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# TEACHING THE PROSODIC CONFIGURATION OF LECTURES: THEMATIC STRUCTURE, INTONATION AND L1 INTERFERENCE

Cantarutti, Marina Noelia

ISP Joaquín V González – ENSLV Sofía B de Spangenberg – Profesorado del Consudec marina.cantarutti@bue.edu.ar

#### **ABSTRACT**

The lecture is the chosen speech genre in the academic world for the distribution of knowledge. Among other defining characteristics, lectures are organised along a particular thematic structure that signals to the audience how the information status and its progression is to be interpreted; and the instructions that this structuring provides are either accompanied or disambiguated through prosodic choices in the systems of tonality, tonicity and tone. This paper reviews some basic research on the prosodic configuration of lectures in General British and Riverplate Spanish, and reports a pilot experience in training Spanish-speaking teacher trainees in the production of typical prosodic patterns in the lecture genre, with a special focus on thematic structure, and with a secondary aim of reducing patterns of interference from L1 through the training of metaphonological awareness and self-regulatory skills.

**Keywords**: prosody, interference, metaphonological awareness, SFL, Discourse Intonation

#### 1. INTRODUCTION

"Teacher talk" is made up of different speech genres distinguishable not only by a particular schematic structure of stages and conversational routines, but also through intonation patterns making up a particular prosodic configuration. One of the speech genres closely related to teaching is the lecture, and its textual and prosodic configuration as a rule could be said to mirror its "hybrid" status between the oral and written medium, as Biber and Conrad [1] state. The lecture genre could be said to be clearly organized through the staged presentation of "what is already known or predictable, and what is new or unpredictable" [12], which are always in tension. This interaction of the New and the Given generally builds a pattern of "periodicity" [18] of information waves embedded into a particular thematic structure. This organisation consists in the marking of "points of departure" that frame the message and prepare the audience to apprehend its contents. The role of prosody in this textual function of informational organisation is essential, and for future teachers of English from a different L1 background, an

appropriate handling of the intonation system that makes the perception of "periodicity" possible is an important asset, as it is through prosody that the speakers aid the audience's understanding of what is "foreground", and what, "background" information [13], what information "drives discourse forward" and what acts like a "consolidatory loop" in the development of the text [3]. The presentation of information distribution relies mostly in the system of tonality, and the signaling of information status and relevance is effected through tonicity and tone.

The present paper will review some of the characteristics of the prosodic configuration of thematic structure in lectures in English and in Riverplate Spanish, from the contributions of Systemic Functional Linguistics (SFL) and Discourse Intonation (DI), to predict possible cases of L1 interference. In addition, a report will be made on the preliminary results of a pilot experience in the teaching of prosody and thematic structure in lectures to a group of native Spanish-speaking teacher trainees in Buenos Aires, Argentina. It is believed that the training of metaphonological awareness [10, 23] of the connection between patterns of thematic structure and prosody could help non-native speakers of English self-regulate [22] and fine-tune their L2 intonational choices in their delivery of the lecture genre.

### 2. THE TEXTUAL AND PROSODIC CONFIGURATION OF LECTURES

From a Systemic Functional Linguistic perspective, *genre* is "a staged, goal-oriented, purposeful activity in which speakers engage as members of our culture" (Martin, 1984 as cited in [9]) and it has a particular set of manifestations in the context of situation. Socially speaking, the lecture is one of the institutional means through which knowledge is distributed, subject to the on-line planning restrictions of the spoken medium and the lexical density of spoken mode, thus its denomination of "hybrid" in [1]. Plus, the lecture event promotes a generally assymetrical relationship, with a discourse dominant lecturer who is in a position to claim discourse dominance and control. Thus, lecturers can provide the audience with procedural instructions to

allow their interlocutors to "surf smoothly on the peaks, and slide through the troughs on the information flow" (Bowcher, 2003 in [24]).

#### 2.1. Thematic Structure

One of the forms in which linguistic choices can create "texture" [11] is what is known as thematic structure, that is, the sequencing of initial "points of departure" [9] followed by their rhemes, elements that may act as message cores. Lectures tend to display a clear and patterned structure of clause simplexes and complexes made up of topical themes that present a starting point from which the rest of the section of the message is to be interpreted. The presence of topical themes of unmarked types facilitates the introduction of the participants -topics or people generally marked by pronouns or noun phrases-, whereas marked types circumstantial information -place, time, instruments, conditions, presented by phrases or clauses. These thematic choices are generally associated, though not necessarily, with Given information, and it is prosody that will help establish their degree of salience and status. Even though themes can also present other types of information and be of equative, predicated, interpersonal and textual kinds, in this paper, our concern is with topical themes, given their connection to the New-Given patterns of periodicity.

# 2.2. Prosodic Configuration of Lectures in General British and Riverplate Spanish

These characteristics of the lecture genre invite a staged presentation of the content to an audience with different degrees of previous knowledge. From the point of view of prosody, the distribution of content into "units of information as the speaker perceives them" [19] is accomplished through the intonation system of tonality, a "phonological way of representing pieces of information" [20] into IPs (i.e. intonation phrases). The second system, tonicity, has a major role to play in the signaling of information as Given - generally deaccented and out of focus in English- or New -generally made prominent and placed within the focus domain. The informational notion of Focus [8] contributes to this distinction, with all-New domains for Broad Focus and partly-New domains for Narrow Focus, particularly when Given or contrastive information is present. O'Grady [18] redefines the notion of Given by establishing three forms of Givenness: a) recoverable/predictable, b) non-salient (interest) b) shared knowledge. In other words, the Given is not necessarily shared or retrievable information, as it could also constitute information conferred a low degree of relevance by

the speaker. In general, this type of information is either deaccented- if presented towards the end of the IP-, or accented, but marked as Given by the choices of tone or key.

In Riverplate Spanish, however, speakers were found to re-accent Given information in a large number of occasions, according to a recent study conducted [6]. The tendency of Spanish towards a non-plastic accentuation [8] is reported by Labastía [14] to be manifested by the general placement of the sentence accent towards the last lexical item regardless of the informational focus domain, except in cases of correction or contrast. Nevertheless, in the recent study mentioned [6], only cases of polar contrast presented deaccentuation of Given information, while other cases of contrast displayed (re-)accentuation of repeated information.

The system of tone in English contributes to the marking of information as New or Shared, from a transactional perspective, with falling tones presenting the message as completing an "increment" and acting as information which is "so far from an unnegotiated set" [3], and rising tones acting as "loops" of information which can be retrieved from the area of common ground. The choice of rising tone helps to mark the information as "background" [13], that is, presenting lower relevance in dependent structures, whereas falling tones generally indicate that the information is "foregrounded" [12] or treated as "major" [19].

Two pieces of research on a small corpus of lectures in General British [6,7] established that most marked themes and also a considerable amount of nonpronominal unmarked topical themes are generally chunked apart from their rhemes. A vast majority of the thematic elements scrutinized in [6] were found to be produced with a fall-rising tone, and were thus projected as "loops", though presented "highlighted themes" [19], versus rises, which could be said to merely claim "dominance through continuity"[3]. A limited number of thematic elements carried falling "citation contours as topic markers" [21], and were thus treated as "increments" in themselves. The use of a level tone on several thematic elements marked a shift towards oblique orientation, a text-focussing practice related to creating rhetorical effects, quoting, or declamation.

For Riverplate Spanish, Labastía et al [15] establish that background information is marked through rising tones, and they remark that rise-fall-rises and fall-rises "postpone the evaluation of relevance". Our

study of a small corpus of lectures in Riverplate Spanish [6] reveals, however, that apart from rising and fall-rising tones, it is in fact the rise-fall tone (including its "truncated" manifestation, Granato, 2005 and Gurlekian, 2010 as cited in [6]) that is more frequently applied onto Given elements in thematic position, in keeping with the findings of Le Gac [16]i. The rising versus falling distinction between "loops" and "increments" described for English does not always appear to match the patterns found for Spanish, as the difference between both varieties appears to be both phonetic -allotonic- and phonological -use of rise-falls as "referring" in Spanish. On the other hand, the use of the oblique level tone seems to fulfil the same function as in English, though the typical manifestation of this contour is slightly different.

The differences outlined between General British and Riverplate Spanish predict possible patterns of L1 interference in the accentuation and tone choices of thematic elements by Spanish-speaking users of English as an L2: final Given elements may be found to be accented, and the presence of a rise-fall tone or Spanish allotonic varieties of the rise or the fall-rise may also be applied where General British fall-rises or rises may be expected. The development of metaphonological awareness of these differences for Spanish speakers of English as L2 could facilitate the appropriation of the L2 phonological and phonetic features characterizing the delivery of lecture genres in English.

## 3. THEMATIC STRUCTURE AND PROSODY IN LECTURES: THE STUDY

#### 3.1. The Context

The study hereby reported was not initially conceived of as a formal piece of research, but rather as a common practice in the Laboratory III course, aimed at allowing students to measure their progress by confronting their reading of the same text at the beginning and the end of the course. The results of these pre- and post-tests are also internally used to reflect upon the tools and procedures used for instruction, and their degrees of effectiveness, particularly in terms of the use of DI and SFL as metalinguistic frameworks. This section will describe the pilot experience with the intention that later studies be formally carried out.

The Laboratory III group selected was made up of ten third year teacher trainees with some previous knowledge of DI. During the eight-month course, the students were trained on the prosodic configuration of different teaching speech genres, analysing different textual and interpersonal linguistic choices from SFL and DI perspectives. Special attention during the training was placed on the role of thematic structure as a means of organizing discourse, and on the development of students' self-monitoring [22] skills in making appropriate tonality, tonicity and tone choices on these preparatory thematic elements to mark patterns of periodicity. The sequencing of activities during the course generally started from initial collaborative analyses of sample lectures, reflection and imitation of model lectures, followed by controlled practice through the reading aloud of new lecture transcripts, and culminating in freer practice in the production of mini-lectures, where students' metaphonological awareness and selfregulatory skills were ultimately tested.

#### 3.2 The Test

The abovementioned group was given a short diagnostic task, consisting in the reading aloud of a short lecture extract retrieved from the British Council Professional Podcasts collection [5]. The passage was recorded after some considerable time for preparation, though students were not allowed to write any marks on the text, to ensure a more natural rendering. The test was repeated, with the same passage and characteristics, at the end of the course.

The selected lecture extract contained 23 thematic elements possibly requiring their own IP because of their length and relevance, and 16 of these were marked and unmarked topical themes. 9 of those thematic elements were to be interpreted as being in Narrow Focus and presenting an early nucleus because of either a) the presence of Given information through verbatim or paraphrasing practices b) their contrastive constitution, organising the lecture into three main axes: Past, Present and Future perspectives to life. The text selected allowed for a limited number of options and thus, it constituted a controlled environment to test the students' metaphonological awareness and selfregulatory habits regarding the recognition and production of appropriate L2 intonation patterns on thematic and rhematic elements, at least on a written script, towards a later application onto spontaneous, unscripted practice.

The production of each thematic element was assessed by the teacher via both impressionistic and acoustic techniques including the use of PRAAT [2], and the analysis was coded onto a table, based on three criteria, thus:

- a) Tonality: Is the topical theme produced as a separate IP? Yes /No.
- b) Tonicity: If a) = Yes, is the nucleus the most likely one, regarding the expected Focus treatment and information status? Yes/No.
  - a. If b)=No, is it a case of Spanish reaccentuation of Given information?
  - b. If b)=No, is there any other underlying explanation?
- c) Tone: If a)=Yes, what tone was selected by the speaker?
  - a. Is it a variant associated with General British? Yes/No.
  - b. If not, is there phonological transfer?
  - c. If not, is there phonetic transfer from Riverplate Spanish?

#### 3.3 Discussion and Results

The following tendencies were found in the students' prosodic treatment of topical themes in the tests:

**Table 1**: Tendencies identified in the pre- and posttests. Note: percentages represent tokens. Shaded areas mark the post-test results.

		Unmarked		Marked	
		Topical Themes		topical themes	
Tonality	Given their own IP?	70%	58%	100%	100%
Tone	Rising or fall-rising tone	53%	65%	50%	50%
	Falling tone	4%	3%	10%	0%
	Level tone	10%	15%	0%	30%
	Transfer from	33%	17%	40%	20%
	Spanish				
Tonicity	Expected Focus/Nucleus treatment	40%		72%	
	Transfer from	60%		28%	
	Spanish				

The results have revealed that in spite of the fact that for most tokens students successfully recognized the need for rising tones in the marking of thematic "loops" from the beginning, the post-tests served to mark a decrease in the production of transferred qualities from Riverplate Spanish, most of which were L1 rise-falling allotones. An interesting detail to explore further includes the increase in oblique renderings of some thematic elements, which in general coincided with lower-relevance items, such as "Today" and "This".

Tonicity choices also show levels of improvement, though there a considerable number of students who failed to recognize Given information and contrastive focus in both tests. Even though it is common in English to re-accent Given information, the characteristics of the lecture selected invited an exploitation of the contrasts to provide the right procedural instructions [14]. In fact, it was through these thematic contrasts and progression that this particular lecture was structured, and many of the choices made by students were not successful in acknowledging this.

Tonality choices for marked topical themes remained constant, and those on unmarked topical themes, which show reduced values on the post-test, are consistent with previous studies [6, 7] of English lectures, in that many lower relevance thematic elements are appended to their rhemes, prosodically speaking. This latter factor would appear to reveal some sort of underlying assessment on the part of the trainees of the communicative hierarchy of the thematic elements to the progression of the lecture read aloud.

#### 4. CONCLUSIONS

In spite of the fact that this study cannot be considered a formal piece of experimental research, the results reveal that metaphonological training from DI and SFL frameworks on the intonation of thematic structure has helped this group of students assess the communicative value of different topical themes and make appropriate L2 intonation choices, at least for this stage of controlled, reading-aloud practice of lecture transcripts. First, students appeared to favour the use of rising tones as a means of presenting the information as either "background" or as a "loop". They also chose level tones for items of lesser relevance, and turned to oblique orientation accordingly, or even to theme+rheme conflated IPs. In most cases, students also turned to English qualities, thus dropping their Spanish rise-falls in thematic position.

The recognition of patterns of deaccented Given information in English, however, requires further attention tasks so that the choices of tone so accurately made by the students actually match those patterns of periodicity of the Given and the New that tonicity choices can so clearly signal to the audience.

It is believed that a formal study also including assessement tasks of unscripted lecture delivery, could shed light on the degree to which metaphonological awareness and self-regulation have

been achieved by these trainees in less controlled environments.

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<sup>i</sup> Nevertheless, it is acknowledged that the boundary-marking criteria in these three studies may differ, since two of these studies have been carried out from an Autosegmental Model.

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