attributed thoughts in polar questions in Manchego Spanish. In another Romance language, Catalan, Astruc, Vanrell & Prieto (this volume) show a strong correlation in the use of two different nuclear configurations with

different parameters relevant to the expression of politeness. What counts as a linguistic contrast must depend on whether or not it is systematic, and the conventional relation between form and meaning. We think that the L* L%, H+L* L% and L+H*+L L% contrasts meet these criteria, and that they systematically contribute to the process of utterance interpretation by guiding the hearer in the identification of the speaker's intended illocutionary force and propositional attitude, at the same time conveying further indications such as the certainty with which the speaker entertains the assumptions he communicates, the degree of relevance he expects the hearer to achieve in processing the utterance, and the type of contextual effects he expects the hearer to derive.

Finally, Feldhausen, Pešková, Kireva & Gabriel (2011) provide evidence for a categorical scaling contrast between L+H*+L and L* in Buenos Aires Spanish through a categorical perception experiment, where L+H*+L is consistently interpreted as contrastive or emphatic, and L* as its neutral counterpart, which supports the point made in this chapter that these are two contrasting tones, and they encode different processing instructions.

6. Conclusion

In this paper, the role of intonation is captured through the notion of procedural encoding in Relevance Theory. While lexis provides mostly conceptual input to the process of utterance interpretation, grammar (including intonation) supplies procedural instructions to guide the comprehension process. Both types of input are co-oriented to guide inferences in the direction intended by the speaker. BA Spanish has three tonal configurations associated with assertions: a falling contour (H+L* L%), a low contour (L* L%) and a rising-falling contour (L+H*+L L%).

Although all three are associated with declarative utterances, each of these contours conveys a different processing instruction, associated either with the strength with which the state of affairs is entertained by the speaker or with the degree of relevance the speaker wants to communicate. Additionally, these instructions are often related to specific cognitive effects. It should be kept in mind that intonation does not, in and of itself, determine the illocutionary force of an utterance or the speaker's attitude towards it. It interacts with other procedural signals such as mood or word order, and with other contextual assumptions to guide the audience in the direction in which the relevance of the utterance should be sought, thus reducing the processing effort needed to infer the speaker's intended meaning.

Although the results in this paper do not differ from previous findings on Argentine Spanish as regards the repertoire of falling configurations and their uses, what it does contribute is an analysis of the data in context, and in the framework of a theory of communication and cognition. The results of this type of research can form the basis for experimental research, in which the hypotheses put forward here can be tested. That is to say, analyses of extended spontaneous discourse may fruitfully complement those carried out in the lab (see Henriksen, Arnstrong & García-Amaya, this volume). Finally, the use of authentic extended discourse provides a point of intersection for theories of discourse-structure building by the speaker, the analysis of the speaker's process of putting thoughts into words in unplanned speech, the speaker's awareness of the audience's effort to grasp his communicative intentions, and the audience's awareness that the speaker is actively guiding them step by step to reduce that effort.[10]

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[10]This idea was suggested by an anonymous reviewer of Labastía (2011), to whom I'm indebted.

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