UNIVERSIDAD NACIONAL DE CÓRDOBA

FACULTAD DE LENGUAS

MAESTRÍA EN INGLÉS CON ORIENTACIÓN EN LINGÜÍSTICA APLICADA

Advanced EFL University Students' Academic Oral Presentations: A Phonological Perspective

Trabajo de tesis presentado por María Verónica Ghirardotto

Directora: Magíster Lidia Soler

Córdoba, diciembre de 2017

Table of Contents

To my parents, Antonio and Amira for their love and patience.

Acknowledgements

This thesis was possible thanks to the support and encouragement of many people who shared their time, love, patience and knowledge with me.

Firstly, I want to express all my gratitude to my family and friends. To my grandparents, José and Lala for so many afternoon conversations which were plenty of wisdom. To my parents, Liliana and Alberto, for their interest, emotional support and pieces of advice to persevere with the thesis writing process. To my husband Antonio and Amira, my daughter, who caringly encouraged me to keep forward during times of surrender. Last but not least, I am thankful to Susy. I could had never had all the writing mornings I had without her help.

Secondly, I want to thank my thesis director, advisor and mentor, Mgtr. Lidia Soler. She shared all her knowledge, personal library, a lot of patience and time. She did not only teach me about Phonetics and Phonology and the art of teaching, but she also provided me with guidance and encouragement. Above all, she kindly inculcated personal values which helped me grow up as a better person and teacher.

Thirdly, my colleagues, experienced teachers of Phonetics and Phonology I and II from the School of Languages, were a source of inspiration for writing the thesis and pursuing research goals. To all of them: thanks for all the time you spent reading my e-mails and messages when I most needed your support. I also want to express gratitude to the students who were kind enough and allowed me to record their presentations, to Mgtr. Patricia Lauría, the Didactics II teacher and to the raters who participated in the study as external judges. They contributed with a lot of suggestions.

Finally, all the staff working for the MA English programme at the School of Languages are worth of praise. They were always there to answer all my queries and to offer positive solutions.

List of Tables

List of Figures

List of Graphs

Chapter I

Introduction

Preliminary Considerations

Delivering efficient oral presentations has become one of the musts within the repertoire of skills in several professional contexts and in diverse academic settings. In fact, according to Shalom, oral presentations contribute to further the knowledge on a certain subject and promote aims and interests for ongoing exploration of topics and inquiries in different disciplines (as cited in Ventola et al., 2002, p. 54).

In university contexts, either at undergraduate or postgraduate levels, it is very frequent that while students are taking the necessary courses to become future professionals, they have to cope with the task of giving oral presentations with clarity and precision. For instance, they may have to develop topics during classes, to present findings of research, or to make an oral defense of an MA or a PhD dissertation. Furthermore, very often they may be required to make an oral presentation in a language other than their mother tongue, generally English, which means that speakers not only need to develop the necessary oral skills to speak in public, but they have to do so in a foreign language.

This seemingly pressing need from academic contexts to give oral presentations effectively to facilitate message comprehension has led scholars within different fields to study this type of discourse. However, researchers such as Ventola et al. (2002) and Webber (2005), argue that even though a large volume of research about the differences between written and spoken language has been done, it appears that oral language in academic contexts (oral presentations, conferences, research/academic discussions, etc.) has not yet been fully explored.

Oral Presentations in Academic Contexts by EFL Learners

In academic contexts, university EFL learners are usually required to make oral presentations in different courses. To carry out this activity, students usually receive training on how to prepare and deliver talks effectively. Hincks and Edlund (2009) point out the relevance of these oral texts by stating that:

> Holding an oral presentation in front of their classes gives students who have reached a certain level of communicative competence the opportunity to practice a task that they in all likelihood will meet in their working life. Teachers are given the opportunity to listen in a focused manner to the spoken production of individual students, and classes are given a chance to learn about various topics from their peers rather than from their teachers. (p. 32)

In their research, these authors address the context of presentations given by learners mainly in graduate and undergraduate courses and also refer to the advantages as well as the challenges that students encounter when presenting a topic in front of their classmates and teachers. The authors highlight the complexities of the task for those students who are novice presenters and have to make presentations in English as a second or foreign language. They suggest that the way speakers use their voices to allow their listeners to have easy access to the content of the presentation is a factor of successful oral expositions in EFL academic contexts.

One of the ways in which speakers help listeners decode an oral text is by organizing their oral discourse in structures of topically related language. In fact, efficient listeners are characterized by permanently paying attention to speech segmentation and by being able to make predictions about what speakers are about to say (McCarthy, 1991; Van Dijk, 1982). However, as already mentioned, there does not seem to be much work done in relation to the linguistic features of oral presentations in academic settings and the linguistic features the speaker can resort to in order to present an oral text. It appears that the majority of public speaking manuals and books which provide instructions onto how to deliver oral presentations are limited to laying the emphasis on the choice of words, the construction of grammatically correct phrases, the use of pauses, a good pronunciation

and a loud voice. But there seems to be little research about the phonological resources that allow speakers to organize an oral text in a cohesive way in order to render a clear presentation of topics to listeners.

In spite of the fact that there exists research into how speakers segment their discourse in different contexts (Brazil, Coulthard & Johns, 1980; Brazil, 1997; Brown, Currie, & Kenworthy, 1980; Yule, 1980; Brown & Yule, 1983; Couper-Kuhlen, 1986; Barr, 1990; Tench, 1990, 1996; Wichmann, 2000; Pickering, 2004, among others), there has been little research on the way advanced EFL learners employ phonological tools to effectively structure oral academic presentations. Consequently, the field of oral presentations given by EFL students in academic settings in relation to phonological organization offers an area of interest for research.

Motivation for the Research

The main goal of this work is to examine the way speakers structure talks into paratones and the phonological features employed which contribute to effective topic organization signaling used by speakers during oral presentations in academic contexts. More precisely, the study aims to analyze the use of these tools by EFL university students doing oral presentations in class.

In the School of Languages of the National University of Córdoba, the aim of oral presentations in undergraduate courses is that students present and develop topics in English with clarity and using the appropriate vocabulary and expressions. Students are also expected to present topics using an intelligible pronunciation together with adequate prosodic features that contribute to an effective topic organization.

One of the main objectives of English Phonetics and Phonology II, a third-year course of the Teacher, Translator and Licentiate undergraduate programmes at the School of Languages, is to provide students with the phonological training in how to structure oral presentations effectively through the use of prosodic features such as rhythm, speed of delivery, pauses and pitch height, among others.

Nevertheless, through observation and practice during instruction, it has been possible to detect that in several cases students are not able to employ the necessary phonological features to structure oral presentations effectively into paratones. This, in turn, results in a great difficulty for information processing on the part of their audience, that is, their classmates and the teacher.

Given the difficulty that EFL university students show to deliver oral presentations, this work is intended to study the use of paratones required for the efficient structuring of oral academic presentations delivered by fifth-year EFL learners from the Teaching, Translation and Licentiate training programmes of the School of Languages. More precisely, this study aims at 1) examining through auditory and acoustic analysis the occurrence of the prosodic features of prominence, pitch height and pauses in the oral presentations given by fifth-year EFL students from the Teaching, Translation and Licentiate training programmes of the School of Languages, 2) at investigating how these prosodic features contribute to organizing speech into topically related sequences or paratones, 3) at determining the level of efficiency in the academic oral presentations under study by means of an assessment scale designed within the context of this work, and 4) at comparing the use of the prosodic features that structure oral discourse into paratones in an efficient and a non-efficient oral presentation.

In order to carry out this research, the oral presentations on 'teaching materials design for ESP' made by 15 fifth-year students of the Didactics II chair were recorded and later assessed by external judges who used a scoring tool designed by the researcher to select the most and the least efficient presentations. Auditory and acoustic analyses of these two samples were carried out in order to compare the use of the prosodic features under study by both speakers.

This thesis consists of six chapters. Chapter one, the Introduction, presents the research problem and the motivation for undertaking the study. Chapter two contains the State of Research and the Theoretical Background. It presents a revision of major studies in the area of oral presentations delivered by EFL learners in academic contexts and the way phonological features are used to structure discourse. It also contains a description of

Discourse Intonation, which constitutes the frame for the present research. Chapter three presents the methodological design, the procedures and instruments used in the study. Chapter four presents the Results; it shows the findings from a questionnaire, the average grades from efficiency ratings made by external judges and the results from the auditory and acoustic analyses. Chapter five consists of the Discussion and interpretation of the results. Finally, chapter six deals with conclusions, limitations, teaching implications and suggestions for further research.

Chapter II
State of Research and Theoretical Framework

This Chapter presents the State of Research and the Theoretical Framework of the study. The State of Research contains a revision of the most influential pieces of research in the area, focusing on the way EFL advanced university learners structure oral presentations into paratones through phonological features. The Theoretical Framework describes the theory of Discourse Intonation. This theory supports the analysis which will be presented in the following chapters of this study.

Section 1: State of Research

Oral Presentations and Phonology.

The study of oral presentations has been rather neglected by applied linguists and other researchers who analyze and describe academic discourse. This little concern for oral presentations may be due to their dynamic nature which implies moment-by-moment decisions as to how to present a "quasi spontaneous" talk (Ventola et al., 2002, p. 10). However, those who have started working on the way academic matter is orally presented, tend to focus on linguistic aspects of these presentations other than on the phonological choices that speakers must make in order to organize their talk in a coherent way for their audience. Authors such as Brazil et al. (1980) emphasize the fact that the appropriate use of phonological signaling resources to structure discourse contributes to enhancing communication between speakers and their listeners.

A considerable body of research in the field of Phonology describes units of spoken language and phonological features that speakers employ in an oral presentation to organize portions of information into parts. These contributions shed light upon and provide a better understanding of the ways in which presenters structure information in speeches, conferences, and academic lectures, among others, through the use of prosodic features to guide listeners and facilitate information processing as to the way that information is structured.

Studies on Oral Paragraphing.

The early studies which focused on the way speakers managed long portions of discourse, at least longer than single sentences or utterances, were done by Halliday (1967) and Crystal (1969). According to Jassem, these two scholars were pioneers in analyzing "spontaneous, unscripted conversation" (as cited in Tench 1990, p. 258) and responsible for a new interest in the studies on intonation.

Halliday's contribution consisted of providing a phonological hierarchy of intonation in which the "tone group" was the highest and largest unit of spoken language. His focus was also concerned with explaining the meanings of intonation within the system of the grammar of the English language (1967, p. 12). As regards Crystal's contribution; the researcher enlarged the area, suggesting that these units of spontaneous language were bound together. In a piece of research he conducted with Quirk, Duckworth, Svartvik, Rusiecki and Colin (1964), Crystal introduced a theory for tone-unit subordination in which these units integrate "simple" and "complex" sequences (Tench, 1990, pp. 259-260). In Tench's words, it was Crystal who "provided the fullest discussion up until then of "inter-tone-unit relations" (p. 260), thus, introducing the concept that these units of intonation are not discrete items in isolation, but that they occur in fluent connected speech and form part of larger units of spoken language.

After Halliday and Crystal's studies on spontaneous, unscripted language, in 1973 Fox started investigating these larger units which he called "paratone groups". A paratone group included "a tone group with a superordinate tone (=major tone group), optionally preceded and/or followed by tone groups with a subordinate tone (=minor tone groups)" (Tench, 1990, p. 263). In Fox's view, it is evident that these units of intonation exist in a hierarchy and that they are linked to each other forming structures of spoken language larger than themselves. It is recognizable, then, that these structures contain a minimal unit which is obligatory and central and around which other minimal units occur in subordinated relationship to the main superordinate unit. Fox's work is also clear in the fact that these are phonological units and their way and degree of superordination and subordination among them are related to information status, that is to say, they are not the exact equivalents of grammatical independent and dependent clauses. Consequently, it is

possible to state that Fox's work, together with the findings of Halliday and Crystal, paved the way for the research enquires of other linguists and phoneticians who wanted to reach the scope of study beyond single utterances into larger units in connected speech.

The work of Lehiste (1982) was influential in this line because she was the first "who provided phonetic evidence for these units" (Tench, 1990, p. 270). After an experiment based on listeners' judgments of sentences recorded in isolation and in sequences of other sentences, she found that speakers mark higher order units, similar to paragraphs from written language, by means of phonetic cues such as high pitch at the beginning, gradual descent of this pitch for the following units within the oral paragraph and low pitch at the end of the unit, usually accompanied by a long pause.

Lehiste (as cited in Tench, 1990, p. 272), states that speakers:

> use phonetic means to signal the beginning and end of such units in English:
> 1) The beginning of a unit is signaled by a high pitched onset syllable and a general high level of pitch for the paragraph-initial unit of intonation.
> 2) The general level of pitch gradually lowers for succeeding intonation units in the paragraph.
> 3) The end of the unit is signaled by a fall to a pitch lower than that of preceding falls within the same paragraph; that lowest fall is often accompanied by laryngealization.

In conclusion, these early studies motivated the interest of other researchers who continued with the task of analyzing evidence about the existence of higher order units above the level of single utterances by which speakers transmit ideas in an organized way, usually signaling the beginning and end of these units by phonological criteria. The scholars who worked along these lines can be grouped in 1) The School of Birmingham, 2) The Studies in Edinburgh, 3) Other Studies and 4) Recent Studies.

1. The School of Birmingham.

These studies started with the contributions by Sinclair and Coulthard (1975) who analyzed classroom interaction. They realized that during the interaction between teacher and learners there was a linguistic pattern that evidenced a discursive organization for which these scholars designed a rank scale. This scale was a hierarchy which consisted of categories for examining teachers and students' talk. At the lowest level of the rank scale, the minimal unit of spoken language is the act. Above the act, the units that follow, including the lower units in their structure, are the move, the exchange, the transaction and the lesson, as the highest category of the scale. These units were established by the researchers as categories of discourse, but they did not constitute units of phonological analysis. Nevertheless, it was David Brazil, together with other scholars, who studied the intonation of these units within the Birmingham tradition.

David Brazil and his colleagues presented and developed the Theory of Discourse Intonation (DI) (Brazil et al., 1980; Brazil, 1992 and Brazil, 1997), which will be referred to in more detail in Section II of the present Chapter. These scholars introduced a model of the intonation of the English Language which has been not only widely taught in EFL education at Higher Education levels, but also increasingly researched and applied in the analysis of different types of discourses by authors such as Barr (1990), Coulthard (1992), Flowerdew (1994), Morra and Soler (1999, 2002), Wichmann (2000), Pickering (2004), Hincks (2005), Kang et al. (2010), and others.

The model of intonation suggested in the theory of DI was based on the analysis of naturally occurring spontaneous data. The categories of this system, as well as speakers' choices during an interaction, "make direct reference to the here-and-now state of speaker/hearer convergence" (Brazil, 1992, p. 209). In other words, speakers' intonational decisions in discourse are motivated by contextual factors, such as time and place of the interaction. Brazil adds that "situationally appropriate discourse is generated by both parties to the interaction in response to the assumed communicative need of the moment" (p. 210). That is to say, besides time and place, choices of intonation are made in the light of interactants' communicative purposes. Brazil holds that discourse unfolds

in a progression of choices made by interlocutors influenced by contextual aspects of the situation.

Discourse intonation proposes phonological categories to analyze oral language which extends beyond the single utterance and constitute a hierarchy. In this system of intonation, the minimal unit is the "tone unit", similar to the tone group in Halliday. Above the tone unit, Brazil recognizes a higher order unit, the "pitch sequence", defined as "any stretch of language which ends with low termination and has no other occurrences of low termination within it" (Brazil, 1978, p. 18). "Termination" refers to the selection of relative pitch level on the tonic syllable of the tone unit. On the other hand, choice of pitch level on the onset, or first prominent syllable in a tone unit, is called "key" (Brazil et al., 1980). Both key and termination are three-term systems (high, mid and low), independent from the system of tones.

In reference to the pitch sequence, Brazil (1997) states that this unit consists of one, or more than one, tone units and that tone units within the sequence are topically related to one another. This relationship between tone units within a pitch sequence and between pitch sequences is indicated by "pitch phenomena" (Coulthard, 1987, p. 60). That is, through variations in the pitch of their voices, interlocutors indicate meaning relations within a unit of spoken language, as well as between units.

According to Tench (1990), Brazil's greatest contributions to the study of phonological paragraphing were the description of the concepts mentioned above, that is to say, key and termination, as independent features that define a unit above the tone unit: the pitch sequence. Other scholars, such as Coulthard (1992) consider that another important contribution is the fact that "the intonational divisions that speakers make in their utterances are not grammatically motivated…; rather they are motivated by the need to add moment-by-moment, situationally specific, intonationally conveyed meanings to particular words or group of words" (p. 38).

After Brazil's model, an insightful body of research has been growing over the last few decades, enlarging, deepening and elaborating on the Theory of DI. Most of the scholars who have been responsible for expanding this theory have conducted research which

draws upon DI mainly as the theoretical background of studies which focus on the analysis and description of phonological features from the system of intonation. These features have been shown to function as information structuring resources which, from the point of view of text producers, organize the oral text into units larger than the utterance, similar to oral paragraphs. From the point of view of text receivers, these features cue and guide listeners at the moment of decoding a message.

Another author devoted to the analysis of the features which define higher level units above single tone units is Pauline Barr (1990). She reports on a study which focuses on the functions of features of DI in lecture organization and in the way students may exploit them to improve comprehension upon receipt of information. The corpus includes fragments of lectures given by four students at undergraduate level, all native speakers of English, to a group of 80 students in their first year of Accounting studies. The talks were audio and video recorded. Photocopies of students' notes taken during the lectures were kept in order to verify if learners have made a note of major points covered in the talks chosen for the analysis.

Based on her analysis, she found that there is a unit which reveals the lecturer's organization of his/her speech: the *sequence chain*, which basically refers to a chunk of discourse which deals with a topic. According to the findings of this study, a sequence chain is content-defined, and its boundaries are signaled by phonological criteria and/or marked by introductory topic expressions which she calls "lecturing frames" (p. 11). Barr calls "lecturing frames" to a set of words whose main function is to set the boundaries of sequences of spoken language so that they clearly mark the end of a part of a talk and the beginning of the subsequent new part.

The majority of the presenters in Barr's work used high key or a high pitch at the beginning of each of these chunks in their discourse. This fact led Barr to define a sequence chain as "a string of pitch sequences such that the first pitch sequence and only the first pitch sequence begins with either high key or a lecturing frame" (p. 11). Barr's concern for the way the student presenters in her study divided up information in their lectures led her to compare and contrast the student listeners' notes with the recordings collected. She found that "lecture monologue can be seen to consist of chunks of discourse

whose functions are similar to those found in sections of written discourse," (p. 10) and she adds that the fact that there exists a division of talks into parts is evidenced in the ways the students took notes, dividing the lectures into different chunks, and in the manners information was organized and presented in lecture handouts and OHP transparencies.

The researcher also suggested that spoken monologue can be perceived as divided into parts through the use of presenters' pauses. However, she explains that in her data there are many pauses which do not separate chunks and occur in the middle of them, whereas other pauses are chunk-identifying and occur at the boundaries of different parts of the talks. For this reason, the author concludes that it seems that pauses alone are not enough for recognizing chunk boundaries and therefore, she introduces the probability that it may be that speakers' use of intonation is a better indicator of chunk-definition.

It can be said that Barr furthers Brazil and his colleagues' findings by adding another unit in the hierarchy proposed in the model of DI, the sequence chain, which is above the pitch sequence and, therefore, it may include one or more pitch sequences. The researcher adds that, likewise the tone unit and the pitch sequence, the sequence chain is defined at its limits by speakers' use of intonation, but while the pitch sequence is defined by its final phonological features, the sequence chain is defined by features occurring at the beginning of the unit: it starts with high key or a "lecturing frame", as mentioned above.

Barr's study makes, then, important contributions to the research on lectures and on the way language users employ intonation to give an account of the structure and relationships of portions of data while delivering a speech and, also, on the manner listeners perceive that organization.

2. The Studies in Edinburgh.

The works done by Brown, Currie and Kenworthy (1980), Yule (1980), and Brown and Yule (1983) have also contributed to valuable research and to the analysis of the use of intonational cues at the limits of the oral paragraphs.

Brown, Currie and Kenworthy (1980) describe in detail the intonation patterns of one of the accents of Scottish English, the Edinburgh Scottish English (ESE). One of the purposes of this research is to characterize the intonation system of this accent from the point of view of whether speakers employ intonation to continue with a topic they are already dealing with in conversation or if they use intonation to establish a new topic.

The data they analyze cover over one hundred interviews which range from formal readings of sentences in isolation and texts to answers to a questionnaire. They also include conversations, some of them directed by interviewers and some others spontaneously produced. The participants of the study are all native ESE speakers. The interviews were audio recorded and then transcribed. These transcriptions were auditorily analyzed by two trained phoneticians who listened to the samples independently to mark pitch and pauses. These independent transcriptions were compared and an agreement was reached in those points where markings were different. The transcriptions were also analyzed acoustically with the Frokjaer-Jensen Intensity Meter and the fundamental frequency (F0) of pitch movements was measured in cycles per second (cps).

As already mentioned, one of the aims of this study was to explore the way participants employed intonation to signal either if they were continuing speaking about a topic or if they were ending it. The researchers found that the participants' spontaneous speech was divided into 'pause-defined units'. These units consisted of chunks of discourse separated from one another by long pauses or 'topic pauses', lasting between 1.0 and 1.8 seconds. These researchers also found that there was another type of pauses, which they called 'contour-marking pauses', lasting between 0.6 and 0.87 seconds, which enclosed smaller units of discourse.

The authors also found that these units separated by pauses begin with a peak-initial contour, or a salience in pitch, which in most cases coincides with a change in topic in the participants' discourse. Brown et al. (1980) called these chunks or stretches of discourse 'paratones' and defined them as "a short sequence of units beginning with a stressed peak high in the speaker's voice range" (p. 26). They also distinguished between 'major paratones', which are those "which follow topic pauses and are characterized by very high peaks" and 'minor paratones' "which follow contour pauses and begin with

lower peaks" (p. 71). Therefore, these findings reveal that, at least in spontaneous unrehearsed speech, speakers seem to delimit different topics, and even sub-topics, through phonological resources which set the boundaries of different speech paragraphs. The terms 'major and minor paratones' can be regarded as useful contributions since they are taken as categories of analysis by other researchers in the area of Phonology.

In the same line of analysis, Yule (1980) based his work on the role of intonation to organize long portions of oral texts. He claims that speakers use intonation to mark the boundaries of these portions or units of spoken language about a topic. To carry out the research, the data analyzed concern recorded informal conversations of speakers of ESE. The recordings are part of the corpus employed in the work of Brown et al. (1980) described before. In his article, Yule presents several transcriptions of extracts from the recordings and discusses the use of speakers' intonation to begin and finish their topics as they speak. This scholar found that the participants' contributions have a paratonic structure signaled by their use of intonation. The use of paratones is evidenced by a rise in pitch in the first stressed syllable, followed by a descent in pitch in the subsequent stressed syllables and a final fall in the last stressed syllable. This final fall to a low pitch is followed by a long pause, usually exceeding one second, which undoubtedly marks the end of the paratone, and it is followed by a new rise in pitch of the next paratone (p. 36).

The researcher also distinguishes between major and minor paratones in the data under study. He describes minor paratones as phonological units starting with initial high peak and ending with a fall to low with or without a pause or a fall to mid with a pause (p. 36). However, it seems that both the analysis and the results are targeted at defining features of major over minor paratones. As regards major paratones, the author explains that in his data these units of spoken language are realized through a topic expression, introducing the new topic to be developed, and by the phonological marking already referred to (p. 42).

Furthermore, Yule found that the beginning of a major paratone has an obligatory intonational mark, which is a high pitch in the onset, whereas the end is optionally marked. He claims that the initial high pitch falls on a topic expression and that the closure may not necessarily be marked by low pitch. When this happens, he found that speakers

can use a summarizing expression or a long pause. Finally, he emphasizes that the long pause is the clearest marker of the end in a major paratone (pp. 38-39).

As regards minor paratones, Yule does not explicitly specify the criteria for their identification (Tench, 1990, p. 284). In Tench's view, Yule's minor paratones seem to begin with a high peak in pitch and finish with a low pitch, followed or not by a pause. Tench also adds that these minor paratones appear to be equivalent to Brazil's pitch sequence. Yule considers that there are difficulties in determining the phonological features of these units (p. 38).

The work done by Brown and Yule (1983) on Discourse Analysis is devoted to providing a descriptive account of the ways speakers and writers use language in communication and, also, of the ways listeners and readers interpret messages. The study is mainly a theoretical work which draws on several different types of data, ranging from literary works, news items and informal talks of postgraduate students to conversations between native speakers of ESE in a pub, taken from Brown et al. (1980).

Following the findings of Brown et al. (1980) about spoken texts being divided into oral paragraphs or paratones, Brown and Yule state that "there are, in fact, structural units of spoken discourse which take the form of 'speech paragraphs' and have been called paratones" (p. 101). They suggest that there are boundary markers which signal the beginning and end of these units of spoken language and that speakers are able to use them in order to indicate shifts in topics when they speak. When speakers announce a change in topic, they do so by means of an expression which introduces the topic they wish to talk about and accompany this expression with phonological cues. This introductory expression may be placed at the beginning of the first utterance and it may be said with a rise in pitch; thus, signaling the onset of the topic that speakers are introducing. To indicate the end of the topic, speakers may use a very low pitch, together with a long pause, usually longer than one second (p. 101).

3. Other studies.

Couper-Kuhlen (1986) presents a book about English Prosody which had its origin in her concern about this topic when she was teaching English intonation in different universities such as Frankfurt, Zurich, and Konstanz. In other words, the book comes from her intention to cover her students' needs. It includes topics such as prosody and prosodic features, stress and accent, rhythm, intonation, and the functions of intonation. The author states that the data come from a corpus of spoken English of the British variety and include radio and TV programmes and interviews from the BBC compiled from 1977 to 1979. The book contains several fragments of this recorded material, which were used to illustrate most of the contents.

As regards the discoursal function of intonation, Couper-Kuhlen considers that a text is an organized unified whole. The organization of texts is based on sub-units which are related to the development of a topic. She takes the notion of a conceptual paragraph from Hinds (1979, p. 136), who defined it as "a unit in speech or writing which maintains a uniform orientation" to make a parallel between oral and written texts. Therefore, this comparison is useful to almost equate the use of paragraphs in writing as having a unifying and organizing function with the use of paratones, or speech paragraphs, in oral texts with the same function. The author postulates that "(t)exts can be seen as consisting of an unspecified number of these sub-units which are organized around *topics*," (p. 189).

Together with Brown et al., Yule and Brown and Yule, Couper-Kuhlen also believes that there exist higher order units which have a structuring function of the information in spoken language. In her data, she found that there are two types of these units: macro, or major, and micro, or minor, paratones. Macro paratones begin with a high pitch in the speaker's voice range and end with a very low pitch, followed by "a noticeable pause" (p. 190). By "a noticeable pause" the author refers to the pause which Yule (1980) found in his data which is a pause that frequently lasts one second or more. The researcher adds that "(h)owever, whereas the initial marking of a major paratone is obligatory, the final marking – in particular, the pause – may be lacking. Nonetheless, the final boundary may be established in retrospect by the presence of a following initial boundary." (p. 190). In this way, clear references are given as to the intonational cues which could be present in

discourse to aid listeners to get the organization of a talk easily, through variations in pitch and the use of pauses on the speaker's part, and facilitate the audience access to information.

The other type of paratone, the micro paratone, is characterized as smaller in size in relation to the macro paratone; Couper-Kuhlen equates it with the *pitch sequence* in the Theory of DI. Different from the macro paratone, the micro paratone has an unspecified pitch height at its onset. In other words, speakers may employ high, mid or low pitch to begin these units. Nevertheless, the end should be compulsorily marked by low pitch.

Micro paratones are thus subdivided into three sub-types – those beginning with high pitch, those beginning with mid pitch and those beginning with low pitch. In the data Couper-Kuhlen studied, she found that micro paratones with a high onset usually initiate macro paratones and therefore, they signal the start of a new topic. Micro paratones beginning with a mid pitch frequently indicate that their content is an addition or an extension in relation to what has been said. Finally, when micro paratones start with low pitch, their content is an inclusion in the previous discourse.

Couper-Kuhlen's main contribution is probably the notion of cohesion between the units of the hierarchy in connected speech. Cohesion can be of two kinds: external and internal. External cohesion between macro-paratones is given by the occurrence of low pitch at the close of macro-paratones. She states that "Macro-paratones are closed by one or more low pitches, usually accompanying a falling nucleus, at the lowest or nearly lowest level of the speaker's pitch range" (Tench, 1990, pp. 291-292). Internal cohesion of macro-paratones is determined by the way the constituent micro-paratones begin and finish through the initial and final pitch.

Another important contribution to the study of units of intonation above the tone unit is made by Paul Tench (1990). He provides a comprehensive description of the roles of intonation in English. The main purpose of this study is to explore the six functions that intonation plays in English discourse: attitudinal, communicative, informational, syntactic, textual and stylistic functions. The data analyzed in this research include audio

recorded material of actually spoken texts from Crystal and Davy (1975), Brown et al. (1980), and other sources, such as extracts from BBC Radio 4 (1986).

From the point of view of oral paragraphing, Tench considers that, of the six roles of intonation, the textual function is used to organize talk into chunks longer than single pieces of information. In the chapter devoted to illustrating this function, he presents an overview of phoneticians who focused on the uses of intonation to organize stretches of spoken language larger than a single unit of intonation before arriving at his own contributions. He begins an account with the studies of scholars like Palmer (1922) and considers his work as one of the earliest analyses done in the area of the uses of intonation to build oral paragraphs. According to Tench, the foundations in the area were actually laid by Pike (1955) and Trim (1959) when the former introduced the notion of phonological hierarchy and the latter, the differentiation between 'minor' and 'major' tone groups. Nevertheless, the trip through these various research studies seems to acquire its stress with Lehiste (1980) who, as already mentioned, considered that there were three factors which gave cues to listeners in order to identify the ends of chunks in discourse. These factors were a long pause, laryngealization and pre-boundary lengthening.

In a later work (1996), Tench, from a Hallidayan perspective, refers to the concept that the intonation of English operates in a three-layered system, composed of ‘tonality, tonicity, and tone’. He states that:

> tonality is the system by which a stretch of spoken text is segmented into a series of discrete units of intonation which correspond to the speaker’s perception of pieces (or ‘chunks’) of information; tonicity is the system by which an individual, discrete unit of intonation is shown to have a prominent word which indicates the focus of information; and tone is the system of contrasting pitch movements in each unit of intonation, which among other roles, identifies the status of the information, e.g. major, minor or incomplete. (p. 8).

Within these three layers, Tonality is linked to the function of textual structure of intonation. Tench redefines Tonality by stating that it “concerns longer structures than single units of intonation and individual pieces of information” (p. 23). He explains the

manner the process called in his terms ‘phonological paragraphing’ (pp. 23-24) operates when speakers employ intonation to divide and stage the information in their speech in order to present it in a manageable way to listeners. Following the researchers mentioned before, this author also says that, for example, when listening to news reading, identifying the points where speakers finish a topic and start a new one can usually be an easy task. No doubt, the topic, the grammar of reference and conjunction and intonation are three factors that work together in helping listeners detect beginnings and ends in spoken language. However, considering phonological criteria, there is a pattern of “high start, gradual descent and low finish” in news reading, as well as in other types of oral texts which are prepared and rehearsed, such as stories and jokes. The pattern is recurrent in most chunks or ‘phonological paragraphs’ in oral language.

Furthermore, Tench discusses how these oral paragraphs are also bound up together by intonational resources, therefore, exhibiting a textual structure of speakers’ talk. This binding of phonological paragraphs is done through the use of low pitch in the final stressed syllable of the oral paragraph, followed by a pause and initial high pitch of the next oral paragraph. Tench states that the “combination of pitch descent and pause serves to combine units together but serves also to detach the final unit of one item from the initial unit of the next” (p. 23). In an attempt to clarify even further the phonological cues that delimit oral paragraphs, Tench adds that:

> (t)he key to phonological paragraph is:
> (1) The high pitch on the onset syllable of the initial intonation unit.
> (2) The relatively high ‘baseline’ of that initial unit; this means that the low pitches are relatively high, compared to the low pitches in the final unit of the paragraph.
> (3) There is a gradual lowering of that baseline until the final unit is reached.
> (4) The depth of fall in the final unit is the lowest in the whole paragraph.
> (5) There is usually a slowing down process in the final unit.
> (6) There is a longer pause than is normally allowed between intonation units. (p. 24).

The study of Tench can be seen as a useful contribution to the previous works that focused on the identification of units in spontaneous, connected speech beyond the level of discrete utterances in isolation mainly because, from the point of view of revision of the literature, he provides a detailed description of the major exponents in Phonology. In addition, he supplies clear hints in order to both produce and perceive oral paragraphs in lectures, oral presentations, and similar texts.

At the end of this section, table 1 presents a chart which shows the different units of unscripted language according to different authors.

4.Recent Studies.

In the light of more research needed to prove the contention that speakers resort to intonation to organize what they say; some recent studies have also focused on the manner language users employ intonation with a discoursal function in different types of oral texts.

Wichmann (2000), in a study which inserts itself as an interface between the structure and meaning of intonation and discourse analysis, analyzes the use of prosodic features by expert readers and storytellers to study the influence of these features in speech structuring. The data come from the Spoken English Corpus (SEC) (Knowles, Williams & Taylor, 1996) which includes 53 oral texts of different genres and which are mainly rehearsed monologues. The researcher used transcriptions of texts and their corresponding sound recordings. The transcriptions were carried out by the phoneticians Gerry Knowles and Briony Williams and they showed two main features of intonation – tones and boundaries. The data in Wichmann's book were auditorily and instrumentally analyzed by the researcher. For some excerpts, tadpole transcription was used, whereas for some others the illustrations of pitch curves from the speech software analyzer were employed. To draw conclusions from the analysis, the author compared the written versions of texts with the spoken versions and corroborated if beginnings and ends of written and spoken paragraphs coincided.

Wichmann looked at prosodic resources such as ‘pitch reset’, ‘declination’, ‘supradeclination’ and pauses in the organizational topic planning which speakers carry out during their oral performance. This researcher considers that listeners, who do not have access to the printed material that is being read or to scripts in the cases of monologic texts which are not read, have to rely on prosodic cues of the speakers’ voices to detect the beginnings and ends of different topics and parts of discourse. When listeners detect beginnings, what they actually perceive is called ‘pitch reset’ or a “step up in pitch for a new beginning” (p. 24). In other words, a ‘pitch reset’ is a high onset in pitch that speakers use to start a new topic.

After pitch reset, ‘declination’ follows. The author defines this term as “the typical tendency of pitch to fall in the course of an utterance” (p. 24). While ‘declination’ refers to the gradual lowering of a speakers’ pitch range over an utterance, ‘supradeclination’ points to the lowering in pitch across a larger portion of talk. ‘Supradeclination’, then, is seen as the gradual descent of pitch beyond the level of a single utterance. Therefore, ‘declination’ describes this descent in pitch at a local dimension in discourse, whereas ‘supradeclination’ implies the use of this downward melody of speakers’ voices at a more global level, for it pertains to larger units of information of discourse management.

In order to analyze beginnings in spoken language, Wichmann studies four different extracts: a news summary, a news report, a short story and children’s oral reading. She found that in many occasions speakers organize information in an oral text in such a way that it may not hold the same organization as if it were arranged in written paragraphs. In the case of the news summary, her findings reveal that the speaker used initial low pitch for the first utterance at the start of the text and relatively high pitch on utterances occurring inside the text. For the news report, the speaker did use a higher pitch for initiating a new topic than that of the following utterances. Both for the short story and the children’s oral reading, the researcher found that, in some instances, the speakers used high pitch or pitch reset at the beginning of utterances which were not sentence-initial in typographical paragraphs in the written versions of the texts read aloud. This suggests that while paragraphs in written language are orthographic units, in spoken language oral paragraphs may be signaled differently by speakers depending on their own view of where a topic begins and ends.

For the analysis of endings, written and spoken versions of texts from the SEC, together with the transcriptions were studied. Wichmann found that the

> majority (79%) of major tone group boundaries co-occur with the end of an orthographic sentence, in that they co-occur with a full stop or other end-of-sentence marker such as ! or ?. The end of an orthographic sentence in this corpus is thus highly likely to be also the end of a 'spoken sentence'…and indicated by a falling tone. (p. 50).

However, she mentions some other cases in which speakers' oral performance was different because speakers used tone groups ending with a fall assuming finality not necessarily at the end of the orthographic sentence, but elsewhere. This was the case of adverbials in final position which, in most opportunities, ended with a rising tone, instead of a fall. It was also the case of complex syntactic sentences, which speakers read aloud producing an utterance-internal fall, thus reducing an orthographic sentence into a shorter spoken sentence.

At the level of oral paragraphs, Wichmann refers to 'paragraph intonation' as "the use of pitch to signal the topical coherence of a series of utterances, much in the same way a printed paragraph signals such coherence in written texts" (p. 102). The author concentrates in looking for evidence of 'supradeclination'. She found that only one-third of the oral paragraphs under analysis followed the pattern of descending pitch. Therefore, she concludes that there might have been 'obscuring factors' operating, different from information structure. One of these factors, she suggests, can be the rhetorical relation between individual sentences inside oral paragraphs (pp. 118-119).

Wichmann's contributions can be considered valuable since they provide another aspect, in her view, apparently not exploited before. She refers to the work of Brown et al. (1980) and claims that these phoneticians focused on the definition of units of spoken language, that is, the paratones, by giving evidence of prosodic features at their boundaries. Instead, she claims that paratones can be studied and defined in terms of what happens across whole paratones and inside them. Consequently, perhaps both views can be seen as

complementary. Nevertheless, it is worth mentioning that her study focuses mainly on read aloud speech, not in the discourse of oral presentations.

Another researcher, Thompson (2003), focuses on speakers' use of intonation and lexical cues at certain points in academic lectures in order to signal the organization of talks and allow listeners to form a mental sketch of the outline of presentations. The purpose of the author is to show to what extent listeners can make a 'mental map' of an academic talk, in other words, to what extent they can grasp the different stages of a presentation as they rely on the intonation and choice of words of speakers to guide listeners through this task.

The study focuses on the functions of text-structuring metadiscourse and intonation to signal the global organization of academic talks. The researcher compares text organization in six authentic undergraduate lectures and ten talks taken from EAP materials published over the last 25 years. She focuses on the use of speakers' choices of 'frame markers' and phonological paragraphing. Thompson claims that "lecturers can help their audience to process the information in their talks efficiently and make a 'mental map' of the overall organization of the text" (p. 6). In doing so, lecturers use signposting language, such as 'frame markers', which signal "interpretive framing information about longer elements of the discourse", according to Hyland (as cited in Thompson, 2003, p. 7). These items show sequencing ('first', 'next'), label stages ('to conclude'), discourse goals ('my purpose is') and shifts in topics ('well').

As regards phonological paragraphs, this author equates the structuring function of information into manageable chunks of orthographic paragraphs to that same role of phonological paragraphs in spoken discourse and mentions studies, like Yule's (1980), in which this purpose of oral paragraphs is analyzed. The identification of these oral paragraphs is evidenced by phonological features at the boundaries of these units. Therefore, their limits are indicated as follows:

> high pitch on the first prominent (stressed) syllable of the initial tone unit and may be marked by relatively high pitch across the whole of that first tone unit. Throughout the phonological paragraph there is an overall gradual lowering of this

> pitch level, and the phonological paragraph ends with its lowest pitch choice on the tonic syllable of the last tone unit. (pp. 7-8).

Thompson adds that "the end of the phonological paragraph may be followed by a significant pause (one second or more) before the speaker's voice jumps up again to start the next phonological paragraph" (p. 8).

In this study, all the lectures were transcribed, both the authentic ones and the ones taken from EAP materials. The transcripts were analyzed in search for text-structuring markers, those at highest levels only, which included global, topical and sub-topical markers. Those markers signaling exemplification or contrast, that is to say, local relationships between informative portions of the talks were not considered in the analysis. Then, the recordings of all the lectures were analyzed to detect phonological features marking boundaries of phonological paragraphs. A second independent rater was asked to identify these oral features and only the features which were identified by both raters were considered for later analysis.
The results of this work show that:

> for both the authentic and the EAP talks, there is quite a strong likelihood that new phonological sections will contain text-structuring metadiscourse. This is particularly the case at the level of introducing major topic areas rather than the global organization of the lecture, which is typically done by the use of structuring metadiscourse alone. (p. 17).

Consequently, according to the findings of this study, it seems plausible that through the use of intonational cues, lecturers organize the information in their talks breaking it down into phonological paragraphs to render it in manageable ways for their listeners, so that they can follow the lecture and grasp the 'mental map' of the talk's overall structure.

It is also the case that these phonological cues accompany frame markers which signal the introduction of topics, even though other sections still corresponding to the global structure of lectures may not always be indicated by the phonological resources under

study in this work. Finally, the researcher considers that, concerning the structuring role of phonological paragraphs in academic lectures, very little research has been done.

Pickering (2004), from the point of view of Brazil's (1997) DI Theory, studies the structure and function of the intonational paragraph as an organizational tool of classroom speech in L1 and L2 settings. This researcher analyses the structure of intonational paragraphs by focusing on the speakers' pitch range and use of pauses to delimit the boundaries of the oral paragraphs in their talks. She compares performance in two groups: one of them is constituted by six native English teachers and the other by six non-native teacher assistants, both groups of teachers work in a US university. The non-native participants were from China and their L1 was Mandarin Chinese. Their level of English was rated as "somewhat to generally effective" according to the Educational Testing Service Speaking Proficiency English Assessment Kit (1996, p. 9).

The corpus of this research study consists of 12 samples which were audio and video recorded. They all last between 2 to 4 minutes. Pitch range and pauses were analyzed with a Kay Elemetrics Computerized Speech Laboratory 4300. Apart from the instrumental analysis, the samples were auditorily explored following the system of DI by Brazil (1986, 1997). The results show that non-native participants were not as efficient as native participants in the management of key and tone choices to structure their discourse. Therefore, Pickering concludes that non-native speakers in her study have a limited management over the intonational structuring of speech, which influences message comprehension on the part of listeners.

Nafá Waasaf (2005) makes a study about the use of intonational features for the structuring of oral paragraphs in simultaneous interpreting. The researcher resorts to the system of DI described by Brazil and to the Theory of Orientation in Reading Aloud (Brazil et al. 1980, Brazil, 1985) to interpret speakers' phonological choices. The analysis focuses on three prosodic resources – pitch height, allocation of prominence and choice of tones.

The study is designed within an observational methodological framework which combines qualitative and quantitative methods. The observational methodology allows

the researcher to describe intonational choices and explore the functions of intonation in the samples under analysis. For the qualitative aspect, the samples are analyzed according to premises from discourse analysis. For the quantitative aspect, a software programme was employed, Speechanalyzer 1.5 Test Version 15.3, to conduct an acoustic study of intonational features. The corpus of her work is made up by 30 political parliamentary speeches in British English, the source language, and 30 in Spanish, the target language. The speeches in Spanish were delivered by the interpreters.

Even though her research is not specifically focused on oral academic presentations given by EFL advanced learners, the results are worthy of attention. The majority of the speakers, both in the source and in the target language, structure their interventions into oral paragraphs resorting to the same intonational features. They begin every paratone with a rise in pitch, that is, with High Key, and finish with Low Termination, followed by a long pause. Only some cases are characterized by a beginning with Mid Key and they are soon followed by High Key. These cases with initial Mid Key are motivated by a desire of the speakers to signal the end of the previous phonological intervention. They immediately employ High Key to begin the new intervention (p. 411).

There are also some other interesting findings in Nafá Waasaf's research. She found some paratones which begin with Mid Key and finish with High, Mid and Low Termination (p. 414). Within paratones, the results showed varied intonational choices. The use of High Key within oral paragraphs in both languages was employed to signal emphasis and contrast in reference to a previous phonological unit. Low Key was used for equivalence in meaning between two units, both in the source and in the target languages (p. 415).

Kang, Rubin and Pickering (2010) explored suprasegmentals – speech rate, pause, pitch, and intonation –through acoustic measures in relation to listeners' perceptions of L2 oral proficiency. They analyzed 26 speech samples of non-native speakers who were taking the iBT TOEFL examination. The samples lasted for about 60 seconds and they were answers to a question in which candidates were asked to summarize and show understanding of an article they had just read.

As regards the procedures, raters were trained and scored each sample online. The assessment conditions and criteria they had to manage were the ones employed in the iBT TOEFL oral tasks (p. 60). Proficiency and comprehensibility measures were developed on the basis of Likert scales. A 7-point scale for proficiency ratings and a 5-point scale for comprehensibility ratings. Both scales showed reliability according to the Cronbach's alpha analysis – the proficiency scale was .96 and the comprehensibility scale was .94. The samples were transcribed following the model of DI developed by Brazil (1997) and acoustically analyzed with a KayPENTAX Model 5400 Computerized Speech Laboratory (CSL) for rate, pause, stress, pitch and paratones (p. 5). The data were analyzed by means of a general multiple regression model and then through a hierarchical cluster analysis.

Among the results, those related to pitch variation and the use of pauses to delimit paratone structure are of importance. The researchers found that:

> The boundary-marking cluster (i.e., number of silent pauses and low termination tone choices) exhibited positive relations to comprehensibility and proficiency ratings. It is well known that NSs of English tend to use low pitch levels accompanied by longer pauses at topic-final boundaries, whereas they use high pitch levels at the initiation of a new topic and use middle levels at points of continuation (Nakajima & Allen, 1993). The current finding is consistent with earlier research that NNSs' production of low termination tones facilitates the comprehension of discourse structure by NS listeners (Pirt, 1990). (pp. 562-563).

Buss, Cardoso and Kennedy (2015) conducted a pilot study in Concordia University, Canada. Their study was part of a larger project which analyzed speaking abilities of non-native undergraduate learners longitudinally. The researchers studied the use of pitch height to structure paratones and to signal semantic meaning between ideas within paratones in oral academic presentations. They employed the model of prosodic phonology developed by Nespor & Vogel (1986).

The participants were 4 students of English as an L2, whose mother tongue was Mandarin Chinese, and 2 native speakers of English. They were recorded while delivering

presentations 4 times in a two-month interval. The non-native participants were enrolled in an immersion programme and did not receive any previous instruction. The native participants were recorded in order to keep their presentations for comparison. The recorded samples were acoustically analyzed with a software programme, Praat.

In general terms, results indicated that non-natives' use of pitch height at the beginning of a new topic was less evident than natives'. Nevertheless, what was less of a challenge for these non-native participants was the fact that they did not employ low termination between ideas inside paratones, while native speakers were able to employ low pitch between ideas inside paratones in the study.

All in all, and considering the studies mentioned above, research on oral presentations from a phonological perspective can nowadays count on units of analysis at different levels of a hierarchy. Although most scholars accept the existence of these units and agree as to the role they play, they sometimes differ as to the way they define them, that is, some scholars define these units by phonological phenomena occurring at their beginning and others at their end. In spite of these differences, they all stress the importance of these phonological units in building up oral presentations and stress the need for further studies in the area.

Following, there is a chart which has been adapted from Tench (1990, p. 290). This "comparative table of analyses of levels above the tone unit", as the researcher calls it, has been modified for the purposes of this work with the inclusion of the findings of Pauline Barr (1990). As already mentioned, the table contains the categories of analyses in the way they will be applied in the analysis of the oral presentations of this study.

Table 1

Comparative Table of Analysis of Levels Above the Intonation Unit

Lehiste (1975, 1979)	**Brazil and colleagues (1975, 1978, 1980,1985, 1997)**	**Pauline Barr (1990)**	**Brown et al (1980), Brown & Yule (1983), Yule (1980)**
	Tone unit	Tone unit	Pause-defined unit
Sentence Intonation Pause and pre-boundary lengthening	Pitch sequence Beginning: High/ Mid/ Low key End: Low termination	Pitch sequence Beginning: Mid/ Low key End: Low termination	Minor paratone Beginning: Initial high peak Fall to low, + or – pause Fall to mid, + pause
Paragraph Intonation Beginning. High initial pitch General high pitch level of initial "sentence" End: Low pitch / laryngealization Greater pre-boundary lengthening Long pause	Series of Pitch sequences Beginning: High key End: Low termination	Sequence chain Beginning: High key / Lecturing frame End: Low termination, + or – pause	Major paratone Beginning: Initial high peak End: Low pitch and long pause or summarizing expression

Table 1: Comparative Table of Analysis of Levels Above the Intonation Unit. Adapted from *The Roles of Intonation in English Discourse* (p. 290), by P. Tench, 1990, Frankfurt am Main: Peter Lang. Copyright 1990 by Verlag Peter Lang GmbH. Adapted with permission.

Section 2: Theoretical Framework

The communicative purposes of speakers may be diverse. Nevertheless, language producers want to be understood by their listeners in most cases. This supposition may lead speakers to manage the content of what they need to say in ways that enable their listeners to have an easy and comfortable access to the information of the message; that is to say, they may resort to varied linguistic and non-linguistic features to carry out this task.

As regards the spoken message and in contexts like academic oral presentations speakers can use linguistic resources at their own disposal to deliver a lecture in a neat and organized fashion. These linguistic resources belong to different dimensions of the language. For instance, presenters may resort to signposting language through adverbs and adjuncts, varying speed of delivery, using pauses, varying loudness, among others. Considering the studies mentioned in the previous section of this chapter, there is evidence that most speakers use phonological features to guide listeners through the organization of lectures into parts that constitute units of spoken language.

The purpose of this study is to analyze oral presentations from the point of view of discourse structuring phonological resources. In order to fulfill this objective, this work draws upon the Theory of DI developed by Brazil et al. (1980), Brazil (1997) and Barr (1990).

Discourse intonation.

The theory of DI presented by Brazil et al. (1980) and Brazil (1997) provides a suitable theoretical framework to study the functions of intonational cues in the phonological structuring of oral presentations in academic contexts.

One of the main assets of this intonational model is that "by working in a discourse framework it is possible to reveal some underlying general truths and that these, in turn, give reason to believe that the way intonation affects meaning *can* be presented in fairly

simple, coherent and homogeneous terms" (Brazil et al., 1980, p. xiv) [emphasis in original]. In other words, on the one hand, intonation is analyzed as an essential aspect of the communicative speech event. On the other, once a feature of intonation has been assigned a certain communicative meaning, that meaning is valid for all the occurrences of that said feature.

Units of Spoken Language and Prosodic Features.

In order to perform the analysis of the oral presentations collected for this study, it is necessary to describe certain units of discourse intonation. These units have been defined by several phoneticians and researchers in the area of Phonology, as mentioned in the previous section (Brazil et al., 1980; Brazil, 1997; Brown, Currie & Kenworthy, 1980; Yule, 1980; Brown & Yule, 1983; Couper-Kuhlen, 1986; Barr, 1990; Tench, 1990, 1996; Wichmann, 2000; Pickering, 2004, among others). Their importance lies in the fact that they play a significant role in topic management in oral discourse. These units, which constitute units of higher order of analysis in Phonology, are the pitch sequence and the sequence chain. That is, both units are placed above the tone unit in a phonological hierarchy.

Speakers give account of these units, as a presentation unfolds, through the use of phonological features, such as pitch height (key and termination), and pauses. According to the researchers mentioned in the previous section (Brown, Currie, & Kenworthy, 1980; Yule, 1980; Lehiste, 1982; Brown & Yule, 1983; Couper-Kuhlen, 1986; Barr, 1990; Tench, 1990; Brazil, 1997, Wichmann, 2000; Pickering, 2004), presenters make use of high peaks in pitch whenever they wish to start a new topic in discourse, continue with a gradual lowering of pitch in subsequent units of speech in order to finish with a relatively lower pitch in the last units of the spoken message to signal the end of a part in a talk. Presenters may usually employ a long pause after that drop to a lower pitch to signal finality.

As already explained, speakers may employ different pitch levels –high, mid or low- to start a new part in their discourse depending on the content of the information they wish to transmit –new, additive or equative in content. By means of the use of pitch variations

and pauses, speakers organize their discourse in units which contribute to give cohesion to oral texts. These units, which signal hierarchical order phonological events, comprise *the tone unit, the pitch sequence,* and *the sequence chain*.

The Tone Unit.

All theories of intonation define a minimal unit of spoken language that every speaker handles to present the information of a message in an organized way. This unit has been given different names by different phoneticians: *tone unit* (Brazil et al., 1980), *breath group* (Pike, 1967), *intonation group* (Cruttenden, 1997), *pause-defined unit* (Brown et al., 1980; Yule, 1980; Brown & Yule, 1983), to mention some of them. This unit is characterized by containing only one compulsory prominent syllable which bears the tone. Crystal (1969) states that "each tone unit will have one peak of prominence in the form of a nuclear pitch movement" (p. 205).

Within DI the tone unit is analyzed as consisting of three elements:

(Proclitic Segment) Tonic Segment (Enclitic Segment)

As can be seen, the only compulsory element is the Tonic Segment which may consist of one prominent syllable, *the tonic*, or more than one prominent syllables. The boundaries of the Tonic Segment are given by the first prominent syllable, *the onset* and the last prominent syllable, *the tonic*. The Proclitic and Enclitic segments contain no prominent syllables.

As to the boundaries of the tone unit, Brazil et al. (1980) claim that they "are not in fact of great importance". Since the proclitic and enclitic elements contain only non-prominent syllables, "It is therefore of no great significance which tone unit they are attached to, though in fact that boundary is usually unproblematic and marked by a slight pause or hesitation" (p. 46).

According to their structure, tone units can be classified into minimal or extended. Minimal tone units contain only one prominent syllable, consequently, the onset and the tonic are conflated, and all intonation choices are made on that syllable. Extended tone units are those in which there is more than one prominent syllable. Therefore, meaningful choices can be made at two different places, the onset, and the tonic.

Brazil states that "the speaker 'plans' the tone unit and the hearer 'decodes' it as a *whole*" (1997, p. 3). Within tone units, speakers manage the organization of information through the following phonological cues at their own disposal: prominence, pitch movement, and relative pitch level. For the purposes of this study, only prominence and pitch level will be referred to.

It is necessary then, to discuss the implications of these terms from the point of view of DI. According to this theory, a speaker's decision to allocate prominence is a meaningful choice since "prominence reflects the speaker's judgment that the word in question contains matter which, at this time and in this context, will be informing" (Brazil et al., 1980, p. 41). This means that speakers constantly choose to make certain words prominent and not others, through a continuous assessment of the context of the interaction and of the common ground they share with their interlocutors about each other's lives, viewpoints, feelings, and beliefs. In making certain words prominent, language users draw their listeners' attention to "the focus of information" (Tench, 1996, p. 8), or to what is worthy of highlighting, at a particular time in a given interaction.

As regards pitch level, key and termination (both subdivided in high, mid and low) are intonational cues which mark the boundaries of units of spoken language above the tone unit: the *pitch sequence* and the *sequence chain,* discussed below. In a minimal tone unit, as mentioned above, choices of key and termination coincide on the same syllable, the tonic. In an extended tone unit, choice of key is made on the onset and selection of termination on the tonic. The meanings of these options available to the speaker will be dealt with in the following sections.

The Pitch Sequence.

Above the tone unit, there is a higher order unit of spoken language: the *pitch sequence* in DI, *minor paratone* (Brown et al., 1980; Yule, 1980; Brown & Yule, 1983), *or micro paratone* (Couper-Kuhlen, 1986). The pitch sequence consists of one or more tone units. The limits of the pitch sequence are phonologically set by speakers through the use of *termination* (Brazil et al., 1980). Brazil et al. define the *pitch sequence* as a phonological unit "which begins immediately following a tone unit with low termination and includes all succeeding tone units until the next one with low termination" (p. 61).

In oral presentations, pitch sequences have a great communicative value because they constitute "important cues in topic management" (McCarthy, 1993, p. 112). That is, the boundary of a pitch sequence given by low termination signals the end of a phonological unit, which tends to coincide with the end of a topic in speech. The new pitch sequence may start with high, mid or low pitch level or key, thus signaling not only that what comes next is another part of the talk, but also implying that the new part is related with a specific meaning to the previous one. Coulthard (1985, p. 60) states that pitch sequences are related to the topic organization of an oral text in different ways depending on the use speakers make of high, mid or low key. Pickering (2004, p. 25) adds that in Brazil's Theory of DI (1997) pitch sequence boundaries coincide with groups of semantically related units.

Within the pitch sequence, key and/or termination establish different intra-sequential relations that contribute to its semantic coherence. That is, speakers' choice of intra-sequential pitch level represents meaningful choices through which interlocutors indicate the status of the information contained in that pitch sequence. Internal choice of high pitch level or high key in a tone unit indicates that the content of that tone unit is contrastive in relation to "some ongoing expectation" (Brazil, 1985, p. 16). Mid key presents the information as additively related to the previous unit and low key gives equative meaning to the new tone unit. As to internal choices of termination, Brazil (1985) states that through the use of mid or high termination

> speakers can be said to invite 'active' and 'passive' responses in much the same way in the course of an extended monologue, as careful attention to any orator's performance will confirm. Only some of these responses have audible or visible realizations as sotto voce yes or mm, as head nods and other non-vocal behavior (p. 19) [emphasis in original].

As regards inter-sequential relations, they are regulated by the pitch level on the onset of the first tone unit, that is, by key. However, Brazil (1985) claims that "The significance of this choice is not explained by what was said about that of key choices within the pitch sequence; it is, nevertheless, possible to characterize it in roughly comparable terms." (p. 20). The importance of the choice of key at the beginning of a new pitch sequence lies in the fact that the communicative meaning of that choice applies to the new "pitch sequence as a whole." (Brazil, 1985, p. 20) [emphasis in original]. A new pitch sequence that starts with high key then, "serves to mark the pitch sequence as distinct and separate from what has gone before, and thus it typically co-occurs with a change of topic" (Brazil et al. 1980, p. 65). On the other hand, choice of initial mid key presents the information as an expansion of that of the previous sequence and choice of low key indicates that the content of that sequence is a reformulation or restatement of the same idea expressed in the previous unit.

In other words, the interaction between key and termination determine the way tone units are linked together within a pitch sequence, thus showing an internal cohesion manifested through pitch variations. Moreover, pitch level also determines the way pitch sequences relate to each other.

The Sequence Chain.

As seen in the previous chapter, several phonologists studied and defined a unit of intonation which is hierarchically above the pitch sequence and whose main function seems to be to organize topics in speech. This higher order unit has received different names by different scholars: *paratone* (Brown et al., 1980; Brown & Yule, 1983), *major*

paratone (Couper-Khulen, 1986), *macro-paratone* (Yule, 1980), *sequence chain* (Barr, 1990), *phonological paragraph* (Tench, 1996) and *major tone group* (Wichmann, 2000).

Within the Theory of DI, Barr (1990) defines the *sequence chain* as "a string of pitch sequences such that the first pitch sequence and only the first pitch sequence begins with either high key or a lecturing frame" (p. 11). *Lecturing frames* for Barr are introductory topic expressions found at the beginning of sequence chains. She states that they constitute a type of words which, even though they receive prominence and tone, are employed without their usual semantic load to signal divisions in discourse (Morra & Soler, 1999, p. 97).

There are several examples of lecturing frames, among which Barr (1990, p. 11) mentions "so", "now", "okay", "right", etc. The scholar states that in spite of the fact that these lecturing frames in her study do not carry high key and a falling tone, only prominence, these words still act as chunk discourse framers.

Barr's sequence chain, phonologically and semantically, seems to coincide with Brazil's (1997) definition of the pitch sequence that starts with high key: a unit which constitutes a "marker of maximal disjunction" between two parts in a monologue (p. 123). In addition, Pickering (2004, p. 24) supports the idea that if a pitch sequence begins in high key, it marks "a point of maximal disjunction" and it separates two topics, indicating that the topic in the initial high key pitch sequence is different from the topic of the previous sequence.

Pause.

In dealing with phonological higher order units it is essential to revise what different phoneticians state about the role of pauses. There exist studies which provide treatment and evidence of the relevant functions of pause in discourse. Brown and Yule (1983) highlight the role of the long pause in the phonological structuring of speeches and they consider that a long pause is "(t)he most consistent paratone-final marker" (p. 101). In addition, they state that when a fall in pitch to low termination does not occur, it is the

long pause the one which indicates the end of a paratone. Brown et al. (1980) hold that long pauses, those around 0.8 seconds and longer, "coincide with major semantic breaks" (p. 56).

Brown et al. (1980) classify pauses into three types. The first one is the topic pause which lasts longer than one second and its function is to delimit topics in discourse. The second type is the one these researchers call "contour-marking pauses" which last between 0.6 to 0.87 seconds and usually delimit tone units (p. 68). The third type of pauses is called "search pauses" (p. 68). In their data, the duration of these pauses ranges from 0.28 to 0.38 seconds and they state that these pauses take place when speakers seem to have discourse "planning problems" since search pauses "co-occur with incomplete syntax" (p. 68). The authors add that when a speaker has to introduce a new topic in speech, more planning on the part of the presenter implies using longer pauses before starting a new topic.

As regards the interaction between pitch level and the use of the pause to set the boundaries of higher order units in speech, such as the sequence chain, Pickering (2004) mentions that, in studies about perception (Swerts & Geluykens, 1993), the long pause constituted a strong marker to indicate the limits of topic structure.

Barr (1990) argues that this prosodic feature is another way of setting the boundaries in a sequence chain in oral presentations. However, she considers that pauses are not enough to identify the thematic organization since it is possible to detect several periods of silence in speech which do not mean the end of a topic. In her study, Barr finds that many long pauses occur in the middle of sequence chains, while clearly defined points, such as the end of sequence chains, are "being crossed with a barely perceptible pause" (p.10).

For authors such as Hincks (2010), the role of the pause as a structuring discourse feature is also relevant. This researcher highlights that speakers can use falling intonation followed by a pause before they start a new topic. She adds that presenters can then use a higher pitch to begin with that new topic. In this study, the intonational resources which indicate the boundaries of the units described above will be analyzed.

To conclude, this chapter was devoted to reporting on past and current studies in the field of structuring oral presentations into units of spoken language, or paratones, delivered by advanced EFL university learners and the use of phonological features to render an efficient organization of talks. From the revision of previous research, it is evident that the Theory of DI will provide a suitable framework to study the employment of phonological features which help to organize presentations into paratones. Additionally, DI will enable to compare the use of phonological features that structure talks into paratones in an efficient and a non-efficient presentation.

The next chapter presents the research design, the participants, materials, and procedure in which DI is applied to analyze two talks, an efficient and a non-efficient one.

Chapter III

The study

This chapter begins with a description of the context of the research undertaken and an explanation of the problem. Then, the objectives and the research design are presented. It follows a description of the participants, the materials employed in the study and the external judges, who took part as raters of the oral presentations collected. Finally, the procedure gives a closure to the chapter.

Context of the study

The main purpose of this work is to make a contribution to the field of oral presentations in academic settings within the area of English as a Foreign Language (EFL). This type of discourse constitutes one of the means by which information is transmitted in several undergraduate courses in English at the School of Languages of the National University of Córdoba. In these courses, the focus is on the exposition of disciplinary knowledge, generally through oral presentations in class, held by both teachers and students.

At the School of Languages, the goal of oral presentations in undergraduate courses is that students present and develop topics in English. For this activity, clarity and precision in speech and the use of appropriate vocabulary and expressions to this discursive genre are very important. Students are also expected to present topics using an intelligible pronunciation and those prosodic features which are considered important for an effective topic organization. Nevertheless, through observation and practice during instruction, it has been possible to detect that in several cases the students are not able to employ the necessary phonological cues to structure oral presentations effectively, which, in turn, may result in a great difficulty for information processing on the part of the audience.

During their five-year course of studies, students receive phonetic and phonological training in the first, second and third years of the programme. Delivering oral presentations effectively constitutes one of the learning targets in English Phonetics and

Phonology II, a third-year subject of the Teacher, Translator and Licentiate training programmes at the School of Languages. In the context of this subject, they are taught to give formal talks with a solid instruction in the use of features such as prominence, tones, key and termination, and other prosodic resources like pauses, speed of delivery, loudness, to mention some. In other words, the training they receive is targeted at helping them build their oral communicative competence successfully with a strong emphasis on the efficient delivery of talks.

Given the difficulty that EFL students at university level show to deliver phonologically well-organized oral presentations, the goal of this study is to analyze the use of prosodic features that structure oral presentations into paratones in an effective way in the oral productions of fifth-year EFL students at the School of Languages.

Therefore, in order to address the research problem, the following general and specific objectives were formulated:

General Objective

1. To study the use of paratones required for the efficient structuring of oral academic presentations delivered by fifth-year EFL learners from the Teaching, Translation and Licentiate training programmes of the School of Languages.

Specific Objectives

1. To examine through auditory and acoustic analysis the occurrence of the prosodic features of prominence, pitch height and pauses in the oral presentations given by fifth-year EFL students from the Teaching, Translation, and Licentiate training programmes of the School of Languages.

2. To investigate how these prosodic features contribute to organizing speech into paratones (content-defined sequences).

3. To determine the level of efficiency in the academic oral presentations under study by means of an assessment scale designed within the context of this work

4. To compare the use of the prosodic features that structure oral discourse into paratones in an efficient and a non-efficient oral presentation.

Research Design

The research method used in this study is framed within the qualitative design and it is descriptive in scope since the purpose is to explore, and not to prescribe, the use of pitch height, prominence and pauses by fifth-year EFL students to organize their speech during oral presentations. This study does not seek to control stable variables, as experimental research does, to obtain generalizable results which can be extrapolated to other studies. On the contrary, the results from this work are only valid for the samples under analysis.

While working on the methodological design of this study, the body of research in the area of intonation and prosody was explored. Most studies, if not all, analyze phonological features by means of an auditory and an acoustic analysis. The former type of inquiry takes into account markings of pitch height, prominence, and pauses, among other features, as detected by external judges and the researcher. It is, therefore, a type of study of a subjective nature as it relies on the hearing capabilities of people specialized in the area. The latter analysis is done by means of a computer software, in this study Speechanalyzer 3.1 was used, which provides measurements of a more objective nature for the phonological aspects under investigation. These two kinds of analyses complement each other.

Participants

The subjects of this study were 17 undergraduate students, belonging to the Didactics II course of the School of Languages throughout the year 2012, who volunteered to be

recorded upon request. The course is a compulsory subject of the fifth-year teacher training programme in the institution.

It was decided that only fifth-year students' presentations were going to be analyzed since, as students are about to graduate, at this level they are expected to be fluent speakers of English and to have acquired the tools and experience to give talks which contain characteristics of academic presentations. Researchers like Ellis and Barkhuizen (2005, p. 260) state that "sampling in qualitative research tends to be purposive rather than random; participants are chosen because they match the criteria identified by the researcher that are characteristic of the group under investigation."

Materials

Samples.

The corpus of this work was originally made up of 17 oral presentations, made by fifth-year students and, all of them recorded in November 2012. Out of the 17 talks, only 15 were selected for analysis. Two talks had to be discarded due to technical difficulties with the digital recorders.

In order to obtain the samples, a special permission was asked for to the teacher in charge of the course who kindly accepted to cooperate with this work. The presentations were part of the assessment of the course and students were assigned a grade by the teacher. Most of the recordings last between 2 to 4 minutes and only a couple of talks have a duration of about 5 minutes. It is worth mentioning that to guarantee anonymity any reference made to another student or to discourse from another presenter by using proper names was removed from the recordings so as to avoid the risk of judges identifying the speakers.

The recordings were carried out in the premises of the School of Languages with two high-end technology digital recorders, Zoom H2 Handy Recorders. The samples were collected in real time, that is to say, while the presenters were actually delivering the talks

as a test assignment for the Didactics II course. Researchers in the area of SLA such as Ellis and Barkhuizen (2005, pp. 22-27) classify samples collected in a real-life situation as "naturally occurring data". These scholars state that the most important feature of this type of samples is that they capture the students' "vernacular style". They explain that this style "represents what learners are capable of producing when they are not consciously focused on form; it reflects their implicit rather than explicit knowledge of the L2" (p. 26). Following these authors, it was decided that audio recording was the most suitable type of data collection method for this study since audio samples can capture the participants' variation and intensity in pitch and the use of pauses. In addition, audio recordings were complemented with field notes to have a more exhaustive record of the situational context in which the talks were delivered.

All the presentations were conducted in English and the topic was concerned with reading comprehension teaching materials design for ESP (English for Specific Purposes) courses at university level. This material could be hypothetically applied in different schools of the National University of Córdoba. The speakers used a multimedia overhead projector, a screen, and their notes in order to deliver the presentations and they were standing facing the audience. The teacher in charge of the evaluation of the talks was sitting in the audience.

Assessment tool.

The assessment tool for evaluating the samples under study consisted of a holistic rating scale with five bands of descriptors (Appendix B). Each band contains descriptors of different achievement levels from the point of view of effectiveness in making an oral presentation. The scale was designed without any indication of phonological information since it was expected that external judges should rate the presenters' oral production in terms of how successful they were in delivering the message. Another reason for the design of a scale with no reference to phonological features was the fact that the external judges were not specialists in English Phonology. It is worth pointing out that the rating scale employed in the present study was adapted from another scale used in a research project carried out by Soler and Bombelli (2005) which will be described below.

In the areas of Second Language Acquisition (SLA) and English Language Teaching (ELT), researchers such as Bachman and Palmer (2010) and Luoma (2004) discuss the use of rating scales for measuring students' level of language ability. In simple terms, examiners of ESL and EFL learners' language skills can carry out three types of assessments –1) impressionistic assessment, in which raters do not use an explicit scale, 2) assessment with a holistic or global scale and 3) assessment with an analytic rating scale. Holistic and analytic scales are quite different and they both present advantages and disadvantages.

As regards holistic scales, Luoma (2004, p. 60) defines them as scales that "express an overall impression of an examinee's ability in one score". The researcher considers that this type of scoring tools has both positive and negative aspects. On the one hand, they are "practical for decision-making because they only give one score" (p. 62), therefore raters have to remember few aspects when scoring and, in turn, scoring is fast. But, on the other hand, Luoma states that "differences between levels…may depend too much on quantifiers like *many*, *a few* and *few* or quality words like *adequately* and *well* and not enough on concrete differences" (p. 62) [emphasis in original].

Analytic scales also present advantages and disadvantages. Analytic rating scales have several criteria with different levels or grades at each of those criteria. They look like a grid in which the main advantages are that they contain detailed information about the profile for each grade and they include the strengths and weaknesses of test takers' ability in each criterion (p. 68). Nevertheless, one of the disadvantages associated with these rating instruments is that they convey the idea that language skills' components can be assessed separately as if they were discrete language items, instead of considering that, within a certain skill, several areas may overlap.

Concerning the use of scales and the purposes of this study, both types of rating tools have been thoroughly explored and finally, a holistic scale type was chosen. A holistic scale allows for the possibility of finding out a level of efficiency in relation to language ability and, as Bachman and Palmer (2010) point out, this type of rating scale considers the use of a certain linguistic skill as an integral part of the language. The reason behind the use of a holistic scale in this work is that the goal is to measure efficiency in oral

performance; that is to say, the objective is to assess the level of efficiency of participants in delivering an academic talk.

Once a decision was taken as to the rating tool type, the holistic scale was constructed and piloted. For the piloting, two teachers of English of the School of Languages who are not specialized in the area of Phonology were asked to rate the 15 oral presentations by means of a four-point holistic scale and make any observations which would come in handy to eventually modify either the scale or instructions of use. The experts were both given the 15 talks in a pen drive together with a folder containing the scale in print. They were specifically asked to test whether the number of bands was appropriate and whether the number of descriptors per band was enough. In addition, they were also asked if the information contained in the descriptors was adequate to conduct the rating easily.

These teachers' observations were very valuable since they substantially contributed to reorganize and change the information of the scale. The teachers were very enthusiastic about the task of piloting and their comments made reference to two aspects. First, four bands were not enough since the passing mark was not clearly set. Moreover, the transition with the use of adverbials, such as "completely easy to follow", "fairly easy to follow", "basically intelligible", "unintelligible", in each of the bands rendered an abrupt movement from level to level. Therefore, another level which served as the indicator of the passing mark was needed.

The second aspect was related to the quantity and quality of information contained in each of the levels. The four-point scale had six descriptors per level, whereas in the five-point scale descriptors were reduced to four per level. After the piloting stage, and taking into consideration the teachers' observations, the four-point scale was modified into a five-point scale to help raters fine tune when grading the level of efficiency in participants' oral performance. In addition, Luoma (2004, p. 80) suggests that scales "often have four to six levels"; therefore, a compromise of a certain number of levels in the middle was reached for the scale of this study. Also, according to this researcher, a six-level scale would probably start posing some difficulties as it might have looked a bit loaded with information. Consequently, it was thought that a five-band rating scale allowed for more

shades and options for taking decisions. Band three was considered the passing mark, point five the highest level ("always efficient") and point one the lowest ("not efficient").

As mentioned above, a similar scale had already been tested and then used in a research project in which the importance of using prosodic features for efficient reading aloud was studied (Soler & Bombelli, 2005). In that project, a five-point scale was employed to measure the speakers' efficiency in reading aloud three different text types: a poem, a speech, and a story, both in English and in Spanish. Researchers, such as Luoma (2004, p. 82), support the idea that developing a scale on the basis of an existing scale used before by examining boards or other raters "take it on trust that it is appropriate, useful, and well developed"

Questionnaire.

After the students concluded their oral presentations, within the context of this study, they were asked to answer a questionnaire (Appendix C). This tool was designed to collect information about the students' beliefs on their language learning processes, as suggested by Ellis (as cited in Ellis & Barkhuizen, 2005), mainly those beliefs related to the development of different skills for preparing and delivering oral presentations in an L2. Cohen (1987) considers questionnaires as a kind of learners' self-report which provide a set of general statements and that those statements "are based on beliefs or concepts that learners have about the way they learn language …" (p. 84). The questionnaire used in this work was a useful resource which helped to complement the data obtained from the recordings with qualitative information about the students' ways and beliefs about delivering talks.

The questionnaire was written in Spanish and it was designed to collect additional information, mainly, about their preparation skills before making a presentation, their monitoring abilities during the talk and satisfaction with the way they handled the presentation once they concluded the task, among other aspects. Although the questionnaire was not designed to elicit phonological information in detail, some questions pointed to the way they managed to guide the audience to get main and subsidiary ideas or to help listeners distinguish different parts of the talk through the use of prosody. For instance, some questions related to voice management included a set of

options in the answers such as speed, fluency, volume, precision, and monotony. All in all, the content of the questions did not seek to uncover how well the learners could use the phonological features they had learnt. It was built to address their previous experiences with presentations, their beliefs, and skills.

The survey contained closed and open-ended questions. Although at first it was thought that the questionnaire would only contain closed questions, several researchers have argued that "(r)espondents to questionnaires have indicated that they like to have at least some open questions" (Ellis & Barkhuizen, 2005, p. 42), so open-ended questions were included.

The questionnaire consisted of eighteen questions – 13 were closed questions and 5 were open. In addition, the questions were divided into four sections - the first five questions were placed at the beginning of the questionnaire and they addressed generalities about the speakers' delivering oral presentations, such as liking, frequency, and subjects in which the participants gave talks in English in the School of Languages. The following eight questions were included under the heading "Before the presentation" and they were about outlining and rehearsal. The subsequent three questions were grouped under the title "During the presentation" and they considered participants' feelings towards giving a talk to an audience, management of their voices and visual contact with the listeners. Finally, the remaining two questions were in the "After the presentation" section and they were about the participants' attitudes of self-fulfillment when concluding the presentation and precision in voice management to indicate different parts, such as beginning, body, and end of the speech.

In order to build the survey, several steps were followed. First, the theoretical framework of this study was revised to retrieve aspects related to delivering academic presentations that were meant to be addressed in the questions. To decide on the type of questions to be included, several similar questionnaires from previous research were analysed (Morell, 2007, 2015; Hincks & Edlund, 2009; Chou, 2011; Alwi & Sidhu, 2013; Stapa et al., 2014, among others) and the decision was taken based on the goals of the study and on the purpose of the instrument.

The questionnaire was piloted with the help of the teachers who piloted the scale. After the teachers' trial of the questionnaire, a few changes were introduced for the sake of

clarity in questions which were meant to elicit information as to voice management over the presentations. Consequently, these questions were modified by adding a set of options from which learners could choose, for instance, “speed of delivery”, “fluency” “and volume”, in order to answer. The survey was administered after the learners finished their oral presentations. The data obtained were tabulated and simple percentages were obtained for each of the answers (Appendix D).

External Judges

External judges for efficiency ratings.

The external judges of this study were four teachers of English who taught different subjects in the fourth and fifth year at the School of Languages. They were chosen to rate the samples of this work due to their familiarity with the students’ task of giving oral presentations on topics of advanced courses’ curricula at the School of Languages and also because they are not specialists in the area of Phonology. In fact, their contribution for judging the participants’ oral performance from a perspective other than the phonological was considered of utmost importance.

The judges were all called in through e-mail for a first meeting where the task required from them was explained and some hints about how to interpret and use the rating scale were given. They were not told what the purpose of the study was. They were each sent a file with the 15 recordings of oral presentations and the rating scale through e-mail. Their task consisted of becoming familiar with the scale first and listening to the samples once to assign a grade according to the assessing instrument provided. They were asked to listen to each sample once and to assess them in one sitting. All the judges showed engagement and enthusiasm with the task and were very pleased to participate.

External judges for auditory analysis.

Since the auditory analysis of the samples under study was expected to provide reliable phonological cues, they were transcribed by this researcher and by two external judges.

These judges are specialists in Phonetics and Phonology at the School of Languages and are highly trained in auditorily analyzing oral samples. Both judges were provided with the audio files of the two selected talks, together with the transcripts of the presentations in a paper-based format. They were specifically instructed to mark for prominences, pauses and pitch height with the same level of detail and difficulty as they do when they require learners to use these prosodic features in the Phonetics and Phonology course. The researcher's and the external judges' auditory analyses were compared. Cases of disagreement were listened to and discussed by the three judges until an agreement was reached.

Procedure

As previously stated, oral samples of academic talks delivered by fifth-year students as an assessment task for the subject Didactics II were audio-recorded in order to study the use the presenters made of the prosodic features that contribute to the topical organization of presentations into paratones.

The audience was made up of peer students and the teacher in charge of evaluating the talks according to the standards set for the course. The teacher listened to the speakers, took notes and checked that all talks were delivered in the allotted time. Each presentation was meant to last between 2 to 4 minutes. The students in the audience listened to the presentations, made notes and asked questions when the speakers invited the audience to do so. In general terms, the speakers adopted a formal style of speaking and the whole environment was polite and friendly and very similar to the way conferences and workshops for professional teachers are held.

As already mentioned, fifteen oral samples were selected for analysis - 14 were given by female students and 1 by a male speaker. The samples were rated by 4 external judges to this study, all teachers of English at the School of Languages, who used a holistic scale designed for the purpose of this study. The external raters worked individually and they were not trained to use the scale. Each of the raters received the samples in a different order. The purpose of giving the samples in a different order to each of the judges is

related to the fact that when several samples are rated, in this case audio recordings, the rater can unconsciously change the rating criteria as the evaluator gets familiarized with the text (oral presentation in this study), even though the rater has a scoring scale. Consequently, a sample can be evaluated differently according to its place in the recording sequence or order. In order to avoid the "sequence effect" (Bachman, 1990, p. 179), all the samples were organized in different orders for each of the external judges.

The scores for each of the samples were tabulated. After the judges finished rating the samples, every recording obtained a grade; therefore, each recording was given 4 grades. The grades for each of the samples were kept in a record. For each of the samples, the 4 grades were added up and an average grade was obtained for every recording.

Once the 15 oral samples were rated by the external judges and an average score was obtained for each recording, 2 of them were chosen to study the occurrence of paratones determined by prominence, pitch height, and pauses. One of these samples was selected as "the least efficient" presentation, considering that it averaged the lowest score in the ratings. Another sample was chosen as "the most efficient" because it obtained the highest average. The purpose of this task was to compare the use of the prosodic features under study in both very efficient and not always-efficient presentations to determine whether the use of these phonological features had an effect on the quality of the presentations.

The analysis of learner samples in SLA has been studied by scholars, such as Ellis (1994), Ellis and Barkhuizen (2005), Ortega, (2014), among others, for whom the exploration and scrutiny of SL and FL students' performance through samples is essential to know the ways they acquire the target language. Ellis and Barkhuizen (2005) suggest that one of the methods of analysis of learner samples is called "obligatory occasional analysis" which examines "how accurately learners use specific linguistic features" (p. 73). The ultimate goal of this data analysis procedure is to give an account of the extent to which learners have internalized a linguistic form. Taking into consideration Ellis and Barkhuizen's (2005) contributions, the procedure and the goals of this study can be framed within obligatory occasional analysis since this research was focused on the study

of learners' performance in order to determine whether the use of certain linguistic features have an effect on the quality of production.

In order to determine the presence of paratones through prominence, pitch height and pauses in the presentations of more efficient and less efficient speakers, two types of analyses were carried out – an auditory and an acoustic analysis.

The auditory analysis was based on the system of Discourse Intonation developed by Brazil et al. (1980) and Brazil (1997), described in the previous chapter and it was carried out by the researcher and two external judges to this work who were English teachers specialized in Phonetics and Phonology (see section on *External Judges for Auditory Analysis*). It should be highlighted that this kind of analysis depends on the perception of each individual listener and, for this reason; it is a subjective type of study. Researchers in the field of second language learners' oral fluency and pronunciation, such as Derwing (2013) hold the contention that auditory phonetic perceptive analysis can be very relevant in linguistic research since the human ear can interpret subtleties that some computer speech software not always can get.

However, given the fact that the auditory analysis may present instances of subjectivity due to external raters' individual perceptions of sound input, the data obtained from the auditory study was complemented with an acoustic analysis. This type of analysis allows for the measurement of relevant phenomena. Even though an acoustic study does not discriminate significant linguistic events from those which are not, it is relevant to complement data from an auditory analysis with an acoustic analysis since researchers, such as Quilis (1999, pp. 137-8), hold that:

> in the perception of an acoustic stimulus there are two aspects which are naturally different: one of them is of a physical nature which can be objectively measured in all its component parts; the other one is of a psychological nature and it refers to the degree in the effect that an impression causes upon us. This last aspect is of a sensory quality and, as such, it is subjective and much more difficult to control.[1]

[1]This is a translation of the researcher.

For the acoustic analysis, the software programme Speechanalyzer 3.1 was used in order to study the fundamental frequency (F0), intensity and duration to determine prominence, pitch height, and pauses. The unit of analysis was the tone unit since, according to Brazil (1997, p. 3) it is "the stretch of language that carries the systematically-opposed features of intonation...".

For the analysis of pauses, the classification of this feature in Brown et al. (1980, p. 68) and other similar studies in the area (Brown & Yule, 1983; Pickering, 2004; Kang et al. 2010; Soler & Bombelli, 2004, 2016) were followed. According to these works, long pauses, those that last over 1-second, serve as limits for topics, whereas shorter pauses, ranging from 0, 40 to 1 second, define tone units and pauses below 0, 40 seconds form a sub-group of the previous type of pauses which are associated with semantic discontinuity.

Concerning long pauses which set the limits for a topical speech organization, they generally co-occur with changes in pitch height (Brown & Yule, 1983). Nevertheless, these are resources at speakers' disposal to organize their talks in order to facilitate message comprehension to the audience. The lack of these phonological cues does not necessarily imply a breakdown in communication. However, their absence may contribute to a faulty or difficult interpretation.

Once the occurrence of prominence was analyzed through the F0, intensity, and duration, pitch height was determined on the basis of the F0 of vowels in prominent syllables. Since, according to Brazil et al. (1980), pitch height is always relative to that of the preceding tone unit, in order to determine the division into paratones the initial pitch height, or key, and the final pitch height or termination of tone units were measured. Cases of initial pitch height which exceeded the final pitch height of the preceding tone unit in a 50% were considered as markers of beginnings of paratones[2] (Soler & Bombelli, 2004). These are the cases of pitch height called *pitch reset* by Wichmann (2000).

[2] This percentage was estimated as follows: the value of Termination of a tone unit was substracted from the value of Key of the following tone unit. The value from this substraction was multiplied by 100 and then divided by the termination of the preceding tone unit (Soler & Bombelli, 2004).

The next chapter describes the results of this study. The findings are grouped into three different types since they were obtained from three sources. First, the results about EFL learners' answers to the questionnaire are presented. Second, the findings from the external judges are shown. Finally, the findings from the auditory and acoustic analyses are mentioned. These last findings constitute the crux of the research because they contain a detailed study of two oral presentations from the corpus.

Chapter IV

Results

This chapter presents the key findings of this study obtained from three different sources: the mean grades given to speakers by external judges, the results from the auditory and acoustic analyses of two presentations belonging to the least and the most efficient speakers and EFL learner-presenters' answers to a questionnaire. In the next chapter, the results are discussed in the light of the information obtained.

1. Analysis of efficiency ratings

The efficiency ratings were the first source of results. In the previous chapter, it was explained that four experienced teachers of English from the School of Languages, who were not specialists in Phonetics and Phonology, rated the presentations by means of a five-point scale. The scale had been specifically designed for the purposes of this research.

The raters worked individually to give a score to each of the 15 presentations. An average grade was calculated for each presenter. Table 2 shows the scores and mean grades given to each speaker.

Table 2

Scores assigned to each speaker

Speakers	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Judge N°1	3	4	4	3	3	3	4	5	3	4	4	4	3	4	4
Judge N°2	2	3	3	5	4	4	3	4	4	4	3	4	3	5	5
Judge N°3	3	5	4	3	3	2	4	5	4	5	5	3	3	5	4
Judge N°4	4	4	4	5	3	5	4	4	3	3	4	3	3	5	3
Mean	**3**	**4**	**3.75**	**4**	**3.25**	**3.5**	**3.75**	**4.5**	**3.5**	**4**	**4**	**3.5**	**3**	**4.75**	**4**

The results from table 2 show that none of the 15 speakers obtained the highest score, which was 5. None of them was rated below 3 as an average grade; none was considered "not efficient".

Only two speakers (1, and 13) obtained the lowest score, which was 3, the passing mark. Of these two presenters, speaker 1 was chosen as the "least efficient" since one of the external raters scored the presentation with a 2; below the passing mark. Speaker 14 obtained the highest average grade and was considered the "most efficient"[3].

The mean and standard deviation was then calculated for the 15 speakers with a frequency analysis in SPSS. The mean was 3.7; showing that the speakers' performance in this study was considered efficient on the whole since 3 was the passing mark. The standard deviation was 0.5, reflecting that there was no significant difference among the grades.

2. Results of auditory and acoustic analyses

The least and the most efficient presentations according to the external judges' ratings, were auditorily transcribed by the writer-researcher of this study following Brazil's system of DI. The transcription conventions were adapted from those in Pickering (2004, p. 40). Two external judges, specialists in Phonetics and Phonology, were in charge of transcribing the presentations in an independent fashion to give more reliability to the analysis. Then, the transcriptions were compared, and the auditory analysis was repeated only in cases of disagreement. This auditory study aimed at analyzing the organization of talks into paratones. To do so, prominence, pitch[4] level, and pauses were identified.

As mentioned in Chapter III, the auditory analysis was complemented with an acoustic study. For this analysis, the software Speechanalyzer 3.1 was used to measure the duration

[3]The two presentations chosen for analysis will be referred to as P1 (presentation 1) and P14 (presentation 14) hereafter.

[4] The term "pitch" will be used to refer to an auditory quality; however, in many occasions throughout this work, it will be employed as an acoustic quality. Ladefoged (2003, p. 75) considers that "Strictly speaking, pitch is an auditory property - something you hear. It is not an acoustic property - an aspect of the sound wave that you can measure. From a practical point of view when discussing the pitch of the voice, it can usually be said to be the rate at which vocal fold pulses recur, and thus the fundamental frequency of the sound wave."

of pauses and the F0 of prominence and pitch height at the beginnings and ends of paratones.

In the presentation of the results that follow several examples are cited which are parts of the talks under analysis. The auditory and acoustic transcriptions are found in Appendices F and G respectively[5]. The results are presented in the following manner. The results from P1 are listed first and the results from P14 come afterward. For each talk, the findings were arranged in the following order:

A) A paratone-by-paratone description is made from the auditory and acoustic perspectives (in this work, the term 'paratone' has been chosen (Brown et al., 1980 and Brown & Yule, 1983), instead of 'sequence chain' (Barr, 1990) as it is the word most widely used within the field and in the course Phonetics and Phonology II). Discrepancies between the auditory and the acoustic analyses are presented.
B) Lecturing frames.

Analysis of paratones in the two presentations.

The use of prosodic features allows speakers to set a macro-structure to their speech and to give it cohesion by dividing long portions of talk into oral paragraphs or paratones. In fact, an important way in which speakers can show their audience how topics are structured and related to one another is by organizing speech into paratones. (Brown et al., 1980; Brown & Yule, 1983; Couper-Khulen, 1986; Yule, 1980; Barr, 1990; Tench, 1996; Wichmann, 2000).

Many authors (Brown et al., 1980; Brown & Yule, 1983; Couper-Khulen, 1986; Yule, 1980; Barr, 1990; Tench, 1996; Wichmann, 2000; Nafá Waasaf, 2005; Nafá, 2007) describe the prosodic resources that signal paratone boundaries. Many of them (Barr, 1990; Tench, 1996; Wichmann, 2000; Nafá Waasaf, 2005; Nafá, 2007) consider that the combination of HK at the beginning of a paratone and LT at the end, followed by the long pause, constitutes the most commonly used pattern to introduce a new topic in discourse.

[5]Appendix E contains the transcription conventions

Nevertheless, as it was mentioned in Chapter II, Yule (1980) argues that the pause is not essential to mark paratone boundaries.

In the analyses of the 2 presentations, it was possible to identify different patterns to signal paratone boundaries. That is, there are paratones which begin with HK and finish in LT followed by a long pause, paratones which begin with HK and finish with LT, with shorter pauses after low pitch ending and paratones that start with a lecturing frame or a frame-like lexical item, not necessarily produced with HK, and finish in LT with or without a long pause after the low pitch level closure.

Acoustic analyses and missing values of low termination.

In the acoustic analysis, pitch height was measured on those prominent syllables which, according to the auditory analysis, marked the beginnings and ends of paratones. However, there were instances in which LT could not be measured by the Speechanalyzer. This was due to the fact that speakers finished paratones with a very low volume, therefore, preventing intensity from being measured in Hz. In all the cases where LT was not measurable by the Speechanalyzer, the occurrence of at least one, or more, of the following cues was considered to determine the end of a paratone:

a long pause

noticeable high pitch at the beginning of the next paratone

pre-boundary lengthening

a gradual descent in pitch towards the closure of the paratone

As already mentioned (Chapter II), Yule (1980) considers that "whereas the initial marking of a major paratone is obligatory, the final marking – in particular, the pause – may be lacking. Nonetheless, the final boundary may be established in retrospect by the presence of a following initial boundary." (p. 190). In other words, what is compulsory in a paratone is the initial cue set by a [very]high pitch on the onset. As to the closure of a paratone, when LT is lacking, Yule found that "It can be realized by very low pitch,

even on lexical items, loss of amplitude and a lengthy pause. Alternatively, the speaker can use a summarising phrase, often repeating the topic expression, not necessarily low in pitch, but also followed by a lengthy pause. The long pause, exceeding one second, is a fairly consistent marker of major paratone boundaries." (pp. 38-39).

Another important cue which indicates the end of a paratone when LT is lacking or cannot be measured, or there is no long pause is pre-boundary lengthening (Lehiste, 1982). Lehiste considers that a long pause, laryngealization, and pre-boundary lengthening are among the factors which can guide listeners in following the organization of discourse. According to Chun (2002), laryngealization is similar to a "creaky voice".

Appendix H contains the acoustic analysis of some cases in which LT could not be measured at the end of paratones. The examples in the appendix illustrate the use of the long pause at the end of a paratone, noticeable high pitch at the beginning of the next paratone, pre-boundary lengthening and a gradual descent in pitch towards the closure of the paratone. Some of these cues co-occur in the same example.

Presentation 1 (P1)

A. Analysis of paratones.

This oral presentation was 5: 14 minutes' long. According to the auditory analysis, it was divided into 11 paratones. However, in the acoustic analysis, 10 paratones were identified.

Table 3 below shows a comparison between the paratones perceived in the auditory analysis of P1 and the corresponding acoustic measures. Table 4 presents correspondences and discrepancies between auditory and acoustic paratones.

Table 3

Auditory analysis of paratones and acoustic measures in P1

Auditory Analysis ***Paratones***	**Acoustic analysis (Pitch height in Hz and duration of pauses in seconds)**		
	K	T	Pause
1AU	295	226	1.9
2AU	341	m/v[6]	0.9
3AU	348	m/v	1.2
4AU	375	264	1.5
5AU	319	m/v	1.7
6AU	341	m/v	1.2
7AU	350	310	1.5
8AU	337	m/v	0.7
9AU	333	m/v	0.7
10AU	328	180	1
11AU	297	198	End of the talk

Table 4

Auditory and acoustic paratones: correspondences and discrepancies

1AU	1AC
2AU	2AC
3AU	3AC
4AU	4AC
5AU	
6AU	5AC
7AU	6AC
8AU	
9AU	7AC
	8AC
10AU	9AC
11AU	10AC

Two paratones from the auditory analysis were realized as one unit after the acoustic study.

One paratone from the auditory analysis was realized as two units after the acoustic study.

[6]m/v: missing value

Paratone 1AU.

Paratone 1AU, the initial paratone, was the opening of the presentation of the whole group. In this oral paragraph, the speaker introduced the partner presenters and announced the field in which the team had to base the selection of the text to design reading comprehension activities.

The transcription below was taken from the auditory study.

1AU

OK let me introduce ourselves we are (NAMES HAVE BEEN DELETED) and today we are going to present the main aspects we are going to consider when we developed our material for uh ESP courses we had the field of environmental studies as you can see in the first (SLIDE) (VERY LONG PAUSE) …

Auditorily, its beginning was marked with HK[7]on the onset syllable of the first tone unit, "oK", and its end with LT on "SLIDE" followed by a long pause. Acoustically, the F0 measured on "oK" was 295 Hz and the F0 for the final pitch on "SLIDE" was 226 Hz. The pause was 1.9 seconds' duration.

Paratone 2AU.

The second paratone, 2AU, was a short paratone. Its function was to set the topic on which the activities were based. According to the auditory study, HK was identified on "SO". LT on "STUDies" signalled the end of the paratone. After LT, a pause was detected and paratone 3AU began immediately after.

The following transcription was taken from the auditory analysis.

[7] In this work, High, Mid and Low Key and High. Mid and Low Termination are mentioned with uppercase initial letters respectively (HK, MK, LK and HT, MT and LT) when they refer to paratone boundaries. Lowercase initials were chosen to refer to pitch sequences (hk, mk, lk and ht, mt,lt).

2AU

… [SO] let's this is uh uh our topic environ(MENTalSTUDies) (LONG PAUSE) …

The acoustic analysis showed that the F0 for initial HK on "SO" was 341 Hz (51% higher than the termination from the previous paratone). The F0 for LT on "STUDies" could not be measured. The figures from the acoustic analysis of the previous tone units showed a gradual descent in pitch until the last tonic, perceived on "STUDies". Pitch height before the last tonic of 2AU had a F0 which ranged from 221 Hz to 186 Hz. After LT, there was a long pause (0.9 sec).

Paratone 3AU.

Paratone 3AU was devoted to letting the audience know about the plan of the presentation. The speaker set the outline of the talk by mentioning the different aspects which the whole group would cover while pointing to a slide. Auditorily, pitch was perceived as HK on "LET'S" and the end of the paratone with LT on "FOcus". LT was followed by a pause and the next oral paragraph started.

The following extract belongs to the auditory transcription.

3AU

… so[LET'S] give an overview of what we are going to deal with today we are going to present the context in which we had to focus to develop our material and then the objectives we focused on to ah well the selection of the text and the activities the the the concepts that we considered when developing ah when selecting our text and finally the activities we developed according to that text and the strategies we had to (FOcus on) (VERY LONG PAUSE) …

Acoustically, the F0 for the initial pitch on "LET'S" was 348 Hz. The F0 on "FOcus" could not be measured by the Speechanalyzer. Therefore, paratone boundary was established in retrospect, by considering the pitch height of the previous tone units. Pitch height measured according to the Speechanalyzer ranged from 328 to 243 Hz in the two

final tone units before the last tonic, “FOcus”, in 3AU. A very long pause (1.2 sec) followed LT.

Paratone 4AU.

In this oral paragraph, the speaker announced the beginning of a new topic, the context. Nevertheless, the topic was not developed in 4AU but in 5AU.

Paratone 4AU began in HK after LT from the previous paratone. A very long pause mediated the boundaries between 3AU and 4AU. HK on the first word “SO” marked the paratone as a different one from 3AU. Pitch descended from high to mid and to low throughout this short paratone. LT on “CONtext” indicated the end of the paratone and a very long pause followed LT.

The following extract was taken from the auditory transcription and shows paratone 4AU.

4AU

…[SO][LET’S] start with uh the (CONtext) (VERY LONG PAUSE) …

Initial HK and final LT were acoustically verified. The F0 on “SO” was 375 Hz and on “CONtext” 264 Hz. The duration of the pause was 1.5 seconds.

Paratone 5AU.

In this paratone, the speaker described the context, or the characteristics of the course which received reading comprehension instruction, and the objectives of the lesson. Towards the end of 5AU, the speaker transitioned to the following paratone.

As regards its paratonic structure, 5AU began in HK after the descent to low pitch from the previous paratone. A very long pause mediated the limits of 4AU and 5AU. HK was

perceived on "CONtext", the onset of the first tone unit and LT, to indicate the end of the paratone, was perceived on the word "TEXT".

Acoustically, the F0 of initial HK in 5AU was 319 Hz (20.8% higher than LT of the previous paratone). F0 on "TEXT" could not be measured with the Speechanalyzer. Despite the absence of visible values of F0 of low pitch at the end, the presence of the long pause, 1.7 seconds, a gradual descent in pitch (the two tone units before the final one were produced with a gradual descent in pitch) and the choice of high pitch at the beginning of the next paratone were clear indicators of paratone boundary.

The example below shows an extract from the auditory version on the left and the acoustic study on the right.

5AU	4AC
…the [CONtext] we had to focus on was a second or third class of as you know of a reading comprehension course in which the students were in their fourth and fifth year of their studies (VERY LONG PAUSE) the students had a basic knowledge of English of English but they were proficient L1 readers ok so ah as regards the objectives the strategy we had to focus on was prediction and the aim of the activity was to make students focus on ah the noun phrase that is to say to ah the analysis of the noun phrase and the recognition of new words through the analysis of word stems and affixes (VERY LONG PAUSE) ok (LONG PAUSE) having said this we can move to the selection of the (TEXT) (VERY LONG PAUSE)…	[SO] let's start with the context (1.5 sec) the context we had to focus on was a second or third class of as you know of a reading comprehension course in which the students were in their fourth and fifth year of their studies (1.4 sec) the students had a basic knowledge of English of English but they were proficient L1 readers ok so ah as regards the objectives the strategy we had to focus on was prediction and the aim of the activity was to make students focus on ah the noun phrase that is to say to ah the analysis of the noun phrase and the recognition of new words through the analysis of word stems and affixes (1.3 sec) ok (0.4 sec) having said this we can move to the selection of the (TEXT) (1.7 sec)…

Discrepancy Between the Auditory and the Acoustic Analyses (4AU and 5AU).

Differences between the two analyses were detected at the boundaries of 4AU and 5AU. The example below shows the auditory transcription on the left and the acoustic on the right.

4AU	4AC
…[SO] let's start with the ah the (CONtext) (VERY LONG PAUSE) 5AU the [CON]text we had to focus on was a second or third class of as you know of a reading comprehension course…	…[SO] let's start with the ah the context (1.5 sec) the context we had to focus on was a second or third class of as you know of a reading comprehension course…

The fragment on the left shows paratone 4AU and the beginning of 5AU from the auditory analysis. However, acoustically, the two paratones were realized as one, 4AC.

According to the acoustic study, the F0 of initial HK in 5AU was 319 Hz and the closure of 4AU was 264 Hz. As the value of the starting pitch level of 5AU did not exceed that at the end of 4AU by 50%, the two paratones identified in the auditory analysis were considered as one unit, 4AC, in the acoustic study. Acoustically, 5AU was a pitch sequence that started in mk and therefore its content was additively related to that of 4AU.

Paratone 6AU.

This paratone was devoted to explaining text selection and the difficulty that presenters encountered to find an appropriate text which could match learners' skills and needs.

According to both, the auditory and the acoustic analyses, the beginning of the paratone was indicated by HK on "WE" (341 Hz), and the end was a case in which there were slight laryngealization and pre-boundary lengthening. LT fell on the verb "preSENT" and even though it could not be measured and laryngealization was not very noticeable, the duration of phonemes in the two last tone units was extended and the pace of delivery

was slower compared to the timing of segments of the tone units at the beginning of the next paratone, 7AU. A very long pause (1.2 sec) followed LT.

The example below is a fragment from the auditory analysis on the left and the acoustic study on the right.

6AU	5AC
[WE] selected our text on the basis of the TAVI approach text as a vehicle for information so it is important to consider that our text ah the aim of our text was to focus on the students' needs (LONG PAUSE) and ah as you can see the text is called ocean pollution what's the solution and we didn't choose this text because of the title let's say it was a difficult task to choose it since we had to focus on the linguistic items we had to exploit or to make to the students ah to present to the students and ah we made a research ah because ah (SHORT PAUSE) as you know (SHORT PAUSE) it is difficult to find a text appropriate for the level of the students and the linguistic aspects we had to pre(SENT) (VERY LONG PAUSE) …	[WE] selected our text on the basis of the TAVI approach text as a vehicle for information so it is important to consider that our text ah the aim of our text was to focus on the students' needs (1 sec) and ah as you can see the text is called ocean pollution what's the solution and we didn't choose this text because of the title let's say it was a difficult task to choose it since we had to focus on the linguistic items we had to exploit or to make to the students ah to present to the students and ah we made a research ah because ah (0.3 sec) as you know (0.4 sec) it is difficult to find a text appropriate for the level of the students and the linguistic aspects we had to pre(SENT) (1.2sec)…

Paratone 7AU.

This oral paragraph was about the final selection of the text on which reading comprehension activities were designed and the group's search on the Internet of similar courses around the world.

Paratone 7AU began in HK on "SO", LT was perceived on the second syllable of "NeuQUÉN" and it marked the end of this paratone. The final LT choice on "NeuQUÉN" was followed by a pause. In the acoustic study, F0 on "SO" was 350 Hz and LT on the

second syllable of "NeuQUÉN" was 310 Hz. The pause after LT was 1.5 seconds' duration.

The transcription below belongs to the auditory analysis.

7AU

… [SO] first we selected another text which was useless for our purpose and then we selected this text considering the fact that we made a research on different syllabuses from ah universities who whose aim is to teach environmental studies so for example ah we search on the net for syllabuses of universities from Japan New Zealand and here in Argentina there is a university it is the University of Comahue in Neu(QUÉN) (VERY LONG PAUSE) …

Paratone 8AU.

This oral paragraph was a concluding remark that the speaker made about the topic developed in the previous paratone. 8AU began in HK on "SO" and ended with LT on the second syllable of "exPLOIT". Below, the paratone is cited from the auditory transcription.

8AU

…[SO] these syllabuses ah were like a guide for us to focus on the aspects we needed to ex(PLOIT) (LONG PAUSE**)** …

Acoustically, the F0 on "SO" was 337 Hz. LT could not be measured. However, a descent in pitch in the last two tone units and a slow pace of delivery indicated the presence of LT. A long pause (0.7 sec) was perceived at the end of this paratone. After the pause, the following tone unit was auditorily perceived as HK.

Discrepancy Between the Auditory and the Acoustic Analyses (7AU and 8AU).

As already mentioned, pitch level at the beginning of 8AU was 337 Hz, whereas the F0 of LT in 7AU was 310 Hz. As the value of the starting pitch height in 8AU did not exceed that of LT in 7AU by 50%, acoustically, the two paratones were considered as one, paratone 6AC, shown below.

7AU

…[SO] first we selected another text which was useless for our purpose and then we selected this text considering the fact that we made a research on different syllabuses from ah universities who whose aim is to teach environmental studies so for example ah we search on the net for syllabuses of universities from Japan New Zealand and here in Argentina there is a university it is the University of Comahue in **Neu(QUÉN)** (VERY LONG PAUSE) …

8AU

[SO] these syllabuses ah were like a guide for us to focus on the aspects we needed to **ex(PLOIT)** (LONG PAUSE) …

6AC

…[SO]first we selected another text which was useless for our purpose and then we selected this text considering the fact that we made a research on different syllabuses from ah universities who whose aim is to teach environmental studies so for example ah we search on the net for syllabuses of universities from Japan New Zealand and here in Argentina there is a university it is the University of Comahue in Neuquén (1.5 sec) so these syllabuses ah were like a guide for us to focus on the aspects we needed to **ex(PLOIT)**(0.7sec)…

Paratone 9AU.

This paratone was concerned with the text finally chosen and some modifications added to the text for reading comprehension teaching purposes. The paratone was initiated in HK on "SO" after LT selection from paratone 8AU and ended with LT on "MUCH". A pause was perceived after LT.

The transcription below was taken from the auditory study.

9AU

…[SO] ocean pollution what's the solution was the text we selected it is an authentic text because it was taken from the Internet ok so we get the original text but we added a picture this picture doesn't belong to the text we added the picture and the line numbers to the text ah which was the purpose of it the purpose was ah to help the learners to draw implications from the text in an easier way and to help them find the information in each activity in an easier way as well ok so umm can anyone read the instructions would you Betty please ok lea el título del texto observe cómo está dispuesto y la foto que lo acompaña determine de dónde pudo haber sido extraído ok thank you very (MUCH) (LONG PAUSE) …

According to the acoustic analysis, F0 on "SO" was 333 Hz; however, F0 on "MUCH" could not be measured. A long pause (0.7 sec) followed LT.

Even though LT could not be measured in 9AU, there were auditory cues which helped in the perception of paratone closure. The previous two tone units were said in low pitch. Their F0 could not be measured due to the speaker's use of low volume. Additionally, after "MUCH" noticeable high pitch (328 Hz) was perceived that marked the beginning of a new paratone. Those tone units were uttered as the speaker was acknowledging receipt of information after a member of the audience finished reading some instructions aloud.

Discrepancy Between the Auditory and the Acoustic Analyses (9AU).

The acoustic analysis revealed that what was perceived as one paratone in the auditory study was realized as two paratones, 7AC and 8AC.

9AU

…[SO] ocean pollution what's the solution was the text we selected it is an authentic text because it was taken from the Internet…

7AC

…[SO]ocean pollution what's the solution was the text we **se(LECTED)**

8AC

it is an **au[THENTIC]** text because it was taken from the Internet…

The fragment on the left shows a part of paratone 9AU. This is the beginning of the paratone. The acoustic transcription on the right shows the presence of two paratones. Pitch level on "seLECTED" was 82.3 Hz. The following tone unit, which according to the auditory study opened a pitch sequence in mk, in the acoustic analysis was actually a case of HK. The onset of this tone unit (on "auTHENtic") was 310 Hz. It exceeded the LT of the preceding tone unit by more than 50%. Therefore, acoustically, the pitch level on "auTHENtic" marked the beginning of a new paratone, labelled as 8AC.

Paratone 10AU.

This paratone was concerned with the explanation of activities focused on the reading strategies whose aim was to activate previous knowledge to make inferences and draw implications.

Paratone 10AU began in HK on "SO" after a LT choice from the previous paratone. A long pause (0.7 sec) mediated the limits of paratones 9AU and 10AU. LT, perceived on "THAT", was followed by a long pause. The auditory transcription below shows LT in bold and the use of the long pause.

…and to provide information concerning**(THAT)** (LONG PAUSE) ...

Acoustically, the F0 on "SO" was 328 Hz and the F0 on "THAT" was 180 Hz. LT was followed by 1second' pause.

The extract below shows the auditory transcription on the left and the acoustic one on the right.

10AU	8AC
…[SO] as you can see the instructions lead the learners to pay attention to the text and to the picture to draw implications and to make inferences as you have read McNeil states that um it is important for the reader to get something to the text that is to say to use their previous knowledge their previous schemata to draw implications and to provide information concerning (THAT) (LONG PAUSE) …	…[SO] as you can see the instructions lead the learners to pay attention to the text and to the picture to draw implications and to make inferences as you have read McNeil states that um it is important for the reader to get something to the text that is to say to use their previous knowledge their previous schemata to draw implications and to provide information concerning (THAT) (1sec)…

Paratone 11AU.

This paratone was concerned with the closure of the talk developed by speaker 1. The speaker reached the end of the presentation and gave the floor to another partner in the group to continue with other aspects of the lesson.

The paratone was initiated in HK (297 Hz, 65% higher than the previous LT) after a long pause (1 sec) which followed the LT choice from the preceding paratone. HK on the onset was realized on "K". Paratone 11AU is transcribed below. Its beginning in HK is highlighted in bold.

11AU

…[o**K]** is [**THAT CLEAR]** it ok now (NAME) is going to move to the NEXT…

The speaker could not signal the end of the paratone, and of the presentation, through LT because she was interrupted by the next speaker. That is, speaker 1 could not bring the paratone to a close.

B. Lecturing frames.

Efficient speakers can greatly enhance the audience's experience in accessing the content of a presentation by choosing prosodic resources from the linguistic system to organize information into manageable parts. When speakers' concern is their listeners' understanding with ease, presenters can use cues in tandem with signposting language. Barr (1990) calls these signposting expressions "lecturing frames" (p. 11)

In the presentation under study, the speaker used intonational cues as tools to accompany signposting language when starting paratones. The majority of the lecturing frames in paratones constituted a minimal tone unit and were monosyllabic words. The frames found in this corpus received high key and many of them, a falling tone, which was in line with the research by Sinclair and Brazil (1982). However, level and rising tones were also found in the corpus.

Table 5 presents the lecturing frames used in P1. The first column lists auditory paratones from 1 to 11. The column in the middle shows the lecturing frames employed at the beginning of each oral paragraph during the presentation. The third column shows the phonological features used on each lecturing frame.

Table 5

Lecturing frames in P1

PARATONE	LECTURING FRAME	PHONOLOGICAL FEATURES
1AU	Ok	Falling tone, HK [o↘K]
2AU	So	Level tone, HK [→SO]
3AU	No Lecturing frame	
4AU	So	Level tone, HK [→SO]
5AU	No Lecturing frame	
6AU	No Lecturing frame	
7AU	So	Falling tone, HK [↘SO]
8AU	So	Falling tone, HK [↘SO]
9AU	So	Falling tone, HK [↘SO]
10AU	So	Falling tone, HK [↘SO]
11AU	Ok	Rising tone, HT [o↗K]

As can be seen from table 5, in P1 two lecturing frames were used in 8 of the 11 auditory paratones which made up the talk. Six auditory paratones were introduced with the lecturing frame “so”, 2 paratones with “ok”, and 3 other paratones began with no lecturing frame at all. In these 3 cases, the speaker chose to indicate the beginning of a new paratone by producing HK on a word other than a lecturing frame (4AU on “Let's”, 5AU on “context” and 6AU on “we”).

Presentation 14 (P14)

A. Analysis of paratones.

P14 was 4: 43 minutes' long. According to the auditory analysis, this oral presentation was divided into 5 paratones. However, in the acoustic analysis, 4 paratones were identified.

Unlike P1, the end of paratones in P14 could be measured with the Speechanalyzer 3.1. The F0 employed by this presenter at the end of oral paragraphs ranged from 200 to 160 Hz. Besides, the majority of the paratones in this talk were followed by a long pause as a clear marker of paratone boundary. Overall, volume in P14 was louder than that in P1 all throughout the presentation and intensity was easier to measure.

Table 6 below shows a comparison between the paratones perceived in the auditory analysis of P14 and the corresponding acoustic measures. Table 7 contains correspondences and discrepancies between auditory and acoustic analyses of paratones.

Table 6

Auditory analysis of paratones and acoustic measures in P14

Auditory Analysis ***Paratones***	**Acoustic analysis (Pitch height in Hz and duration of pauses in seconds)**		
	K	T	Pause
1AU	277	203	0.6
2AU	288	204	0.8
3AU	320	174.3	1.3
4AU	332	183	1.2
5AU	343	167	

Table 7

Auditory and acoustic paratones: correspondences and discrepancies

1AU }	1AC
2AU	
3AU	2AC
4AU	3AC
5AU	4AC

Two paratones from the auditory analysis were realized as one unit after the acoustic study.

Paratone 1AU.

P14 was devoted to the description of reading comprehension activities and two reading strategies – prediction and ideas association. Paratone 1AU was the initial paratone of speaker's 14 talk. It began after the speaker was given the floor by a partner presenter in the team. 1AU was about activities' design following pedagogic principles.

According to the auditory study, the beginning of the paratone was perceived in HK on the onset syllable of the first tone unit on the word "reFER" and the end in LT on "self-inVESTment". A long pause was detected after LT.

The transcription below shows paratone 1AU. It shows the manner in which speaker 14 (classmate B in the transcription) was given the floor by a student in the group (classmate A).

1AU

Classmate A: Ok and now (NAME) is going to continue with the ac(TIvities)

Classmate B: (YES) I will re[FER] to the acTIvities we prePARED following the stages that Dudley-Evans and Saint Jones uh proposed after finding the carrier content we moved on uh to drafting the actual activities uh in order to do so we followed the TAVI approach but we also took into account other aspects such as carrier content and real content and uh especially two important principles uh that were proposed by Tomlinson that are that uh well materials uh should uh help students feel at ease and that materials should require and facilitate learners' self-in(VEST)ment (LONG PAUSE) …

It should be highlighted that 1AU was preceded by a tone unit in low pitch level (YES). This tone unit constituted a new pitch sequence which began in LK. By using LK in "YES" P14 was acknowledging receipt of information in reference to Classmate's A giving the turn. Coulthard (1987, p.54) explains that "the choice of low key marks an item as equative, as contextually synonymous; thus, when the option is co-selected with 'yes' or a repetition, the utterance does little more than acknowledging receipt of the information".

Acoustically, pitch level on the onset ("reFER") was 277 Hz (56% higher than the low termination in the preceding tone unit, ("YES") and the F0 of LT was 203 Hz. The pause was 0.7-seconds' duration.

Paratone 2AU.

This paratone was about the description of the first reading comprehension activity and the inclusion of 2 reading strategies.

Auditorily, the paratone began with HK on "SEE", the onset syllable of the first tone unit in 2AU. LT was realized on the last syllable of "associAtion" and a long pause followed LT choice to close the paratone.

The following transcription was taken from the auditory study.

2AU

… you are going to [SEE] that uh throughout the the activities both principles were taken into account yes well uh the first activity uh was about reading strategies here we focused on uh real content then reading comprehension activities focusing mainly on carrier content then language elements focusing on uh real content and finally the uh closing task well uh within the reading strategies uh we included two uh strategies that are prediction and ideas associ(Ation) (LONG PAUSE) …

According to the acoustic analysis, F0 on "SEE" was 288 Hz and F0 on "associAtion" was 204 Hz. The long pause was 0.8 seconds' duration.

Discrepancy Between the Auditory and the Acoustic Analyses (1AU and 2AU).

In this presentation, there was only one case of discrepancy between the auditory and the acoustic analyses. After the acoustic study, it was decided to consider 1AU and 2AU as one paratone, labelled as 1AC in the acoustic transcription.

1AU

…and that materials should require and facilitate learners' self-in(VEST)ment

2AU

you are going to [SEE] that uh throughout the the activities both principles were taken into account yes…

1AC

…and that materials should require and facilitate learners' self-in(VEST)ment you are going to see that uh throughout the the activities both principles were taken into account yes …

In the example on the left, the auditory transcription, the word "self-inVESTment" brings the paratone to an end and, after that LT, the next tone unit was identified as beginning in HK on the onset. Nevertheless, the acoustic measures showed a different division. The F0 in the

tonic of "self-inVESTment" was 203 Hz and in the onset of the following tone unit, "SEE", it was 288 Hz. As the value of the onset syllable did not exceed that of the tonic in the previous tone unit in 50%, paratone 2AU was considered as a pitch sequence starting in mk, whose content was treated as additively related to the topic developed in 1AU. The transcription on the right contains paratone 1AC, the realization of 1AU and 2AU after the acoustic analysis.

Paratone 3AU.

This paratone explained the reason behind the inclusion of two reading comprehension strategies and described two activities whose objective was to practice those reading skills.

This oral paragraph began after a long pause from the previous paratone with HK on the onset syllable of the first tone unit ("REAson"). LT was perceived on "inforMAtion" and a very long pause followed low pitch level.

Below, there is an extract from the auditory transcription.

3AU

…the [REAson] why we included uh strategies mainly at the beginning is because the main goal for academic reading instruction is to prepare or develop uh strategic learners so uh students are aware of the goal of the the task they are carrying out (VERY LONG PAUSE) uh in the first activity there was prediction we provided the title of the text and we asked students to predict the content (LONG PAUSE) and the topic of the text (VERY LONG PAUSE) text (LONG PAUSE) and the second one was ideas association we were supposed to present the strategy but we did so ah inductively that is that first we presented this image in which they had to (LONG PAUSE) uh gather in groups and they had to complete the this picture with the knowledge they had ah in Spanish of course and they had to justify ah well the content they proposed (LONG PAUSE) after that they had to uh work together as a group and try to complete or modify uh the picture so as to add more infor(MAtion) (VERY LONG PAUSE) …

According to the acoustic analysis, the F0 on "reFER" was 320 Hz (57% higher than the termination in the previous unit) and the F0 on "inforMAtion" was 174.3 Hz. The pause after the termination in low pitch level was 1.3 seconds' duration.

Paratone 4AU.

This paratone described three types of activities: the first one was about awareness, the second one was about an interactive reading process and the third one was about scanning.

4AU began after a very long pause with HK on "DID". LT brought the paratone to an end and it was perceived on "TEXT". LT selection was followed by a very long pause.

The following extract was taken from the auditory transcription.

4AU

…what we [DID] ah and this is something we included within the reading comprehension activities (LONG PAUSE) is ah an activity of awareness of the advantages that this uh type of strategy uh brought to them so uh they had to reflect on the advantages after reading the actual text (VERY LONG PAUSE) em well then (LONG PAUSE) eh within the reading comprehension we included (LONG PAUSE) eh (LONG PAUSE) well eh we worked with an interactive process of reading yes including uh top-down and bottom-up activities (VERY LONG PAUSE) uh first students had to skim the text uh to confirm their predictions in the first activity and then uh we made uh a question for general comprehension (LONG PAUSE) yes (LONG PAUSE) then we moved on to scanning within scanning we included activities such as ah focusing on information that is that was present or wasn't present within the text (LONG PAUSE) uh they had to put the line uh where this information was (LONG PAUSE) in the text and eh then they had to uh write about uh true and false statements and finally they had to complete the stages in a graph we provided a similar graph to uh the one you've seen before and they had to complete uh with the stages they have read in the in the (TEXT) (VERY LONG PAUSE) …

According to the acoustic study, the F0 on "DID" was 332 Hz (90% higher than the F0 in the previous unit). LT on "TEXT" was 183 Hz and the pause was 1. 18 seconds' duration.

Paratone 5AU.

Paratone 5AU was about an activity on textual reference. HK was perceived on "FInally" and the end of the paratone was signaled with LT on "REferent". No pause followed LT. Instead, the paratone was followed by a new pitch sequence. This new sequence was made up by a minimal tone unit with rising intonation ("YES") in low pitch level. This unit was a 'dummy' unit (Brazil,1997., p.121) and it reinforced the effect of closure of 5AU as it was said with LT.

The extract below belongs to the auditory transcription.

5AU

…and [FInally] within ah reading comprehension we included uh textual reference we did so because uh we thought that textual reference has to do with the comprehension of the text uh we didn't have to present eh textual reference we had to practice so uh well we took some uh parts from the text and we uh prepared an activity in which they had to put eh the (REferent) (YES)…

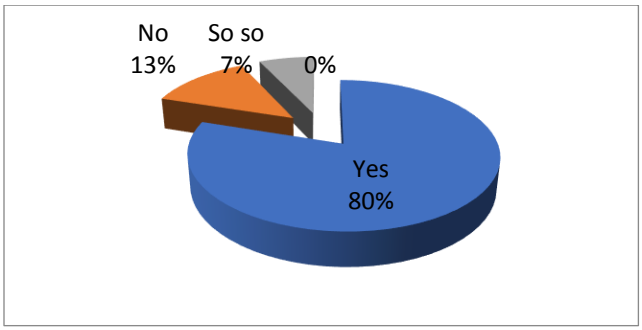
Acoustically, the F0 of HK choice on "FInally" was 343 Hz (87% higher than the F0 in the previous unit) and LT on "REferent" was 167 Hz.

3. Results from the questionnaire

The questionnaire used in this study was administered to the participants after they finished their presentations and it was designed to collect additional information. The questions were

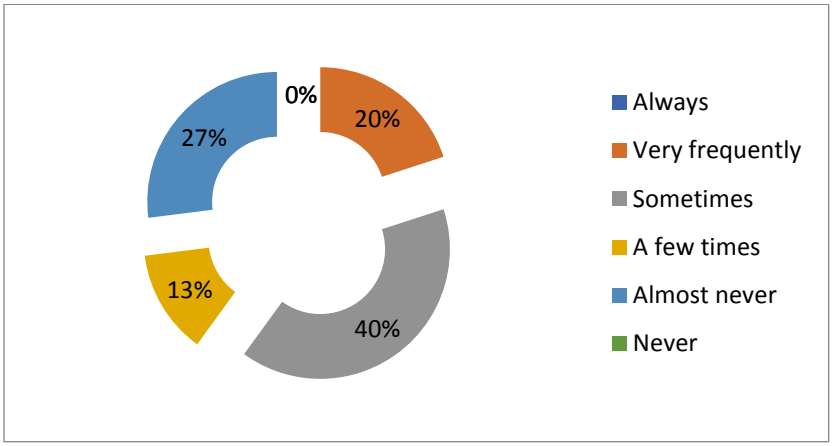
grouped into four sections. This part of the chapter lists the most important findings from the questionnaire. However, Appendix D presents the results in simple percentages of all the answers to each question.

The first section of the survey was aimed at finding out if participants liked to deliver talks in class, if they did it frequently and if they could name the courses in which they had to give presentations. Answers to the first question about their feelings regarding giving talks revealed that the majority (80%) of the participants reported they liked giving presentations in class. The following graph shows the responses in simple percentages.



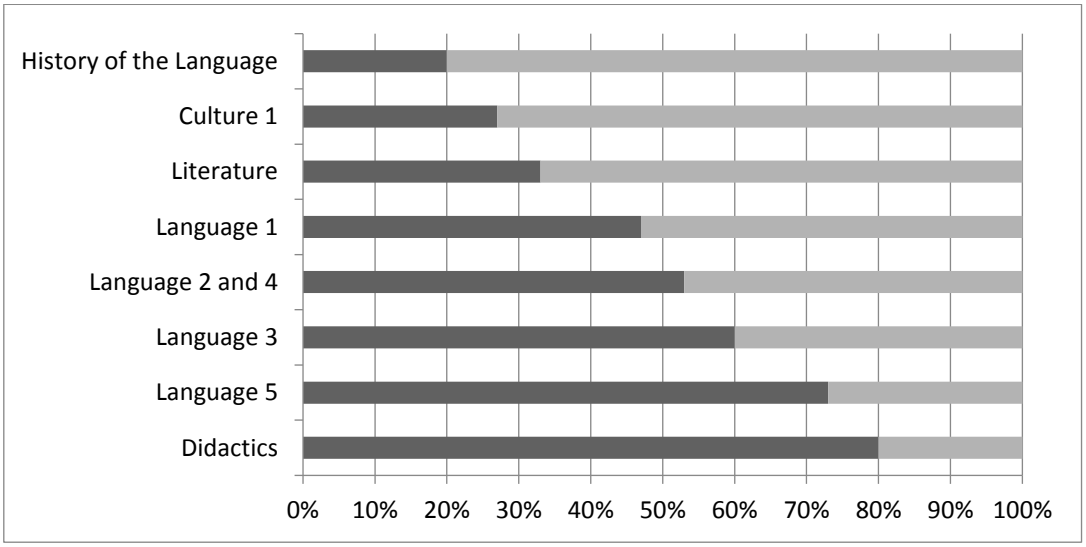
Graph 1. Answers to the question "Do you like giving oral presentations?"

Answers to question 2 revealed that 40% of the participants said they sometimes delivered talks during their courses of studies and only 27% said they always did so. Graph 2 shows the results.



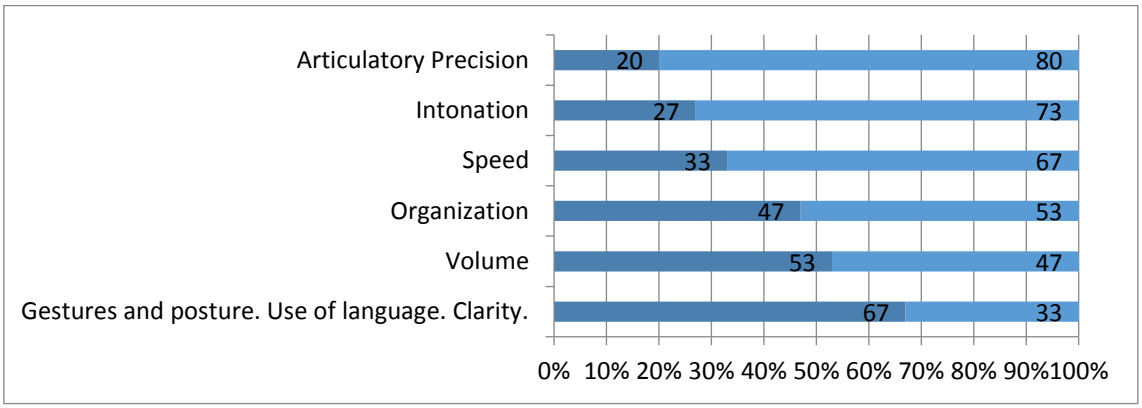
Graph 2. Answers to the question "How often do you deliver presentations?"

When asked about the courses in which they had to present, the participants reported that Didactics and Language were among the courses in which they gave presentations, whereas Literature, Culture, and History of the Language were among the least cited courses in which they delivered speeches. Graph 3 shows the figures for the courses mentioned by participants.



Graph 3. Answers to the question "In which courses did you give an oral presentation? Mention some"

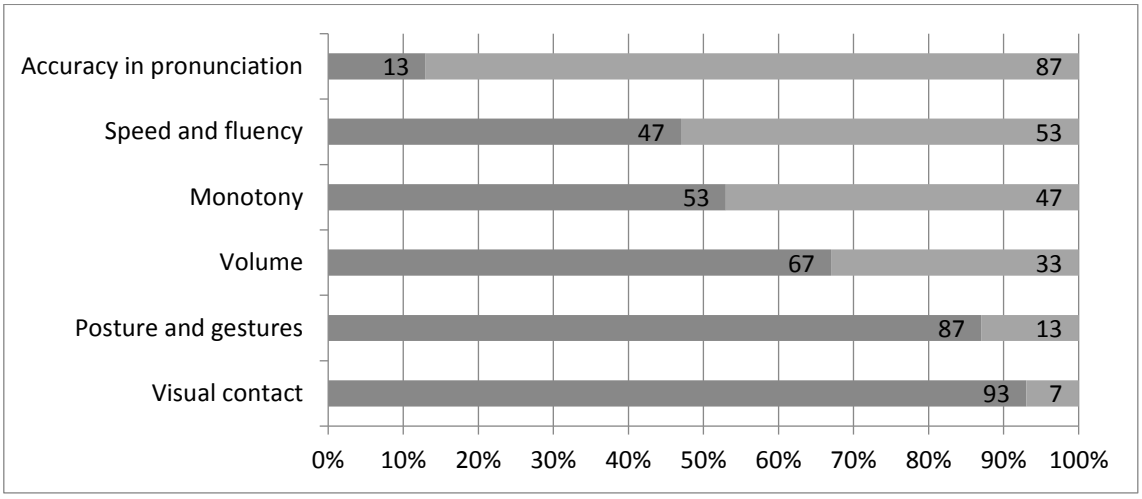
The second section was labelled “Before the presentation” and the questions were targeted at outlining and rehearsal skills of the speakers. In responses to questions under this section, all the participants said they rehearsed their talks by watching other presenters. When asked about the aspects they observed in other presenters, respondents said that they paid attention to the use of posture and gesture, use of language and clarity, whereas intonation and other prosodic features, such as speed, and articulatory precision, received less than 50% of speakers’ attention. Organization of the talks scored around 50%. Graph 4 contains simple percentages of answers to the question.



Graph 4. Answers to the question “What did you pay attention to? (When watching other speakers giving presentations)

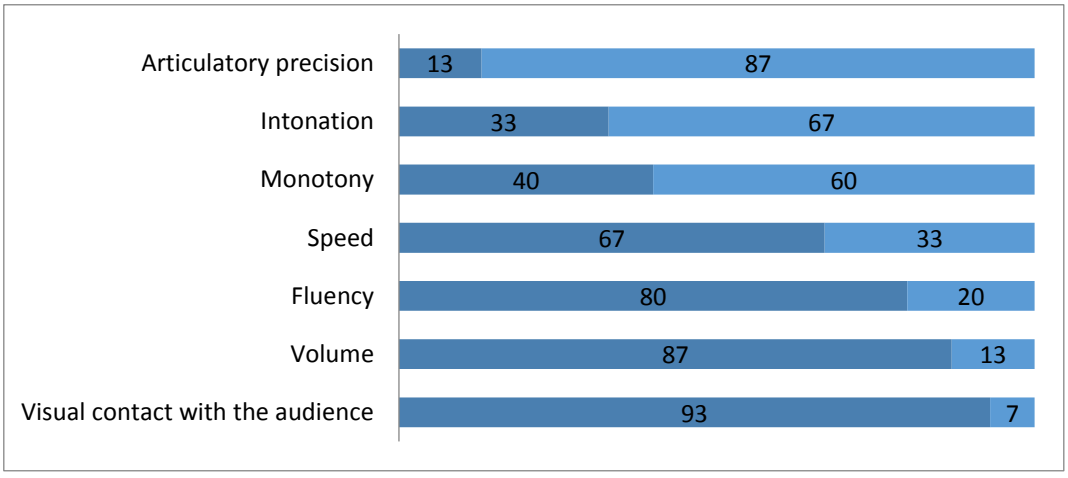
When asked whether they rehearsed their presentations 67% of the participants said they did. Nevertheless, less than half of the speakers (47%) reported they observed the use of their voices and pauses at the beginning and end of topics.

The third section was called “During the presentation” and considered the participants’ feelings, visual contact with the audience and management of their voices. Concerning voice management, volume (67%) and monotony (53%) were among the aspects the participants said they could have more control of, but speed, fluency, and precision of pronunciation were the features they said they handled less during the talk. Graph 5 shows the figures.



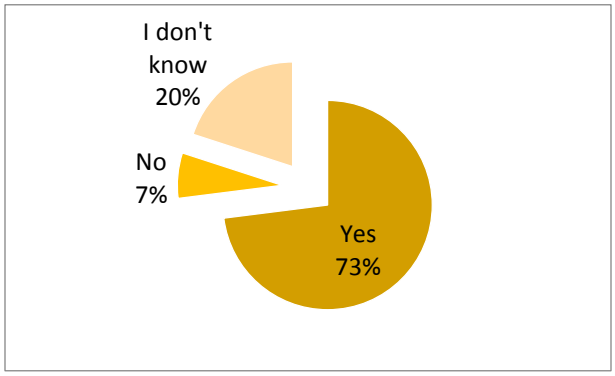
Graph 5. Answers to the question "Were you able to manage the following aspects during the talk? Visual contact. Posture and gestures. Volume. Monotony. Speed and fluency. Accuracy in pronunciation."

The last section, "After the presentation", was about the participants' attitudes of self-fulfillment when finishing the speech and use of their voices to indicate different parts of the talk. Participants reported that volume; fluency and speed were among the aspects they felt more at ease with after they finished their talk, whereas monotony, intonation and articulatory precision were not considered as features which they felt they could handle well. Graph 6 contains the percentages.



Graph 6. Answers to the question "Did you feel at ease with the following aspects? Visual contact with the audience. Volume. Fluency. Speed. Monotony. Intonation. Articulatory precision."

Finally, the majority of the participants (73%) reported they felt they could manage their voices to signal different parts of the speech. Graph 7 shows the figures.



Graph 7. Answers to the question "Do you think you were clear enough about voice management to signal different parts of your presentation to the audience?"

To conclude, the present chapter reported the results of three different sources of data collection: the average grades given to 15 oral presentations by external raters, the findings from auditory and acoustic analyses of 2 presentations which belonged to the most and least efficient speakers and EFL fifth-year students' responses to a questionnaire. The next chapter, Discussion, will offer the interpretation and meaning of the results presented herein, together with links to the theoretical framework of this work.

Chapter V

Discussion

The main purpose of this work is to study how advanced EFL university students use paratones to structure oral academic presentations in an efficient way. It has already been mentioned in Chapter III that fifth-year EFL students of the School of Languages of the National University of Córdoba find difficulties to efficiently organize the content of their talks into paratones using phonological features.

In the previous chapter, it was stated that the findings of this study originated from three different sources: the mean grades given to speakers by external judges, the results from the auditory and acoustic analyses of two presentations belonging to the least and the most efficient speakers and EFL participants' answers to a questionnaire

In the present chapter, the results obtained are interpreted and discussed by referring to the theoretical framework explained in Chapter II. First, there is the interpretation and comparison of the results from the auditory and the acoustic analyses of two presentations which were selected from the efficiency ratings. Second, the results from the questionnaire are discussed.

1.Findings from the auditory and acoustic analyses

This section will offer an interpretation of the results obtained from the auditory and acoustic analyses and a discussion on the use of lecturing frames in the two presentations.

Presentation 1 (P1).

Presentation 1 (P1), the least efficient presentation according to the scores given by the external judges, dealt with materials design for a reading comprehension class of university students in environmental studies.

The talk lasted 5.14 minutes and was divided into 11 phonological paratones (table 3, Chapter IV). These paratones were delimited by HK at the beginning, LT at the end, followed by pauses of varying length. According to the acoustic analysis, the 11 paratones were delimited by high or very high pitch at the beginning and showed a gradual lowering in pitch throughout the tone units within the paratones. However, according to the way the ends of these paratones were realized, it is possible to speak of two different settings: 1) those that ended in measurable low or very low pitch, in many cases the lowest inside the unit, followed by a long or a very long pause and 2) paratones in which it was not possible to acoustically measure this low pitch due to the fact that speakers finished paratones with a very low volume, therefore preventing intensity from being measured in Hz. In these cases, final low pitch had to be established following the criteria described in the previous chapter. As already mentioned, all the paratones were followed by measurable pauses.

Four paratones, 1AU, 4AU, 7AU, and 10AU, presented boundaries that could be acoustically measured. All others, except 11AU, followed condition 2, that is, the values of LT in the last tonic had to be established using other acoustic cues (presence of a long pause, laryngealization and/or pre-boundary lengthening). In paratones 2AU and 6AU, it was possible to identify laryngealization and pre-boundary lengthening (Lehiste, 1982). In paratone 5AU, the end could be identified thanks to the presence of a very long pause (1.7 sec.) and high pitch at the beginning of the next paratone (341 Hz) (Lehiste, 1982). In paratones 3AU, 8AU, and 9AU, there was a gradual descent in pitch throughout the paratones until the last tonic and a very noticeable high pitch at the beginning of the next unit (Lehiste, 1982). (See some examples in Appendix H).

The group of paratones which followed condition 2 was subdivided into two smaller clusters – those that ended with a very long pause and those that finished with a long pause after the

last tonic. Paratones 3AU, 5AU, and 6AU were followed by very long pauses (longer than 1 sec.) and 2AU, 8AU and 9AU were followed by a long pause (0.7 sec.).

Paratone 11AU was the last one in P1. It was short, and it offered a closure to the talk. It started in HK, but the speaker could not use LT to bring it to an end since a partner presenter interrupted the presentation and took the floor.

Three cases of discrepancy between the auditory and the acoustic studies were found (table 4, Chapter IV). Two cases implied two auditory paratones which were realized as one acoustic unit (4AU and 5AU were realized as 4AC and 7AU and 8AU, as 6AC). The third case of discrepancy involved one auditory paratone which was realized as two acoustic units (9AU was realized as 7AC and 8AC).

As already explained, in P1 the speaker relied on some or all of the following features to indicate paratones' beginnings and ends: HK (high pitch on the onset of the paratone), a gradual descent in pitch, laryngealization and pre-boundary lengthening, LT (low pitch on the last tonic), long and very long pauses and a noticeable high pitch at the beginning of the next paratone. It is important to point out that in all cases, these prosodic units of macro organization were defined by the content of the presentation. In other words, each new paratone introduced a new topic or sub-topic. In this sense, Coulthard (1987) and Pickering (2004), argue that many units of phonological organization in spoken language are content-defined. This means that the division speakers make into paratones goes in tandem with the way the information is organized in relation to whether the content is classified by the speaker as contrastive, additive or equative.

The following diagram shows the topics developed in each auditory paratone in P1.

Paratone 1AU	•Introduction of the presentation, partner presenters and the field: Environmental studies
Paratone 2AU	•Repetition of the field
Paratone 3AU	•Presentation of the outline
Paratone 4AU	•Topic 1: Presentation of the context of the activities
Paratone 5AU	•Topic 2: Description of the context (characteristics of the course)
Paratone 6AU	•Topic 3: Explanation about text selection
Paratone 7AU	•Topic 4: Final explanation about text selection
Paratone 8AU	•Conclusion about text selection
Paratone 9AU	•Topic 5: Explanation about modifications added to the text
Paratone 10AU	•Topic 6: Explanation about activities on reading strategies
Paratone 11AU	•Conclusion of the presentation

Graph 8. Topics developed in each auditory paratone in P1

Presentation 14 (P14).

This presentation, the most efficient one according to the scores given by the external raters, dealt with reading comprehension materials design following certain pedagogic principles and including reading strategies.

Presentation 14 (P14), lasted 4.43 minutes and was divided into 5 phonological paratones (table 5, Chapter IV). All these paratones began in HK and ended in LT followed by long or very long pauses. Acoustically, the 5 paratones started with high or very high pitch, showed a gradual descent in pitch throughout the paratone until the last tonic, which was lower in pitch height than the tonics inside the paratone. Paratones 1AU and 2AU were followed by

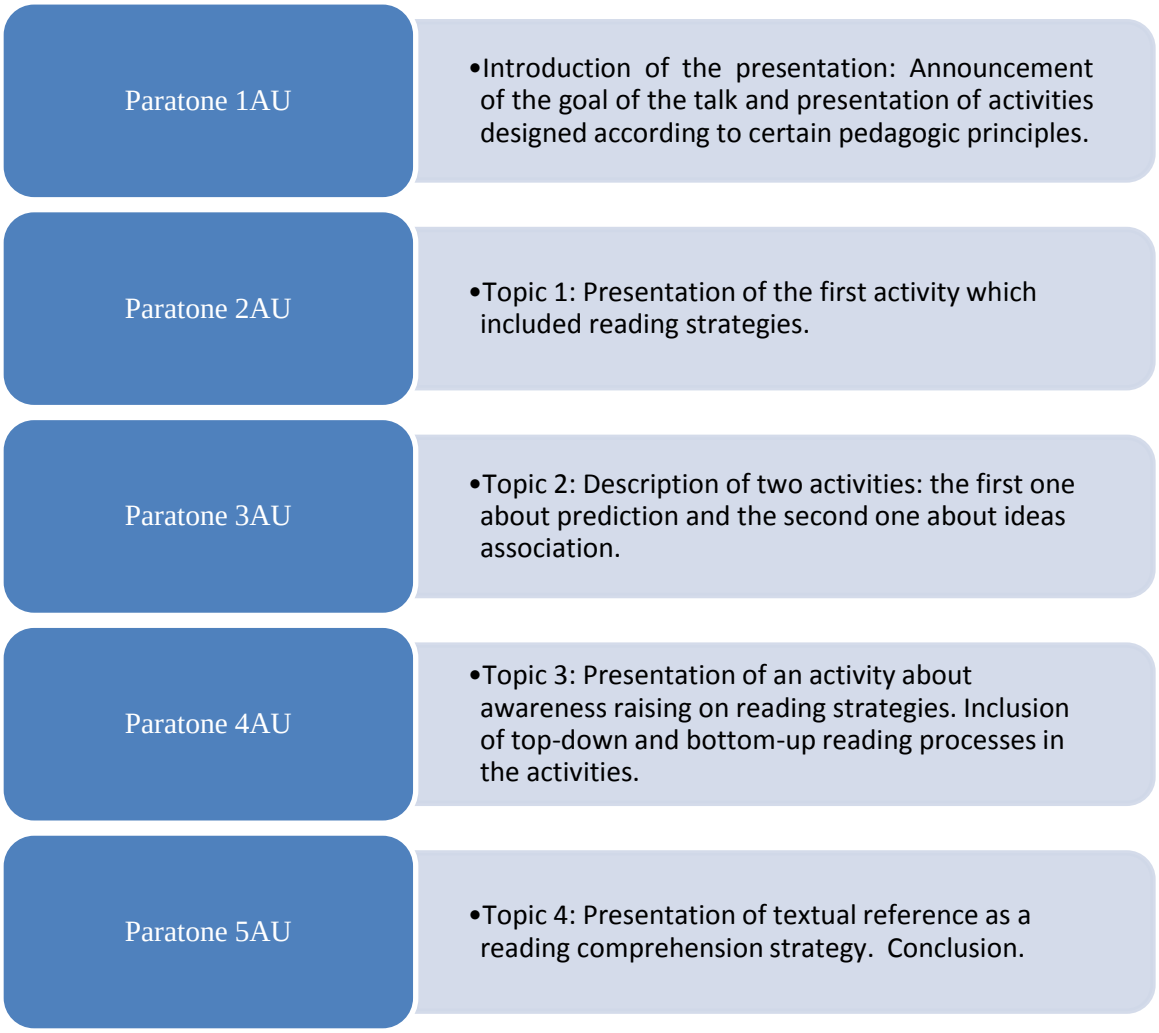
long pauses (between 0.4 and 1 sec.) after low pitch level on the last tonic syllables. Paratones 3AU and 4AU were followed by very long pauses (over 1 sec.). Unlike P1, all final boundaries could be acoustically established.

Paratone 5AU was the last one in the talk. This oral paragraph was about an activity on textual reference. The speaker did not announce the end of the talk in the paratone. Nevertheless, the use of noticeable LT in the last tonic was a clear indicator that the presentation came to an end.

According to table 7, Chapter IV, there was only one case of discrepancy between the auditory and the acoustic analyses. Paratones 1AU and 2AU were realized as one acoustic unit, 1AC.

In brief, P14 was perceived as the most efficient speaker by the external judges of this study. This fact may have been related to the speaker's use of paratones which had similar length, thus rendering what seemed a more balanced development of topics. Another reason that may have contributed to a better evaluation of P14 is that the speaker used a much higher volume than P1. In this presentation, the volume was loud enough to render an overall impression of a clear talk. In addition, aspects contained in the assessment scale used by the external raters such as general comprehension and clarity of explanations may have been favoured by the employment of a loud volume.

P14 was organized in 5 content-defined phonological units. The following diagram shows topic development in each paratone.



Graph 9. Topics in each auditory paratone in P14

Comparison between P1 and P14

A comparison between the two talks yields several similarities and differences. In both presentations, topics were structured around paratones. In most of these units, the phonological features at their boundaries exhibited the following pattern:

HK -LT + Pause

According to scholars in the area (Lehiste, 1982; Brown et al., 1980; Yule, 1980; Brown & Yule, 1983; Couper-Kuhlen, 1986; Tench, 1996; Wichmann, 2000; Thompson, 2003; Pickering, 2004; Nafá Waasaf, 2005; Kang et al., 2010;), that pattern was found to be frequently employed by advanced students and lecturers in their academic presentations. As already mentioned, the pattern helps speakers to signal the structure of a talk and facilitates comprehension of the intended message as it provides easy access to the general organization of topics.

All the paratones in P1 and P14 began in HK after a long or very long pause. The choice of HK on the onset meant that paratones were related to previous units through the meaning of contrast, signalling that the topics developed in each oral paragraph were to be understood as distinct (Brazil et al., 1980). In this way, pitch helped to organize information into different topics which were developed in different paratones by what Coulthard (1987, p.60) calls "pitch phenomena". Also, Pickering (2004, p.24) refers to "a point of maximal disjunction", where high pitch at the beginning of a new topic, and after low pitch level from the preceding unit, indicates that two topics are different from each other.

The main differences between the presentations were related to the use of lecturing frames and the type of information presented in the paratones. From the point of view of the first source of difference, most of the paratones in P1 were introduced by a lecturing frame, which in all cases was made prominent. The use of this resource rendered a clear organization and helped to cue listening comprehension by signposting the starting place of a new topic. On the contrary, P14 did not contain lecturing frames at the beginning of paratones and the indication that a new topic was being introduced was only evidenced through pitch variation and pauses.

As regards the type of information presented in the paratones, it has been mentioned that both presentations were different. The least efficient talk was structured into more paratones than the most efficient one (11 paratones in P1 and 5 paratones in P14). That finding implied that speakers' decisions about the way to present types of information differed significantly. Whereas P1 employed more units and presented examples, repetition of ideas, and addition of information as new paratones, (which phonologically speaking were indicated as new

topics through the use of HK), P14 grouped larger portions of information with different values (repetitions, exemplifications, asides and addition of related information to previous discourse) into each of the 5 paratones.

In order to exemplify the way the information was presented differently in the talks, graphs 8 and 9 from above will be referred to. According to graph 8, P1 presents at least three instances in which two or more paratones were used to cover one topic. For example, paratone 1AU introduced the field (environmental studies) and 2AU was devoted to an explanation of the field. Paratones 4AU and 5AU were both about the context (4AU dealt with the Presentation of the context of the activities and 5AU with the Description of the context, or characteristics of the course). Paratones 6AU, 7AU and 8AU covered just one topic, text selection.

P14 was the opposite case, that is, one paratone was employed to develop two different topics. For instance, according to graph 9, in paratone 1AU two topics were covered (Announcement of the goal of the talk and presentation of activities designed according to certain pedagogic principles.). In 3AU the speaker made the same decision. Two topics (description of an activity about prediction and description of another activity about ideas association) were explained within the same paratone. Paratone 4AU followed the same treatment of information. Paratone 5AU was the last paratone in which two topics, text selection, and the conclusion, were included. On the contrary, 2AU was the only case in which the speaker chose to devote the paratone to one single topic, which was an activity on reading strategies. Therefore, both speakers made distinct phonological choices to indicate to listeners if two or more topics were to be understood as different from each other and new or if information was additively related and had to be explained in one paratone.

To conclude, according to the external judges of this study, P1 was rated as the least efficient presentation and P14 as the most efficient. It should be highlighted that, as explained in Chapter III, the scale employed to rate the 15 presentations did not contain phonological information. It was only targeted at determining oral efficiency by taking into account aspects such as fluency, cohesion, overall comprehension, differentiation of subtopics, and clarity of explanations. According to the auditory and acoustic analyses conducted after the efficiency

ratings, it was found that in both presentations, the content was effectively organized into paratones through the use of phonological features.

Lecturing frames

Table 4 from the preceding chapter shows that the two talks shared similarities and displayed differences in the use of lecturing frames. The beginnings of most paratones in P1 (8 out of 11) were signalled with a lecturing frame (Barr, 1990) and highlighted with intonational choices. The lexical items chosen by the speaker were only two, "so" and "ok", being "so" the most often used. In contrast, it has been stated that paratones in P14 were not introduced by a lecturing frame.

Even though P1 was rated as the least efficient in this study, the speaker used an efficient tool to mark the initiation of phonological units by resorting to lecturing frames (Thompson, 2003). Barr (1990) considers that learners "are often encouraged to listen for macro-organizational lexical signals in lectures … to help them identify lecture organization. The obvious place where such signals are needed is at the beginnings of chunks" (p. 19).

P14 was rated as the most efficient of all the talks from the corpus. Nevertheless, the speaker did not excel in the use of lecturing frames as none of these words was found at the beginning of paratones. Barr (1990) found that only a minority of sequence chains (i. e., paratones) in her study were introduced by lecturing frames and she concluded that:

> a student who depended only on such lexical signals for information on lecture organization would have been frustrated, since they were not commonly used by the three lecturers studied. However, a student actively listening for the beginning of sequence chains would have found such moments very useful. (p. 19).

2.Findings from the questionnaire

The results obtained from the questionnaire offered additional information to the findings obtained from the auditory and acoustic analyses of this study. As previously mentioned the results from the questionnaire have been grouped into four sections: section 1 referring to general questions about giving oral presentations, section 2 was entitled "Before the presentation", section 3 was named "During the presentation" and section 4, "After the presentation".

In section 1, an interesting result has to do with the courses in which students have to give oral presentations. Didactics and Language were reported among those in which presentations delivered by students constitute a frequent classroom activity, whereas Literature, Culture, and History of the Language were among the least cited courses in which they gave talks.

It was expected that Phonetics and Phonology II would be mentioned within the former group of courses. However, students do not seem to associate this subject with oral presentations although this activity forms an important part of the syllabus of the subject. The reason that Phonetics and Phonology II was not mentioned as a course in which learners give oral presentations may have been influenced by the fact that respondents were administered the questionnaire at the end of several Didactics classes and that they were doing fifth-year courses at that moment. Probably, a third-year course, such as Phonetics and Phonology II, was detached from their present.

Another explanation for the finding that Phonetics and Phonology II was not listed among the courses in which students deliver talks could be that during the course in third-year learners are focused on the form more than on the content of what they say. On the contrary, in Didactics students pay more attention to the content than the form or the use of paratones to structure information.

In section 2, all the respondents said they prepared before giving a presentation by watching other classmates delivering talks in class; however, intonation and other prosodic aspects and organization of the talk were not considered by the majority of respondents among the

features they would pay attention to when observing other presenters. Instead, respondents reported that posture and gestures were among the aspects they watched more often.

A probable explanation for the finding of watching other presenters' posture and gestures can be related to the fact that vocal features, such as intonation and prosodic aspects, and organization of the talk are more ephemeral during speaking events (Luoma, 2004), such as oral presentations. In contrast, posture and gestures are rapidly captured by an audience as they belong to a visual realm.

There was another interesting finding in section 2. Sixty-seven percent of the respondents reported they rehearsed their presentations, but less than half of all the respondents (47%) reported they paid attention to the use of their voices and pauses at the beginning and end of topics. The reason why less than half of the students paid attention to the use of certain prosodic features, such as pitch height and pauses, which contribute to signal topic beginnings and ends (Wichmann, 2000) could be found in the fact that these contents are dealt with in third year and the respondents were all fifth-year students. During the fourth and fifth years of their studies, learners do not receive any phonetic or phonological training. Consequently, oral skills, such as voice management to delimit beginnings and ends of topics through prosodic features, may have been difficult to recall for respondents of this study when they were answering the questionnaire.

In section 3, more than half of the respondents said they could control volume (67%) and monotony (53%) during a talk, whereas speed, fluency, and precision of pronunciation were the features they said they handled less. In section 4, participants said that volume; fluency and speed were among the aspects they felt more at ease with after they finished their talk, whereas monotony, intonation and articulatory precision were not considered as features which they felt they could handle well. A possible explanation for the fact that intonational and prosodic features were difficult to control during the presentation could be that students did not receive specific training at that moment to manage those features to signal the organization of the presentations into paratones.

All in all, the findings of this section indicated that the majority of the respondents reported they liked giving oral presentations and Didactics were among the courses which they felt

they were more exposed to the task of delivering talks. They also reported that prosodic features seemed not to be given enough consideration at the moment of making oral presentations. According to the answers to the questionnaire, prosodic features were not considered before and during the presentations.

The following chapter lists the most relevant conclusions, the limitations to the study, some ideas for teaching practice and suggestions for future research.

Chapter VI

Conclusions

This chapter presents the conclusions of the research undertaken about the use of paratones and phonological features to organize oral academic presentations delivered by EFL advanced university learners. The chapter is structured into several sections. The conclusions, which offer a summary of the key findings. Next, the pedagogical implications, which consider recommendations to implement as from third-year courses in the School of Languages. After that, the limitations, which mention some methodological drawbacks and aspects of analysis which could not be explored. Finally, the suggestions for further research, which give some ideas about ongoing work in the field

Conclusions

This study presented key findings and discussed the use of paratones to structure oral academic presentations delivered by EFL advanced university students in an efficient way. The subjects were fifth-year EFL students from the School of Languages of the National University of Córdoba. The study has drawn results from three types of data collection. The first one was concerned with the mean grades given to 15 fifth-year oral presentations by external raters, who employed a rating scale constructed for this work. The second source was the auditory and acoustic analyses of 2 selected oral presentations, which belonged to the most and the least efficient speakers of the corpus according to the mean scores given by the raters. The last source of results came from learner-presenters' answers to a questionnaire, designed to obtain information on students' skills and beliefs on delivering oral presentations.

The results obtained from the two presentations under analysis showed that the talks shared similarities, but they also presented differences. As regards the similarities, in both presentations the paratones began in HK on the onset, there followed a gradual descent in

pitch inside the paratones towards the end and LT fell on the last tonic, followed by long and/or very long pauses, which signalled finishing points.

Concerning the differences, there are several aspects to mention. The use of lecturing frames was different in both talks. Whereas P1 used lecturing frames to introduce most paratones, P14 did not employ this feature in any of the paratones. Another difference was that P1 was structured into more paratones than P14 (11 paratones in P1 and 5 in P14). In P1 there was the decision of presenting information, such as repetitions and exemplifications, as new topics and, therefore, in new paratones of varying length. On the contrary, in P14 the information was structured into paratones of balanced length in most of which two or more different topics were covered.

Ideally, in oral academic presentations, efficient speakers are characterized by introducing new topics through phonological features at the limits of content-defined units. However, Brazil et al., (1980); Brazil, (1997), Barr (1990), and Wichmann (2000) among others state that decisions concerning about how to structure information are left to speakers who, very frequently, make choices on what they assume to know about the context and shared knowledge with their listeners. What becomes clear is that speakers should carefully classify the content of their presentations in order to make phonological decisions which indicate paratone division which will allow listeners to follow the macro-organization of the talk.

Pedagogical Implications

Considering the findings of this work, the following teaching implications are suggested. Firstly, efficient phonological structuring of oral academic presentations into paratones is both important in EFL instructional or teaching contexts (Pickering, 2004) and interpretation settings (Nafá Waasaf, 2005). For this reason, raising awareness of the importance of organizing presentations into paratones for advanced EFL learners of the School of Languages of the National University of Córdoba becomes very relevant.

Delivering efficient oral presentations involves a myriad of skills performed almost spontaneously, among which good use of language and paratone divisions through effective use of phonological features are present. Very frequently, when learners/presenters are faced with the task of delivering talks, they tend to employ rote learning and/or reading aloud of their oral expositions, concentrating almost exclusively on the content. However, if students/presenters neglect the use of the phonological features that help organize a text into content-defined units, memorization or reading aloud alone may defeat the communicative purpose of presentations in academic settings. Employing phonological features at paratones' boundaries to indicate the beginning and end of topics is as efficient as using adequate signposting language, such as discourse markers, to guide listeners through the manner in which information is structured in a talk. Consequently, an efficient use of phonological features to organize a presentation into paratones will result in an engaged audience, enabling them to have an easy access to the content of a speech.

Within the context of third-year courses in the School of Languages, teaching and practicing phonological features to organize talks into paratones through speech technology (Hincks & Edlund, 2009; Hincks, 2010) in the classroom can be an alternative to the mainstream teaching methodology of oral presentation skills' development.

Within the context of fourth and fifth-year courses, providing more opportunities for practice in the form of workshops becomes a need. Workshops can offer phonological assistance to advanced EFL students in tandem with their real presentation assignments. In both fourth and fifth years, students are continuously demanded to prepare and deliver oral presentations in class in several courses (Language, History of the Language, Didactics, etc). However, phonological training stops after third year. Therefore, workshops on how to structure presentations into paratones through phonological features can provide a substantial support to present in an efficient way.

Another teaching recommendation is that more textbooks are needed which emphasize the organizational function of intonational features of long portions of discourse above the tone unit. According to Morra and Soler (2002, p. 38), "Teaching materials should therefore concern with longer stretches and provide practice on the function of intonation in organizing

these stretches into an integrated whole". In their work, these authors present a set of suggestions to train students (p. 39).

Finally, EFL instruction for advanced university learners can combine the teaching of oral academic presentations from a phonological as well as a generic perspective. Phonological structuring of oral presentations into paratones would be best advantageous if intonational features are employed to indicate different moves (Swales, 1990, 2004) in academic talks. Therefore, a simple pattern such as a lecturing frame and HK at the beginning of a paratone, a gradual descent in pitch throughout the paratone, LT on the last tonic and a very long pause (over 1 sec.) can be used every time a move is unfolding (e.g., introduction, first topic, second topic, third topic, etc., conclusion, questions from the audience).

Limitations of the study

There are several limitations in this study concerning the recordings obtained in real-time conditions, the type of digital recorders, the rating scale and the constraints of an MA thesis.

The first limitation was that the 15 recordings were obtained during real-time conditions, which implied that all the presentations in the corpus were live recordings. These recordings presented several characteristics, such as background noise (a door being opened, or chairs being moved) as learners were presenting. In addition, there were moments in which students delivering the talks moved away from the recorder, therefore; the volume of speakers' voices was very low. For this reason, P1 contained several cases in which LT values could not be acoustically measured. Nevertheless, reliance on different cues contributed to the determination of LT. Considering that situation, audio recording in a lab would have resulted in neater sound quality, even though the lab as a recording environment would have turned spontaneity into an artificial rendering of oral production.

The second limitation concerning real-time circumstances was that the presentations were an assignment of formal assessment for the Didactics II course. Many presenters could have felt

intimidated by the pressure of being evaluated and recorded at the same time. The probable pressure they might have felt could have had an influence on their oral performance.

The third shortcoming was that the digital recorders used in this work were high-end technology, portable recorders. These recorders were left on a desk closed to learners delivering the presentations and were good enough to capture the speakers' voices loudly and clearly. In spite of the proximity to the learners and the latest technology, many portions of talk still contained very low volume, even though the speech was intelligible and audible. In that situation, clip digital microphones would have rendered a better sound quality and presenters would not have felt intimidated by the presence of the microphones, should they have been.

The fourth weakness of this work was the 5-point scale employed to rate the 15 presentations in terms of oral efficiency. A 5-point scale was decided to be the most comfortable quantity of language levels as the passing mark was clearer to detect than in the case of 4 or 6-point scales. Nevertheless, grade 3 (the passing mark) was probably a too comfortable option for raters at the moment of decision-making of whether to consider a presentation as efficient on the whole or not. According to Luoma (2004, p. 80) scales "often have four to six levels". Even though it was stated that a 6-level scale would have seemed a bit overloaded with information, six levels of language ability would have added another shade of language ability and scoring would have been fairer.

Another reason for using a 6-level scale can be that a 5-point rating instrument showed that the movement between grade 3 to grade 2 was probably too abrupt. Another level would have meant easier decision-making when scoring presentations which were placed towards the "not efficient" side of the scale, even in cases where speakers were still intelligible.

Another weak point about the scale was the use of a holistic rating scale. Probably, the holistic scale was not the best option, against an analytic scale. Perhaps, an analytic scoring instrument would have been easier for raters to apply as information about language ability is more detailed in analytic scales (Luoma, 2004). It is possible to suggest that an instrument which combines holistic and analytic aspects for delivering oral presentations in EFL

advanced students environments would render a complete view of language skills and assessment.

The last issue concerning the limitations to the study is related to areas which could not be studied given the constraints that an MA thesis implies. Firstly, the internal structure of paratones (Pickering, 2004) and inter and intra-sequential choices of Key and Termination (Brazil, 1997) and cohesion between pitch sequences could not be informed. Even though the study of the way pitch sequences inside paratones are linked together was done in the two talks, the reporting on this finding did not match the objectives of this work. Secondly, the use of tones in the presentations under analysis was also studied. Nevertheless, due to extent limits required for an MA thesis, the results on the employment of tones in the two talks could not be reported.

Suggestions for Further Research

It is possible to detect several paths for future work. The recommendations for future inquiry can include building a learner corpus, designing a rating scale for oral presentations and studying the phonological structuring of oral presentations in other academic contexts.

Pickering (2012), an influential author on intonational paragraphing in academic lectures, suggests building a learner corpus of real, classroom audio files. A corpus of learner samples of oral presentations can be employed both for future research and for classroom use. It also provides a source of motivation for students as the samples are part of real performance made by other learners who may have experienced communicative language needs, similar to the students who are actually learning how to present. Besides, the scholar highlights the benefit of using classroom audio files, instead of lab recordings. Her strong suggestion is to employ live performances of oral presentations as they capture more spontaneity in the use of prosodic features.

Another suggestion is designing a new rating scale to assess oral presentations for EFL advanced learners of the School of Languages of the National University of Córdoba. The

scale can be a combination of an analytic and a holistic scoring instrument, which can be employed for peer, self and teacher assessment.

The last recommendation is continuing this line of inquiry with larger samples and with varied academic contexts (such as research presentations from conferences, paper presentations, lectures from Ph.D. dissertations, etc.) to be able to compare and generalize results. Additionally, aspects such as the internal structure of paratones and the use of tones can become part of a more comprehensive phonological study on oral academic presentations delivered by EFL advanced university learners.

References

Alwi, N. F. B., & Sidhu, G. K. (2013). Oral presentation: Self-perceived competence and actual performance among UiTM Business faculty students. *Procedia. Social and Behavioral Sciences*, *90*, 98-106. Retrieved from http://www.sciencedirect.com/science/article/pii/S1877042813019423

Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford: Oxford University Press.

Bachman, L., & Palmer, A. (2010). Language assessment in practice. Oxford: Oxford University Press.

Barr, P. (1990). The role of discourse intonation in lecture comprehension. En M. Hewings (Ed.), *Papers in Discourse Intonation* (pp. 5-21). University of Birmingham: English Language Research.

Brazil, D. (1978). *Discourse Intonation II.* University of Birmingham, England: English Language Research.

Brazil, D., M. Coulthard y C. Johns (1980). *Discourse Intonation and Language Teaching*. London: Longman.

Brazil, D. (1985). *The Communicative Value of Intonation in English.* University of Birmingham, England: English Language Research.

Brazil, D. (1986). *The communicative value of intonation in English*. Birmingham, UK: University of Birmingham, English Language Research.

Brazil, D. (1992). Listening to people reading. En M, Coulthard (ed.), *Advances in Spoken Discourse Analysis* (pp. 207-241). London: Routledge.

Brazil, D. (1997). *The Communicative Value of Intonation in English*. Cambridge: Cambridge University Press.

Brown, G., K. L. Currie y J. Kenworthy. (1980). *Questions of Intonation.* Londres: Croom Helm.

Brown, G. y Yule, G. (1983). *Discourse analysis.* Cambridge: Cambridge University Press.

Buss, L., Cardoso, W., & Kennedy, S. (2015). Discourse intonation in L2 academic presentations: A pilot study. In J. Levis, R. Mohammed, M. Qian & Z. Zhou (Eds). *Proceedings of the 6th Pronunciation in Second Language Learning and Teaching Conference.* Santa Barbara, CA (pp. 27-37). Ames, IA: Iowa State University. Retrieved from http://search.proquest.com/openview/0d56d8a8c231e17c193748965bfef4d2/1?pq-origsite=gscholar

Chou, M. H. (2011). The influence of learner strategies on oral presentations: A comparison between group and individual performance. *English for Specific Purposes, 30*(4), 272-285. doi:10.1016/j.esp.2011.04.003

Chun, D. M. (2002). *Discourse intonation in L2: From theory and research to practice* (Vol. 1). John Benjamins Publishing.

Cohen, A. (1987). Student processing of feedback on their compositions. In A. L. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 57–69). Englewood Cliffs, NJ: Prentice-Hall.

Coulthard, M. (1985). *An Introduction to Discourse Analysis*. London: Longman.

Coulthard, M. (1987). Discussing Discourse. Birmingham: ELR Birmingham.

Coulthard, M. (Ed.). (1992). Advances in Spoken Discourse Analysis. London, UK: Routledge.

Couper-Kuhlen, E. (1986). *An Introduction to English Prosody.* London: Edward Arnold Publishers Ltd.

Cruttenden, A. (1997). *Intonation*. Cambridge University Press.

Crystal, D. (1969). *Prosodic systems and intonation in English*. London: Cambridge University Press.

Crystal, D. & Davy, D. (1975). *Advanced Conversational English*. London, UK: Longman.

Derwing, T. M. (2013). The Interface of Teaching and Research: What Type of Pronunciation Instruction Should L2 Learners Be Able to Expect? Conference in III Jornadas Internacionales de Fonética y Fonología. Universidad Nacional de Mar del Plata. Sept. 26th - 28th, Mar del Plata, Argentina.

Educational Testing Service. (1996). *SPEAK rater training guide*. Pinceton, NJ: ETS.

Ellis, R. (1994). *The study of second language acquisition*. Oxford University.

Ellis, R., & Barkhuizen, G. P. (2005). *Analysing learner language*. Oxford: Oxford University Press.

Flowerdew, J. (Ed.). (1994). *Academic Listening.* Cambridge, England: Cambridge University Press.

Fox, A. (1973). Tone-sequences in English. *Archivum Linguisticum, 4*, 17-26.

Halliday, M. A. K. (1967). *Intonation and grammar in British English*. The Hague: Mouton.

Hincks, R. (2005). Measures and perceptions of liveliness in student oral presentation speech: A proposal for an automatic feedback mechanism. *System, 33*(4), 575-591. doi:10.1016/j.system.2005.04.002

Hincks, R. & Edlund, J. (2009). Promoting increased pitch variation in oral presentations with transient visual feedback. *Language Learning and Technology 13 (3),* 32-50. Retrieved from http://s3.amazonaws.com/academia.edu.documents/43682242/hincksedlund.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1470846919&Signature=GKVk0ir1hOqJySeujvpv4gzwWmU%3D&response-content-disposition=inline%3B%20filename%3DPromoting_increased_pitch_variation_in_o.pdf

Hincks, R. (2010). Speaking rate and information content in lingua franca oral presentations. *English for Specific Purposes 29*, 4-18. doi:10.1016/j.esp.2009.05.004

Hinds, J. (1979). Organizational Patterns in Discourse. In Givon, T. (Ed.), *Discourse and Syntax, Syntax and Semantics* 12 (pp. 135-157). New York, NY: Academic Press.

Kang, O., Rubin, D., & Pickering, L. (2010). Suprasegmental measures of accentedness and judgments of language learner proficiency in oral English. *The Modern Language Journal, 94*, 554-566. doi:10.1111/j.1540-4781.2010.01091.x

Knowles, G., Williams, B. & Taylor, L. (1996). *A corpus of formal British English Speech: The Lancaster/IBM Spoken English Corpus.* London, UK: Longman.

Ladefoged, P. (2003) *Phonetic Data Anallysis: an introduction to fieldwork and instrumental techniques.* Oxford: Blackwell Publishing.

Lehiste, I. (1980). *Phonetic Characteristics of Discourse.* Tokyo: Acoustical Society of Japan.

Lehiste, I. (1982). Some Phonetic Characteristics of Discourse. *Studia Linguistica 36 (2),* 117-130.

Luoma, S. (2004). Assessing Speaking. Cambridge: Cambridge University Press.

Mears, A. G. (1982). *The Right Way to Speak in Public*. Kingswood, Surrey: Paperfronts.

McCarthy, M. (9991). *Discourse analysis for language teachers*. United Kingdom: Cambridge University Press.

McCarthy, M. (1993). Spoken discourse markers in written text. In: J. Sinclair, M. Hoey and G. Fox (eds) *Techniques of Description - Spoken and Written Discourse.* (pp 170-182). London and New York: Routledge.

Morell, T. (2007). What enhances EFL students' participation in lecture discourse? Student, lecturer and discourse perspectives. *Journal of English for academic Purposes*, *6*(3), 222-237.

Morell, T. (2015). International conference paper presentations: A multimodal analysis to determine effectiveness. *English for Specific Purposes*, *37*, 137-150. doi:10.1016/j.esp.2014.10.002

Morra, A. M. y L. R. Soler. (1999). La estructura de la conferencia en inglés. *Revista de Lengua para Fines Específicos,* Nº 5 y 6, marzo-abril 1998 y 1999 (pp. 375-392), Departamento de Filología Moderna, Universidad de Las Palmas de Gran Canaria.

Morra, A. M. y L. R. Soler. (2002). Implications of Research for the Teaching of Lecture Comprehension. En L. Sierra y A. M. Morra (Eds.), *Research in Academic English: Communicative Skills and Strategies in the University Context. Colección "Pautas".* (pp. 27-46), Instituto de Ciencias de la Educación, Universidad de Alcalá, España.

Nafá Waasaf, M. L. (2005). Análisis acústico-discursivo de la entonación en interpretación simultánea inglés británico-español peninsular. Aplicaciones a la didáctica y la investigación en la interpretación de lenguas. (tesis doctoral). Universidad de Granada, Granada, España. http://hdl.handle.net/10481/798

Nafá, M. L. (2007). Cómo contribuye la entonación a organizar los discursos originales y meta en la interpretación simultánea. *Fonética y Fonología Hoy. Una perspectiva plurilingüe.* 311-325.

Nakajima, S., & Allen, J. (1993). A study on prosody and discourse structure in cooperative dialogues. *Phonetica, 50,* 197–210.

Nespor, M., & Vogel, I. (1986). *Prosodic phonology*. Dordrecht: Foris Publications.

Ortega, L. (2014). *Understanding second language acquisition*. Routledge.

Palmer, H. E. (1922). *English Intonation (with systematic exercises).* Cambridge, UK: Heffer.

Pickering, L. (2004). The structure and function of intonational paragraphs in native and nonnative speaker instructional discourse. *English for Specific Purposes 23,* 19-43. doi:10.1016/S0889-4906(03)00020-6

Pickering, R. (2012). Second language speech production. In *The Routledge handbook of second language acquisition*. (pp. 335-348). S. M. Gass, & A. Mackey. (Eds.). New York, NY: Routledge.

Pike, K. L. (1955). *Language in Relation to a Unified Theory of the Structure of Human Behavior, 2,* Glendale, California USA: Summer Institute of Linguistics.

Pirt, G. (1990). Discourse intonation problems for nonnative speakers. In M. Hewings (Ed.), *Papers in Discourse Intonation.* (pp. 145–156). Birmingham, England: University of Birmingham, English Language Research.

Quilis, A. (1999). *Tratado de Fonética y Fonología Españolas*. Madrid: Gredos.

Quirk, R., Duckworth, A. P., Svartvik, J., Rusiecki, J. P. L. & Colin, A. J. T. (1964). Studies in the correspondance of prosodic to grammatical features in English. *Proceedings of the Ninth International Congress. 9,* (pp. 679-91). International Congress of Linguistics.

Sinclair, J. M., & Coulthard, M. (1975). *Towards an analysis of discourse*. New York, NY: Oxford.

Sinclair, J. M., & Brazil, D. (1982). *Teacher talk.* Oxford University Press.

Soler, L. & Bombelli, G. (2004). *La importancia del empleo de los rasgos prosódicos en la lectura en voz alta: Estudio comparativo de la lectura en voz alta en español como L1 y en inglés como LE (continuación).* (pp. 1-13). Córdoba, Argentina: SeCyT, Facultad de Lenguas, Universidad Nacional de Córdoba.

Soler, L. & Bombelli, G. (2005). *La importancia del empleo de los rasgos prosódicos en la lectura en voz alta: Estudio comparativo de la lectura en voz alta en español como L1 y en inglés como LE*. (pp. 1-13). Córdoba, Argentina: SeCyT, Facultad de Lenguas, Universidad Nacional de Córdoba.

Soler, L. & Bombelli, G. (2016). Calidad expresiva y comprensión lectora en la lectura en voz alta de un poema en lengua extranjera (inglés). In C. Muse (Ed.), *Cátedra UNESCO. Lectura Y Escritura: Continuidades, Rupturas Y Reconstrucciones, 7,* 271-278. http://dx.doi.org/http://hdl.handle.net/11086/2313

Stapa, M., Murad, N. A., & Ahmad, N. (2014). Engineering technical oral presentation: Voices of the stakeholder. *Procedia. Social and Behavioral Sciences, 118,* 463-467. doi:10.1016/j.sbspro.2014.02.063

Swales, J. M. (1990). *Genre Analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

Swales, J. M. (2004). *Research Genres. Explorations and Applications*. Cambridge: Cambridge University Press.

Swerts, M., & Geluykens, R. (1993). The prosody of information units in spontaneous monologue. *Phonetica*, *50*(3), 189-196.

Tench, P. (1990). *The Roles of Intonation in English Discourse*. Germany: Peter Lang

Tench, P. (1996). *The Intonation Systems of English.* London: Cassell.

Thompson, S. E. (2003). Text-structuring in meta-discourse, intonation and the signalling of organization in academic lectures. *Journal of English for Academic Purposes, 2*, 5-20. doi:10.1016/S1475-1585(02)00036-X

Trim, J. L. M. (1959). Major and Minor Paratone Groups in English. *Le Maitre Phonetique 112*, 26-29.

Van Dijk, T. (1982). Opinions and Attitudes in Discourse Comprehension. Advances In Psychology, 9, 35-51. http://dx.doi.org/10.1016/s0166-4115(09)60039-x

Ventola, E., Shalom, C. y Thompson, S. (Eds.). (2002). *The Language of Conferencing*. Frankfurt: Peter Lang.

Webber, P. (2005). Interactive features in medical conference monologue. *English for Academic Purposes 24*, 157-181. doi:10.1016/j.esp.2004.02.003

Wichmann, A. (2000). *Intonation in Text and Discourse*. Essex: Pearson Education Limited.

Yule, G. (1980). Speakers' topics and major paratones. *Lingua* 52, 33-47 North Holland.

Appendix A

Transcriptions

Presentation 1 (5:14 min)

Paratone 1AU

Ok let me introduce ourselves (NAMES HAVE BEEN DELETED) and today we are going to present the main aspects we consider when we developed our material for uh ESP courses we had the field of environmental studies as you can see in the first slide

Paratone 2AU

so let's this is uh uh our topic environmental studies

Paratone 3AU

so let's give an overview of what we are going to deal with today we are going to present the context in which we had to focus to uh develop our material and then the objectives we focused on to ah well the selection of the text and the activities the the the concepts that we considered when developing ah when selecting our text and ah finally the activities we developed according to that text and the strategies we had to focus on

Paratone 4AU

so let's start with uh the context

Paratone 5AU

the context we had to focus on was a second or third class of as you know of a reading comprehension course in which the students were in their fourth and fifth year of their studies the students had a basic knowledge of English of English but uh they were proficient L1 readers ok so ah as regards the objectives the strategy we had to focus on was prediction and the the aim of the activity was to make students focus on ah the noun phrase that is to say to uh the analysis of uh the noun phrase and the analysis of the recognition of new words through the analysis of word stems and uh affixes ok having said this we can move to the selection of the text

Paratone 6AU

we selected our text on the basis of the TAVI approach text as a vehicle for information so uh it is important to consider that our text ah the aim of our text was to focus on the students' needs and um as you can see the text is called ocean pollution what's the solution and we didn't chose this text because we like the title let's say it was a difficult task to choose it since we had to focus on the linguistic items we had to exploit or to make to the students ah to present to the students and ah we made a research ah because ah as you know it is difficult to find a text appropriate for the level of the of the students and the linguistic aspects we had to present

Paratone 7AU

so first we selected another text which was useless for our purpose and then we selected this text considering the fact that we made a research on different syllabuses from uh universities who whose aim is to teach environmental studies so for example uh we search on the net for syllabuseses syllabuses from universities form Japan New Zealand and here in Argentina there is a university er it is the university of Comahue in Neuquén

Paratone 8AU

so uh these syllabuses were uh like a guide for us to focus on the aspects we needed to exploit

Paratone 9AU

so ocean pollution what's the solution was the text we selected it is an authentic text because it was taken from the Internet ok so uh we get the original text but we added a picture this picture doesn't belong to the text we added the picture and the line numbers to the text ah which was the purpose of it the purpose was to uh help the learners to draw implications from the text in an easier way and to help them find the information in each activity in an easier way as well ok so umm can anyone read the instructions would you Betty please ok lea el título del texto observe cómo está dispuesto y la foto que lo acompaña determine de dónde pudo haber sido extraído ok thank you very much

Paratone 10AU

so as you can see the instructions uh lead the learners to pay attention to the text and to the picture to draw implications and to make inferences as you have read McNeil states that um it is important for the reader to get something to the text that is to say to use their previous knowledge their previous schemata to draw implications and to um provide information concerning that

Paratone 11AU

ok is that it ok now (NAME) is going to move to the next …

Presentation 14 (4:43 min)

Paratone 1AU

Ok and now (NAME) is going to continue with the activities yes I will refer to the activities we prepared following the stages that Dudley-Evans and Saint Jones uh proposed after finding the carrier content we moved on uh to drafting the actual activities uh in order to do so we followed the TAVI approach but we also took into account other aspects such as carrier content and real content and uh specially two important principles uh that were proposed by Tomlinson that are that uh well materials uh should uh help students feel at ease and that materials should require and facilitate learners' self-investment

Paratone 2AU

you are going to see that uh throughout the the activities both principles were taken into account yes well uh the first activity uh was about reading strategies here we focused on uh real content then reading comprehension activities focusing mainly on carrier content then language elements focusing on uh real content and finally the uh closing task well uh within the reading strategies uh we included two uh strategies that are prediction and ideas association

Paratone 3AU

the reason why we included uh strategies mainly at the beginning is because the main goal for academic reading instruction is to prepare or develop uh strategic learners so uh students are aware of the goal of the the task they are carrying out uh in the first activity there was prediction we provided the title of the text and we asked students to predict the content and the topic of the text text and the second one was ideas association we were supposed to

present the strategy but we did so ah inductively that is that first we presented this image in which they had to uh gather in groups and they had to complete the this picture with the knowledge they had ah in Spanish of course and they had to justify ah well the content they proposed after that they had to uh work together as a group and try to complete or modify uh the picture so as to add more information

Paratone 4AU

what we did ah and this is something we included within the reading comprehension activities is ah an activity of awareness of the advantages that this uh type of strategy uh brought to them so uh they had to reflect on the advantages after reading the actual text em well then eh within the reading comprehension we included eh well eh we worked with an interactive process of reading yes including uh top-down and bottom-up activities uh first students had to skim the text uh to confirm their predictions in the first activity and then uh we made uh a question for general comprehension yes then we moved on to scanning within scanning we included activities such as ah focusing on information that is that was present or wasn't present within the text uh they had to put the line uh where this information was in the text and eh then they had to uh write about uh true and false statements and finally they had to complete the stages in a graph we provided a similar graph to uh the one you've seen before and they had to complete uh with the stages they have read in the in the text

Paratone 5AU

and finally within ah reading comprehension we included uh textual reference we did so because uh we thought that textual reference has to do with the comprehension of the text uh we didn't had to present eh textual reference we had to practice so uh well we took some uh parts from the text and we uh prepared an activity in which they had to put eh the referent yes…

Appendix B

Rating scale for oral presentations

Listen to each oral presentation and use the scale below to rate them. You may listen to each sample as many times as you need and you may pause the recordings as many times as you want.

5	The oral presentation is **always effective** because . it sounds fluent and coherent at all times. . it facilitates overall comprehension and the identification of different subtopics at all times. . it conveys a certain feeling of pleasure while listening to it, for no disturbances are perceived. . explanations are complete and clearly developed at all times.
4	The oral presentation is **generally effective** because . it creates a coherent speech. . it facilitates overall comprehension and the identification of different subtopics. . it demands little listener effort. . explanations are clear even though there are some digressions and/or a few supporting details are missing.
3	The oral presentation is **sometimes effective** because . it creates a coherent speech, although it may lack fluency and it may not sound natural. . it facilitates overall comprehension but the identification of different subtopics may be difficult at times. . it demands certain listener effort due to interferences that may be disturbing. . explanations are simple, with occasional inconsistencies.
2	The oral presentation is **seldom effective** because . it may sound coherent, even though it generally lacks fluency and does not sound natural. . it hinders overall comprehension although it is possible to identify different subtopics.

	. it demands much listener effort since disturbances interfere with communication. . its general structure is unclear and explanations are not easy to follow.
1	The oral presentation is **not effective** because . it is neither fluent nor coherent. . it hinders overall comprehension of the message. . it does not facilitate the identification of different subtopics. . it demands great listener effort and concentration, for it is not possible to follow explanations.

Appendix C

Questionnaire

Responde las siguientes preguntas:

1. ¿Te gusta realizar presentaciones orales?

Si No Más o menos

2. ¿Con qué frecuencia realizas presentaciones orales?

-Siempre

-Muy frecuentemente

-A veces

-Pocas veces

-Casi nunca

-Nunca

3. A lo largo de tu carrera, ¿has realizado presentaciones orales?

Si No

4. ¿Cuántas veces has dado presentaciones orales durante tus estudios universitarios?

-Más de 4

-Entre 5 y 10

-Más de 10 veces

5. ¿En qué materias has realizado presentaciones orales? Menciona algunas.

……
……

Antes de dar la presentación:

6. ¿Preparaste un plan?

Si No

7. ¿Tu plan fue detallado o sólo contenía un esquema con pocas palabras?

8. ¿Leíste mucho sobre el tema de la presentación antes de preparar el plan?

9. ¿Observaste la forma en que otros oradores han dado presentaciones orales?

Si No

10. ¿Qué observaste?

-Gestos y posturas

-Uso de la lengua

-Organización

-Claridad en las explicaciones

-Precisión en la pronunciación

-Entonación

-Variación de volumen de la voz

-Variación de velocidad de habla

11. ¿Ensayaste antes de realizar la presentación?

Si No

12. ¿De qué manera ensayaste?

-Hablando en voz alta

-Hablando en voz alta frente a un espejo

-Hablando en voz alta frente a un/a compañero/a

-Hablando en voz alta imaginando a tu audiencia

-Te grabaste y luego te escuchaste

-Te filmaste y luego te observaste

13. ¿Tuviste en cuenta el manejo de la voz y de pausas al comenzar y finalizar un tema durante el ensayo?

Durante la presentación oral:

14. ¿Cómo te sentiste?

-Cómodo/a

-Con confianza

-con timidez

-nervioso/a

15. ¿Hiciste contacto visual con la audiencia?

Si No

16. ¿Podías controlar la forma en que hablaste en cuanto a:

-Velocidad

-Fluidez

-Volumen de la voz

-Precisión en la pronunciación

-Monotonía

-Posturas y gestos

-Contacto visual

Después de la presentación:

17. ¿Estuviste conforme con respecto a los siguientes aspectos?

-Velocidad

-Fluidez

-Monotonía

-Volumen de la voz

-Precisión articulatoria

-Entonación

-Contacto visual con la audiencia

18. ¿Consideras que fuiste claro/a en cuanto al manejo de tu voz para indicar a tu audiencia las distintas partes de tu presentación?

……
…….

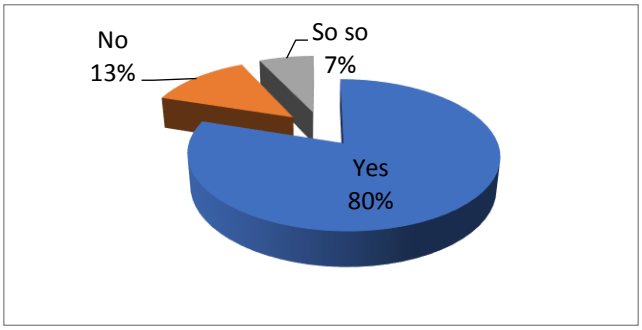
……
……..

¡Gracias por tu colaboración!

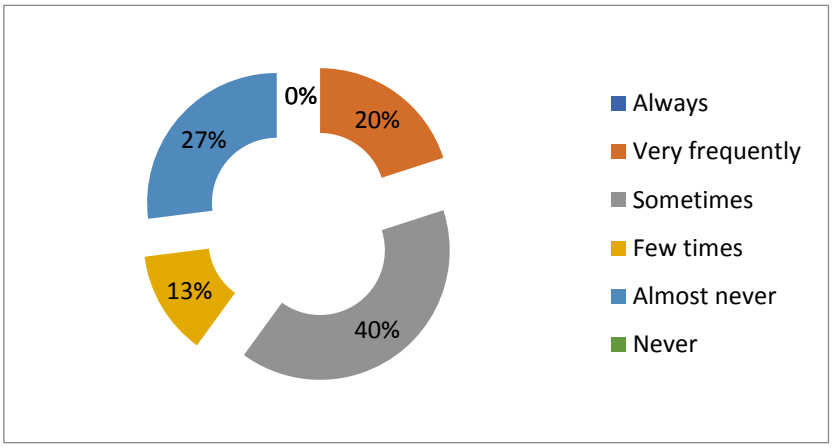
Appendix D

Results from the questionnaire

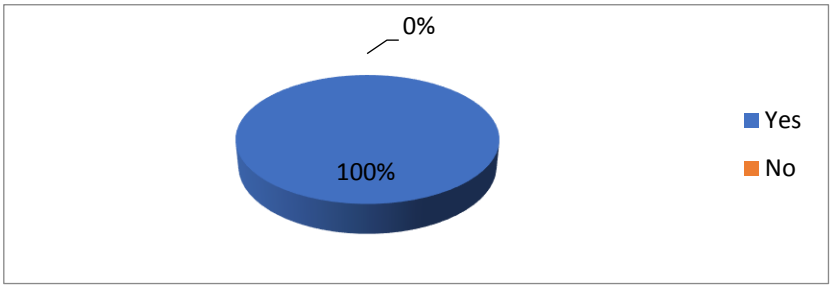
1. Do you like giving oral presentations?



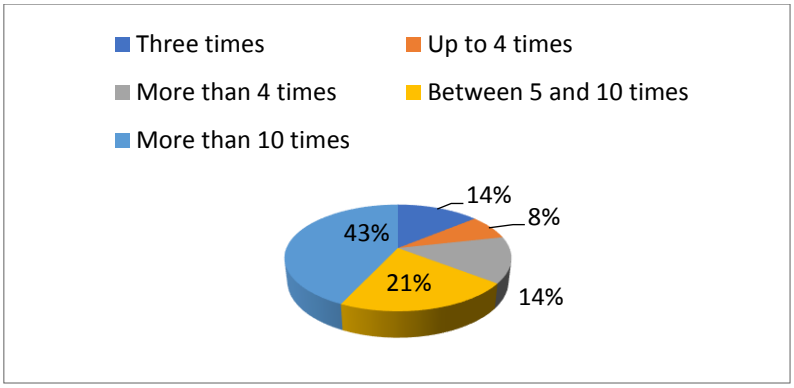
2. How often do you give oral presentations?



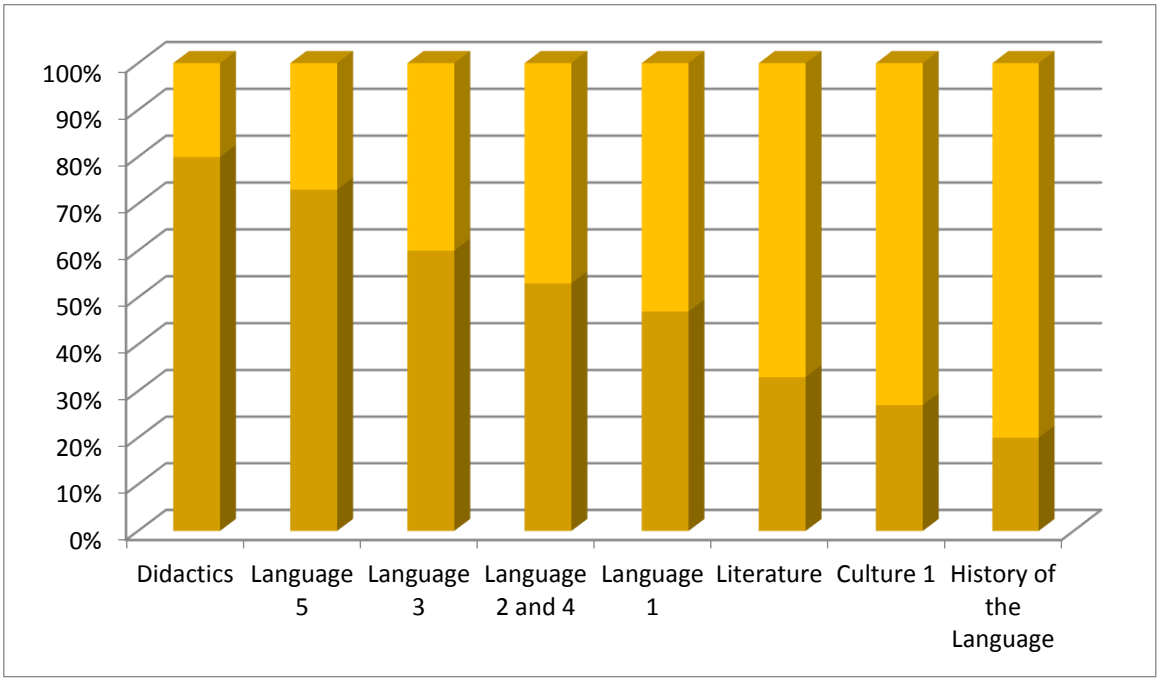
3. Have you delivered oral presentations throughout your course of studies?



4. How many times have you delivered oral presentations throughout your course of studies?

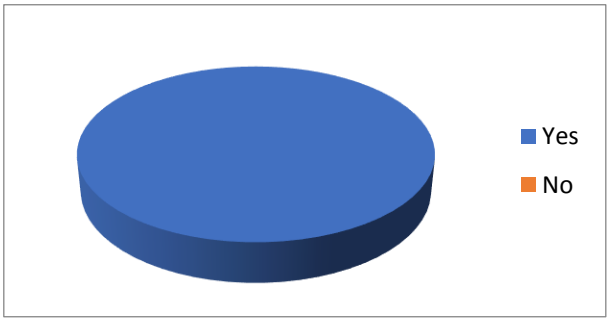


5. In which courses did you give oral presentations? Mention some.

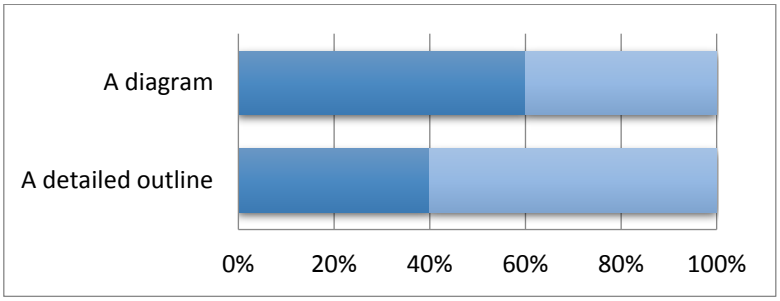


Before the presentation:

6. Did you prepare an outline?



7. Did your outline contain details or was it a diagram with key words?

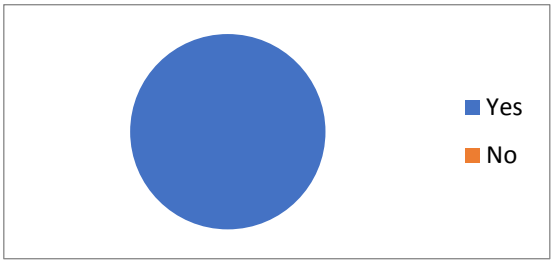


8. Did you read a lot about the topic of the presentation before you prepare the outline?

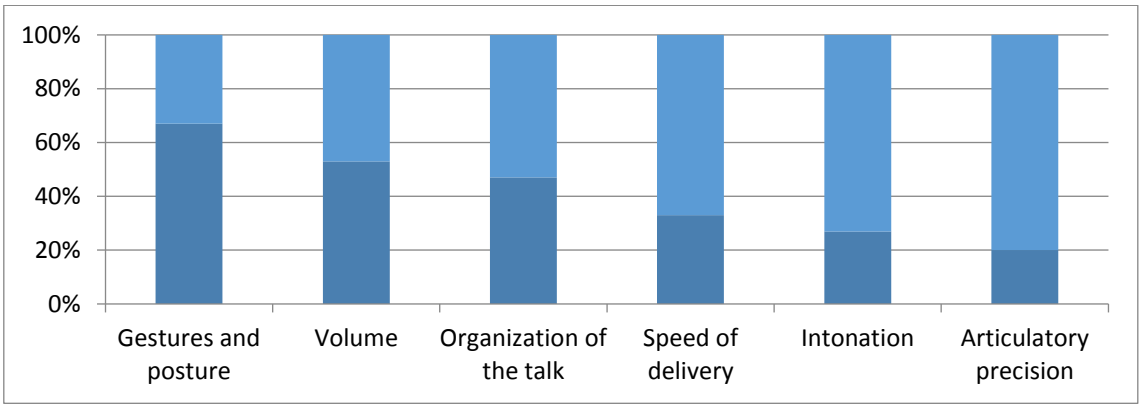
Answers	**N° of answers**
Yes	11
No, I prepared my outline on the basis of a summary about the topic.	1
I read to prepare a report in which I based the presentation.	1
Not much, I ‘ve just read enough in order to choose the most important pieces of information which were used as a guide.	1

Yes, throughout the year. However, I did not read before the presentation.	1

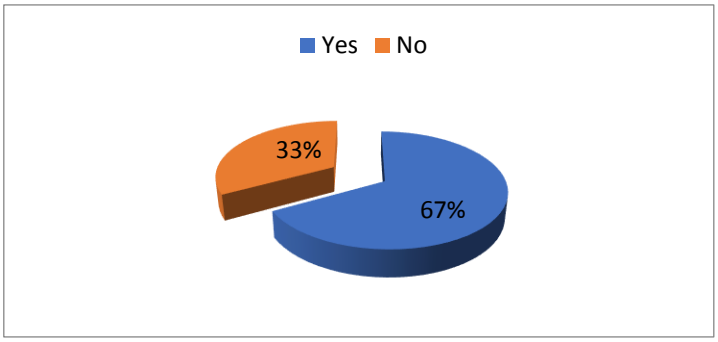
9. Did you pay attention to other presenters when giving oral presentations?



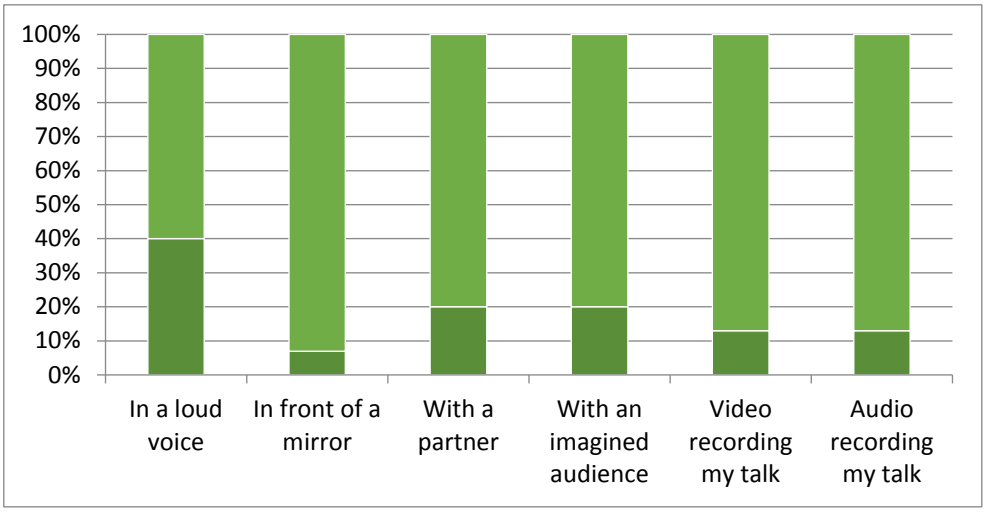
10. What aspects from other presenters did you pay attention to?



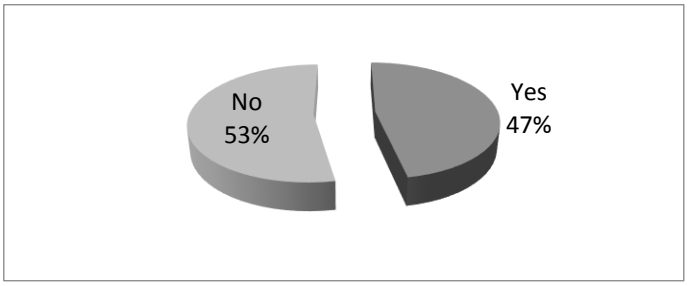
11. Did you rehearse your presentation?



12. How did you rehearse?

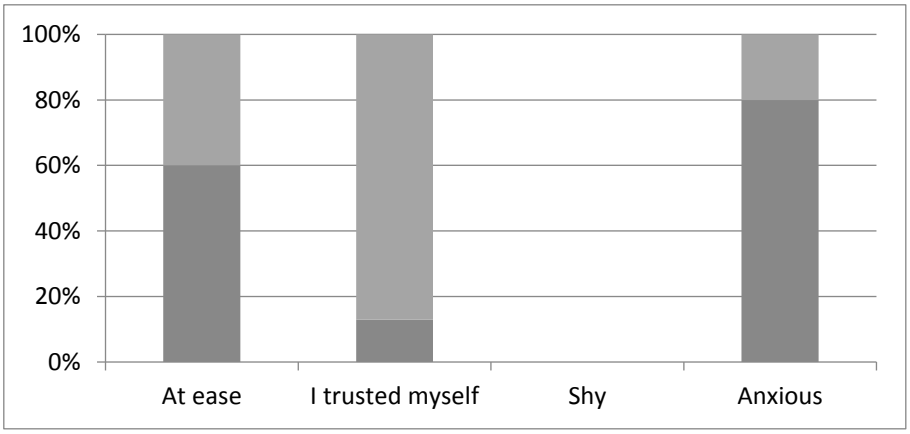


13. Did you consider voice management and pauses at the beginning and ends of topics during the rehearsal?

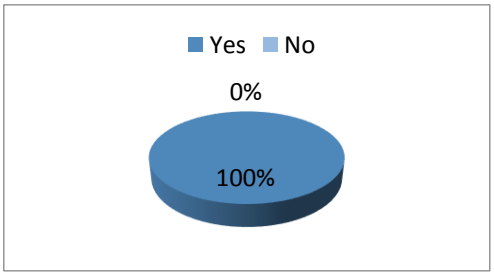


During the oral presentation:

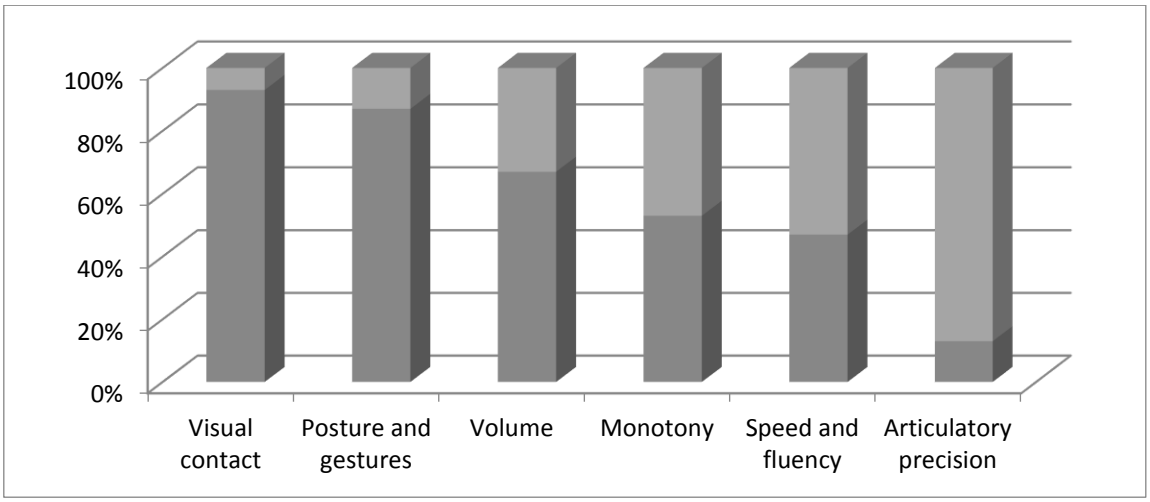
14. How did you feel?



15. Did you make visual contact with the audience?

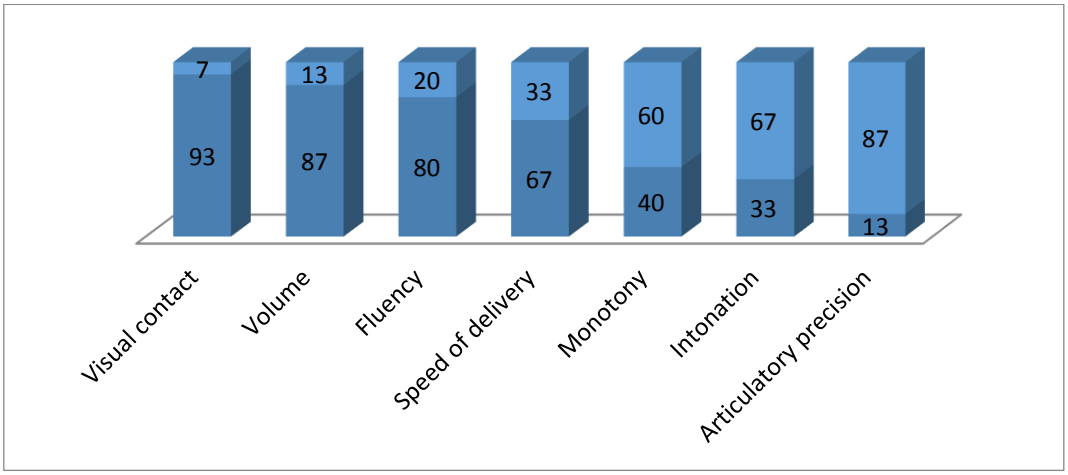


16. Were you able to control the way you deliver the presentation as regards visual contact, posture and gestures, volume, monotony, speed and fluency, articulatory precision?

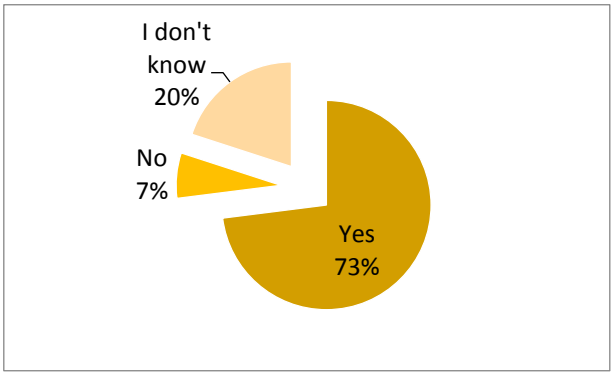


After the presentation:

17. Did you feel satisfied with the following aspects of your presentation?



18. Did you consider you were clear enough to indicate different parts of your presentation to your audience as regards voice management?



Appendix E

Transcription conventions

//// ////	paratone boundary
/// ///	pitch sequence boundary
// //	tone unit boundary
UPPERCASE	onset syllable
<u>UPPERCASE</u>	tonic syllable
(x.x sec)	pause length
[ ]	high key or termination
( )	low key or termination
'	prominence
↘	falling tone
↗	rising tone
→	level tone
↘↗	falling-rising tone

Appendix F

Auditory transcription

Presentation 1 (5:14 min)

Paratone 1AU

//// ˈO↘K// ˈLET me introˈDUCE our↗SELVES// (NAMES HAVE BEEN DELETED) and toˈDAY we are going to pre↗SENT// the ˈMAIN ↘↗ASpects// we con↗SIder// when ↘↗WE developed// ˈOUR ma↘↗TErial// for →UH// ˈESˈP ↘COURSes// (LONG PAUSE) //we ˈHAD the ˈFIELD ˈOF environˈMENTal ↘↗STUDies// as (ˈYOU can ↗SEE)/// in the (→FIRST)/// ///(↘SLIDE) (VERY LONG PAUSE) ////

Paratone 2AU

//// [→SO]// [↗LET'S]// ˈTHIS →IS// →UH// →UH// our (↘TOpic)/// environ(ˈMENTal ↘STUDies) (LONG PAUSE) ////

Paratone 3AU

//// so [ˈLET'S] ˈGIVE an ↘↗OVERview// of →WHAT// we are ˈGOing to↘↗DEAL with// to ↘↗DAY// we are ˈGOing to preˈSENT the [↘↗CONtext]// in which we had to ↗FOcus// →TO//

//→UH// de↗VElop// //our ma↗TErial// and ↗THEN// the ob[↗JECtives]// we↗FOcused// //→ON// to →AH// ↘WELL// the se'LECTion of the ↘TEXT// and the ac↗TIvities// //→THE// →THE// the↗CONcepts// that we con↗SIdered// when de'VEloping →OUR// //→AH// when se↗LECTing our text// (VERY LONG PAUSE) // and 'AH 'FInally the ac↗TIvities// we de'VEloped ac'CORDing to that ↗TEXT// and the 'STRAtegies we 'HAD to (↘FOcus on) (VERY LONG PAUSE) ////

Paratone 4AU

//// [→so] // ['let's] 'start with →uh// the (↘context) (VERY LONG PAUSE) ////

Paratone 5AU

//// the [↗CONtext]// we →HAD// to ↘FOcus// ↗ON// was a →SEcond// or 'THIRD ↗CLASS// of as (↗YOU know)/// of a ('READing compre'HENsion ↗COURSE)/// in 'WHICH the 'STUdents 'WERE in their 'FOURTH and 'FIFTH year of their ↘STUDies (VERY LONG PAUSE) // the 'STUdents had a 'BAsic 'KNOWledge of ↗ENglish// of ↗ENglish// ↗BUT// →UH// they were pro'FIcient 'L1 (↘READers)/// 'O↗K// →SO// //→AH// as re'GARDS the ob[↗JECTives]// the↗STRAtegy// we 'HAD to↗FOcus on// was pre↗DICTion// →AND// →THE// the ↗AIM of the activity //was to 'MAKE 'STUdents 'FOcus 'ON →AH// the ↗NOUN phrase// 'THAT is to →SAY// →TO //→UH// the a'NAlysis of →UH// the ↗NOUN phrase// 'AND the a'NAlysis of the recog'NIition of 'NEW

↗WORDS// through the a'NAlysis of 'WORD ↗STEMS// →AND// →AH// (↘AFfixes)// (VERY LONG PAUSE) /// o↗K (LONG PAUSE) // having said [↗THIS] //→WE// 'CAN 'MOVE →TO// 'THE se'LECTion of the (↘TEXT) (VERY LONG PAUSE) ////

Paratone 6AU

////[→ WE]// se'LECTed our TEXT// on the 'BAsis of the 'TAVI ap↘↗PROACH// ('TEXT as a 'VEhicle 'FOR infor↗MAtion)/// →SO// →UH// it is im'PORtant to con'SIder →THAT// //our ↗TEXT //→AH// the 'AIM of our 'TEXT was to ↗FOcus// 'ON the 'STUdents' ↘NEEDS// (LONG PAUSE)// →AND// →UM// as 'YOU can ↗SEE// the 'TEXT is 'CALLed 'Ocean pol↗LUtion //'WHAT'S the so↘LUtion// and we 'DIDn't 'CHOOSE 'THIS ↗TEXT// because we 'LIKE the ↘TITLE// ('LET'S ↘SAY)/// it 'WAS a 'DIfficult 'TASK to↘↗CHOOSE it// 'SINCE we 'HAD →TO //'FOcus on the lin'GUIStic 'Items we 'HAD to ex↗PLOIT// or to 'MAKE to the 'STUdents →AH //to pre↘↗SENT to the students// //→AND// →AH// we 'MADE a [↘↗RE]search// ah be→CAUSE ah //(SHORT PAUSE) //as (↘↗YOU know)/// (SHORT PAUSE)// it is 'DIfficult to 'FIND a 'TEXT ap'PROpriate for the 'LEvel of →THE// of →THE// ↗STUdents// →AND// the lin'GUIStic ↘ASpects// we 'HAD to pre(↘SENT) (VERY LONG PAUSE) ////

Paratone 7AU

//// [↘SO]// ['FIRST] we se'LECTed a'NOther ↗TEXT// which was ↘↗USEless// for our ↗PURpose //and ↗THEN// we se'LECTed 'THIS ↗TEXT// con'SIdering the 'FACT ↘THAT// we 'MADE a 'RE↗SEARCH//→ ON// 'DIfferent ↗SYllabuses// →FROM uh// uni↘↗VERsities// →WHO// whose 'AIM is to 'TEACH environ'MENTal ↘STUDies// ↘SO// //for e↗XAMple// →UH// we 'SEARCH on the 'NET for↘↗SYllabuseses// ↗SYllabuses// //→FROM// uni'VERsities from Ja↘↗PAN// 'NEW ↗ZEAland// and 'HERE in Argen↘↗TIna// //there is a 'Uni↘↗VERsity// →ER// it is the uni'VERsity of Co↗MAhue// in Neu(↘QUÉN)// //(VERY LONG PAUSE) ////

Paratone 8AU

//// [↘SO] //→UH// 'THESE↘↗SYllabuses// →WERE//→ UH// like a ↘GUIDE// for ↗US// //to →FOcus// →ON// the 'ASpects we 'NEEDed to ex(↘PLOIT) (LONG PAUSE) ////

Paratone 9AU

Speaker 1: //// [↘SO] // 'Ocean pol↗LUtion// 'WHAT'S the so↘↗LUtion// was the 'TEXT we se(↘LECTed)// it is an au'THENtic ↗TEXT// ↗TEXT// because it was 'TAKen from the [↘IN]ternet// o↗K// →SO// →UH// we 'GET the o'RIginal ↗TEXT// →BUT// we 'ADDed a [↘PIC]ture// ('THIS 'PICture 'DOESn't be↘LONG to the text)// we 'ADDed the

↗PICture// and the ˈLIne ↘NUMbers// to the ↗TEXT// →AH// ˈWHICH was the ˈPURpose of ↘IT// (VERY LONG PAUSE)// the ˈPURpose was →TO// →UH// ˈHELP the ↗LEARNers// to ˈDRAW impli↗CAtions from the text// in an ˈEASier ↗WAY// and to ˈHELP them ˈFIND the inforˈMAtion in ˈEACH ac↗TIvity// in an ˈEASier ˈWAY as ↘WELL// //o↗K// →SO umm// can [ˈANYone read the ins↗TRUCTions]// would [ˈYOU ↗BEtty]// //[↗PLEASE]//

Classmate: ok lea el título del texto observe cómo está dispuesto y la foto que lo acompaña determine de dónde pudo haber sido extra(ído)

Speaker 1: //o(↘K)// (ˈTHANK you very ↘MUCH)// (LONG PAUSE) ////

Paratone 10AU

//// [↘SO] //as ˈYOU can ˈSEE the ins↗TRUCTions//→ UH// ↘LEAD// the ↗LEARNers// //to ˈPAY atˈTENtion to the ↗TEXT// ↘AND to the picture// to ˈDRAW impli↗CAtions// //and ˈTO ˈMAKE ↘INferences// (LONG PAUSE)// as ˈYOU have [↗READ]// Mc↗NEIL// //ˈSTATES →THAT// →UM //it is imˈPORTant for the ↗READer// →TO// (LONG PAUSE) //ˈGET ˈSOMEthing ↘TO the text// //ˈTHAT is to ↗SAY// to ↗USE// their ˈPREvious ↗KNOWledge// their ˈPREvious sche↗MAta// to draw impliˈCAtions →AND// →TO// →UM// pro↘VIDE information// concerning (↘THAT) (LONG PAUSE) ////

Paratone 11AU

////[ˈO↗K]// is [ˈTHAT ↗CLEAR]// it o↘K// ↘NOW// (NAME) is ˈGOing to ˈMOVE to the →NEXT//// …

Presentation 14 (4:43 min)

Paratone 1AU

Classmate A: Ok and now (NAME) is going to continue with the ac(↘TIvities)

Classmate B: /// (↘YES) //// I ˈWILL re[ˈFER] to the acˈTIvities we pre↗PARED // //ˈFOllowing the ˈSTAges that ˈDUDley-ˈEvans and ˈSAINT ↗JONES// →UH// //pro↗POSED// ˈAFter ˈFINDing the ↗CArrier content// we ˈMOVED ↗ON// →UH// to ↗DRAFTing// the ˈACtual ac(↘TIvities)// (LONG PAUSE) // →UH// in ˈORder to ↗DO so// we ˈFOllowed the ↗TAvi approach// but we ˈALso ˈTOOK into ac↗COUNT// ˈOther ↗ASpects// such as ↗CArrier content// and ↗REAL content// and →UH// ↗SPEcially// ˈTWO imˈPORTant ↗PRINciples// →UH// that were proˈPOSED by ↗TOMlinson// that →ARE// →THAT// →UH// ↘WELL// maˈTErials →UH//→ SHOULD// →UH// ˈHELP ˈSTUdents ˈFEEL at ↗EASE// ˈAND →THAT// maˈTErials should re↗QUIRE// and fa CIlitate// ˈLEARNers’ ˈSELF-in(↘VEST)ment// (SHORT PAUSE) ////

Paratone 2AU

//// you are going to [ˈSEE] →THAT// →UH// throughˈOUT →THE// the ac↗TIvities// ˈBOTH↘PRINciples// were ˈTAken into ac(↘COUNT)// ↗YES// (LONG PAUSE)// //→WELL// →UH// the ˈFIRST ac↗TIvity// →UH// was aˈBOUT ˈREADing ↗STRAtegies// ˈHERE we ˈFOcused on →UH// ↗REAL content// ˈTHEN ˈREADing compre↗HENsion activities// ˈFOcusing ˈMAINly on ↗CArrier content// ↘THEN// ↘LANguage elements// ˈFOcusing on →UH// ↗REAL content// and ↘FInally// →THE// →UH// (↘CLOSing task)// (VERY LONG PAUSE)// ↘WELL// →UH //wi[ˈTHIN the ↘READing strategies]// →UH// we inˈCLUDed ˈTWO uh ˈSTRAtegies that ↘ARE //(LONG PAUSE)// pre↗DICTion// and iˈDEAS asˈSOci(↘Ation)// (LONG PAUSE) ////

Paratone 3AU

//// the [ˈREAson] ˈWHY we inˈCLUDed uh ˈSTRAtegies ˈMAINly at the be↗GINning// is because the ˈMAIN ˈGOAL for acaˈDEmic ↗READing instruction// is to preˈPARE →OR// //de↗VElop //→UH// straˈTEgic ↘LEARNers// →SO// →UH// ˈSTUdents are a↘WARE// //of the↘GOAL //→OF the// →THE// ˈTASK they are ˈCArrying (↘OUT)// (VERY LONG PAUSE)// →UH //in the ˈFIRST acˈTIvity there was pre↗DICTion// we proˈVIded the ˈTItle of the ↗TEXT //and we ˈASKED ˈSTUdents to preˈDICT the ↗CONtent// (LONG PAUSE)// and the ↗TOpic of the text// (VERY LONG PAUSE)// ↗TEXT //(LONG PAUSE)// and the ↗SEcond one// →WAS// i↗DEAS association// we were supˈPOSED to

pre↘SENT // the ↗STRAtegy// but we ˈDID →SO //→AH// //in↘DUCtively //(SHORT PAUSE)// that is that ˈFIRST we preˈSENTed this ↗Image// in ˈWHICH they ˈHAD →TO// //(LONG PAUSE)// uh ˈGAther in ↗GROUPS //and they ˈHAD→TO//com↗PLETE // //→THE //this ↗PICture// with the ˈKNOWledge they ↘HAD //→AH// in (╲╱SPAnish of course)// and they had to ╲╱JUStify// →AH// →WELL// the ↘CONtent// they pro(↘POSED)// (LONG PAUSE)// ˈAFter [↗THAT]// they ˈHAD →TO //→UH //ˈWORK to↗GEther// as a ↗GROUP //and ˈTRY to com↗PLETE //or ╲╱MOdify //→UH //the (↘PICture)// (ˈSO as to ˈADD more infor↘MAtion)// (VERY LONG PAUSE) ////

Paratone 4AU

//// what we [↘DID]// ↘AH// and ˈTHIS is ˈSOMEthing we inˈCLUDed wiˈTHIN the ˈREADing compreˈHENsion ac↗TIvities// (LONG PAUSE)// →IS// →AH// an ac ╲╱TIvity// //of aˈWAREness of the ad ╲╱VANtages// that →THIS// →UH// ˈTYPE of ╲╱STRAtegy// //→UH// ↘BROUGHT to them //→SO// →UH// they ˈHAD to re↘FLECT// on the ad ╲╱VANtages// ˈAFter ˈREADing →THE //ˈACtual (↘TEXT)// (VERY LONG PAUSE)// //→EM// →WELL// [↗THEN]// (LONG PAUSE) //→EH// wiˈTHIN the ˈREADing compre↗HENsion// we inˈCLUDed (LONG PAUSE) →EH //(LONG PAUSE)// →WELL// //→EH// we ˈWORKED with an ˈINteractive ˈPROcess of ↗READing// ↗YES// //inˈCLUDing →UH// ˈTOP-↗DOWN// and ˈBOttom-up ac↗TIvities//

//(VERY LONG PAUSE)// uh ↗FIRST// ˈSTUdents ˈHAD to ↗SKIM the text// uh to conˈFIRM their pre↗DICTions// in the ˈFIRST ac↗TIvity// and ↗THEN// ˈUH we ˈMADE →UH// a ˈQUEStion for ˈGEneral compre(↘HENsion)// (LONG PAUSE)// ↗YES// //(LONG PAUSE) //ˈTHEN we ˈMOVEd ˈON to ↗SCANning// wiˈTHIN ↗SCANning// we inˈCLUDed acˈTIvities ˈSUCH as →AH// ˈFOcusing ˈON inforˈMAtion that →IS// that was ↗PREsent// or ˈWASn't ˈPREsent wiˈTHIN the ↗TEXT// (LONG PAUSE)// →UH// they ˈHAD to ˈPUT the ↗LINE// uh where ˈTHIS inforˈMAtion →WAS// (LONG PAUSE)// in the ↗TEXT// and eh ↗THEN// they ˈHAD to uh ˈWRITE about uh ˈTRUE and ˈFALSE ↗STATEments// and √FInally// they ˈHAD to com↗PLETE// the ˈSTAges in a ↘GRAPH// //we proˈVIDed a ˈSImilar ˈGRAPH →TO// uh the →ONE// you've seen be↗FORE// and they had to com↗PLETE// →UH// ˈWITH the √STAges// they have ˈREAD in the in the (↘TEXT)// (VERY LONG PAUSE) ////

Paratone 5AU

//// and [√FInally]// wiˈTHIN ah ˈREADing compre↗HENsion// we inˈCLUDed uh ˈTEXtual ↗REference// we ˈDID ↗SO// because uh we ˈTHOUGHT that ˈTEXtual ↗REference// has to ˈDO with the ˈCOMpreˈHENsion of the ↗TEXT// →UH// we ˈDIDn't have to pre↗SENT// →EH //ˈTEXtual ↗REference// we ˈHAD to ↗PRACtice// so →UH// //↘WELL// we ˈTOOK ˈSOME →UH// ↗PARTS from the text// and →WE// →UH// preˈPARED an ac√TIvity// in which they ˈHAD to ˈPUT →EH// the (↘REferent)//

//(↗<u>YES</u>) ////…

Appendix G

Transcription of presentations after the acoustic analysis

Presentation 1 (5:14 min)

Paratone 1AC

//// ˈO↘K// ˈLET me introˈDUCE our↗SELVES// (NAMES HAVE BEEN DELETED) and toˈDAY we are going to pre↗SENT// the ˈMAIN ↘↗ASpects// we con↗SIder// when ↘↗WE developed// ˈOUR ma↘↗TErial// for →UH// ˈESˈP ↘COURSes// (LONG PAUSE) //we ˈHAD the ˈFIELD ˈOF environˈMENTal ↘↗STUDies// as (ˈYOU can ↗SEE)/// in the (→FIRST)/// ///(↘SLIDE) (VERY LONG PAUSE) ////

Paratone 2AC

//// [→SO]// [↗LET'S]// ˈTHIS →IS// →UH// →UH// our (↘TOpic)/// environ(ˈMENTal ↘STUDies) (0.7 sec) ////

Paratone 3AC

//// so [ˈLET'S] ˈGIVE an ˈOVER↗VIEW// of →WHAT// we are ˈGOing to↘↗DEAL with// //to↘↗DAY //we are ˈGOing to preˈSENT the [↘↗CONtext]// in which we had to ↗FOcus// //→TO// →UH// deˈVElop our ma↘↗TErial// and ↗THEN// the ob[↘↗JECtives]// we ˈFOcused

→ON// to →AH// well the se'LECTion of the ↘TEXT// and the ac↗TIvities// →THE// //→THE// the \/CONcepts// that we con↗SIdered //when de'VEloping →OUR// →AH// //when se\/LECTing our text// (1.4 sec) // and ah 'FInally the ac\/TIvities// we de'VEloped ac'CORDing to that ↗TEXT// and the 'STRAtegies we 'HAD to (↘FOcus on) (1.2 sec) ////

Paratone 4AC

//// [→SO] // ['let's] 'start with →UH// the (↘CONtext) (1.5 sec) /// the [\/CONtext]// we →HAD// to ↘FOcus// ↗ON// was a →SEcond// or 'THIRD ↗CLASS// of as (\/YOU know)/// of a ('READing compre'HENsion ↗COURSE)/// in 'WHICH the 'STUdents 'WERE in their 'FOURTH and 'FIFTH year of their ↘STUDies (1.4 sec) // the 'STUdents had a 'BAsic 'KNOWledge of \/ENglish// of ↗ENglish// ↗BUT// →UH// they were pro'FIcient 'L1 (↘READers)/// 'O↗K// →SO// →AH// as re'GARDS the ob[\/JECTives]// the\/STRAtegy// we 'HAD to\/FOcus on// was pre\/DICTion// →AND //→THE// the \AIM of the activity// was to 'MAKE 'STUdents 'FOcus 'ON →AH// the\/NOUN phrase //'THAT is to →SAY// →TO// →UH// the a'NAlysis of →UH// the ↗NOUN phrase// 'AND the a'NAlysis of the recog'NIition of 'NEW ↗WORDS// through the a'NAlysis of 'WORD ↗STEMS //→AND// →AH// (↘AFfixes)// (1.3 sec) /// o↗K (0.4 sec) // having said [↗THIS] //→WE// 'CAN 'MOVE →TO// 'THE se'LECTion of the (↘TEXT) (1.7 sec) ////

Paratone 5AC

////[→ WE]// se'LECTed our TEXT// on the 'BAsis of the 'TAVI ap↑PROACH// ('TEXT as a 'VEhicle 'FOR) infor↗MAtion// →SO// →UH// it is im'PORtant to con'SIder →THAT// //our ↗TEXT //→AH// the 'AIM of our 'TEXT was to ↗FOcus// 'ON the 'STUdents' ↘NEEDS// (0.9 sec) //→AND// →UM// as 'YOU can ↗SEE// the 'TEXT is 'CALLed 'Ocean pol↗LUtion //'WHAT'S the so↘LUtion// and we 'DIDn't 'CHOOSE 'THIS ↗TEXT// because we 'LIKE the ↘TITLE //('LET'S ↘SAY)/// it 'WAS a 'DIfficult 'TASK to ↑CHOOSE it// 'SINCE we 'HAD →TO //'FOcus on the lin'GUIStic 'Items we 'HAD to ex↗PLOIT// or to 'MAKE to the 'STUdents →AH //to pre↑SENT to the students// →AND// //→AH// we 'MADE a [↑RE]search// ah be→CAUSE ah //(0.3 sec) //as (↑YOU know)/// ///(0.4 sec)// it is 'DIfficult to 'FIND a 'TEXT ap'PROpriate for the 'LEvel of →THE// of →THE// ↗STUdents// →AND// the lin'GUIStic ↘ASpects// we 'HAD to pre(↘SENT) //// (1.2 sec) ////

Paratone 6AC

//// [↘SO]// ['FIRST] we se'LECTed a'NOther ↗TEXT// which was↑ USEless// for our ↗PURpose //and ↗THEN// we se'LECTed 'THIS ↗TEXT// con'SIdering the 'FACT ↘THAT// we 'MADE a 'RE↗SEARCH//→ ON// 'DIfferent ↗SYllabuses// →FROM uh// //uni↑VERsities// →WHO// whose 'AIM is to 'TEACH environ'MENTal ↘STUDies// //↘SO// for e↗XAMple// →UH// we 'SEARCH on the 'NET for ↑SYllabuseses//

↗SYllabuses// →FROM// uni'VERsities from Ja↘↗PAN// 'NEW ↗ZEAland// and 'HERE in Argen↘↗TIna// there is a 'Uni↘↗VERsity// →ER// it is the uni'VERsity of Co↗MAhue// in Neu(↘QUÉN)// (1.5sec) /// ↘SO //→UH// ['THESE↘↗SYllabuses]// →WERE//→ UH// like a ↘GUIDE// for ↗US// to →FOcus// →ON// the 'ASpects we 'NEEDed to ex(↘PLOIT)//// (0.7 sec) ////

Paratone 7AC

Speaker 1: //// [↘SO] // 'Ocean pol↗LUtion// 'WHAT'S the so↘↗LUtion// was the 'TEXT we se(↘LECTed)////

Paratone 8AC

//// it is an au['THENtic] ↗TEXT// ↗TEXT// because it was 'TAKen from the [↘IN]ternet// //o↗K //→SO// →UH// we 'GET the o'RIginal ↗TEXT// →BUT// we 'ADDed a [↘PIC]ture// ('THIS 'PICture 'DOESn't be↘LONG to the text)// we 'ADDed the ↗PICture// and the 'LINE ↘NUMbers// //to the ↗TEXT// →AH// 'WHICH was the 'PURpose of ↘IT// (1.3 sec)// the 'PURpose was →TO //→UH// 'HELP the ↘↗LEARNers// to 'DRAW impli↘↗CAtions from the text// in an 'EASier ↗WAY //and to 'HELP them 'FIND the infor'MAtion in 'EACH ac↘↗TIvity// in an 'EASier 'WAY as ↘WELL //o↗K// →SO// //→UMM// can ['ANYone read the ins↗TRUCTions]// would ['YOU ↗BEtty]// //[↗PLEASE]////

Classmate: ok lea el título del texto observe cómo está dispuesto y la foto que lo acompaña determine de dónde pudo haber sido extra(ído)

Speaker 1: //o(↘K)// ('THANK you very ↘MUCH)// (0.7 sec) ////

Paratone 9AC

//// [↘SO] //as 'YOU can 'SEE the ins╲↗TRUCTions//→ UH// ↘LEAD// the ↗LEARNers// //to 'PAY at'TENtion to the ↗TEXT// ↘AND //to the ↘PICture// to 'DRAW impli↗CAtions// and 'TO 'MAKE ↘INferences// (0.4 sec)// as 'YOU have [╲↗READ]// Mc ╲↗NEIL// 'STATES →THAT// →UM //it is im'PORTant for the ╲↗READer// →TO// (0.8 sec) //'GET 'SOMEthing ↘TO the text //'THAT is to ↗SAY// to 'USE their 'PREvious ↗KNOWledge// their 'PREvious sche↗MAta// to draw impli'CAtions →AND// →TO// //→UM// pro↘VIDE information// concerning (↘THAT) (1 sec) ////

Paratone 10AC

////['O↗K]// is ['THAT ↗CLEAR]// it o↘K// ↘NOW// (NAME) is 'GOing to 'MOVE to the →NEXT//// …

Presentation 14 (4:43 min)

Paratone 1AU

Classmate A: Ok and now (NAME) is going to continue with the ac(↘TIvities)

Classmate B: /// (↘YES) //// I will re['FER] to the ac'TIvities we pre↗PARED // 'FOllowing the 'STAges that 'DUDley-'Evans and 'SAINT ↗JONES// →UH// pro↗POSED// 'AFter 'FINDing the ↗CArrier content// we 'MOVED ↗ON// →UH// to ↗DRAFTing// the 'ACtual ac(↘TIvities)// (0.7 sec) // →UH// in 'ORder to ↗DO so// we 'FOllowed the ↗TAvi approach// but we 'ALso 'TOOK into ac↗COUNT// 'Other ↗ASpects// such as ↗CArrier content// and ↗REAL content// and →UH// ↗SPEcially// 'TWO im'PORTant ↗PRINciples// →UH// that were pro'POSED by ↗TOMlinson// that →ARE// →THAT// →UH well// ma'TErials →UH//→ SHOULD// →UH// 'HELP 'STUdents 'FEEL at ↗EASE// 'AND →THAT// ma'TErials should re↗QUIRE// and fa\/CIlitate// 'LEARNers' 'SELF-in(↘VEST)ment// (0.6 sec) ////

Paratone 2AC

//// you are going to ['SEE] →THAT// →UH// through'OUT →THE// the ac↗TIvities// //'BOTH\/PRINciples// were 'TAken into ac(↘COUNT)// ↗YES// (0.8 sec)// →WELL// //→UH// the 'FIRST ac↗TIvity// →UH// was a'BOUT 'READing ↗STRAtegies// 'HERE we 'FOcused on →UH// ↗REAL content// 'THEN 'READing compre↗HENsion activities//

//ˈFOcusing ˈMAINly on ↗CArrier content// ↘↗THEN// ↘↗LANguage elements// ˈFOcusing on →UH// ↗REAL content// and ↘↗FInally// →THE// →UH// (↘CLOSing task)// (2 sec)//well →UH// //wi[ˈTHIN the ↘↗READing strategies]// →UH// we inˈCLUDed ˈTWO uh ˈSTRAtegies that ↘ARE //(0.5 sec)// pre↗DICTion// and iˈDEAS asˈSOci(↘Ation)// (0.8 sec) ////

Paratone 3AC

//// the [ˈREAson] ˈWHY we inˈCLUDed uh ˈSTRAtegies ˈMAINly at the be↘↗GINning// is because the ˈMAIN ˈGOAL for acaˈDEmic ↗READing instruction// is to preˈPARE →OR// //de↗VElop //→UH// straˈTEgic ↘LEARNers// →SO// →UH// ˈSTUdents are a↘↗WARE// //of the ↘↗GOAL //→OF the// →THE// ˈTASK they are ˈCArrying (↘OUT)// (1.6 sec)// //→UH //in the ˈFIRST acˈTIvity there was pre↗DICTion// we proˈVIded the ˈTItle of the ↗TEXT //and we ˈASKED ˈSTUdents to preˈDICT the ↗CONtent// (0.6 sec)// and the ↗TOpic of the text// (1.1 sec)// ↗TEXT //(0.4 sec)// and the ↗SEcond one// →WAS// //i↗DEAS association// we were supˈPOSED to pre↘SENT // the ↗STRAtegy// but we ˈDID →SO //→AH //in↘DUCtively //(0.3 sec)// that is that ˈFIRST we preˈSENTed this ↗Image// in ˈWHICH they ˈHAD →TO //(0.8 sec)// uh ˈGAther in ↗GROUPS //and they ˈHAD→TO//com↗PLETE //→THE //this ↗PICture// with the ˈKNOWledge they ↘HAD//→AH// in (↘↗SPAnish of course)// and they had to ↘↗JUStify// →AH// →WELL// //the ↘CONtent// they pro(↘POSED)//(0.7 sec)// ˈAFter [↗THAT]// they ˈHAD →TO//

//→UH //ˈWORK to↗GEther// as a ↗GROUP //and ˈTRY to com↗PLETE //or↘↗MOdify//

//→UH //the (↘PICture)// (ˈSO as to ˈADD more infor↘MAtion)// (1.3 sec) ////

Paratone 4AC

//// what we [↘DID]// →AH// and ˈTHIS is ˈSOMEthing we inˈCLUDed wiˈTHIN the ˈREADing compreˈHENsion ac↗TIvities// (0.9 sec)// →IS// →AH// an ac↘↗TIvity// of aˈWAREness of the ad↘↗VANtages// that →THIS// →UH// ˈTYPE of↘↗STRAtegy// →UH// //↘BROUGHT to them//→SO //→UH// they ˈHAD to re↘FLECT// on the ad↘↗VANtages// //ˈAFter ˈREADing →THE //ˈACtual (↘TEXT)// (1.8 sec)// →EM// →WELL// ↗THEN// (0.5 sec)//→EH// wiˈTHIN the ˈREADing compre↗HENsion// we inˈCLUDed (0.9 sec) //→EH//(0.7 sec)// →WELL// →EH// we ˈWORKED with an ˈINteractive ˈPROcess of ↗READing// ↗YES// inˈCLUDing →UH// ˈTOP-↗DOWN// and ˈBOttom-up ac↗TIvities//(1 sec)// uh ↗FIRST// ˈSTUdents ˈHAD to ↗SKIM the text// uh to conˈFIRM their pre↗DICTions// in the ˈFIRST ac↗TIvity// and ↗THEN// ˈUH we ˈMADE →UH //a ˈQUEStion for ˈGEneral compre(↘HENsion)// (0.6 sec)// ↗YES// (1 sec)//ˈTHEN we ˈMOVEd ˈON to ↗SCANning// wiˈTHIN ↗SCANning// we inˈCLUDed acˈTIvities ˈSUCH as →AH //ˈFOcusing ˈON inforˈMAtion that →IS// that was ↗PREsent// or ˈWASn’t ˈPREsent wiˈTHIN the ↗TEXT// (0.8 sec)// →UH// they ˈHAD to ˈPUT the ↗LINE// uh where ˈTHIS inforˈMAtion →WAS// (0.8 sec)// in the ↗TEXT// and eh ↗THEN// they ˈHAD to uh ˈWRITE about uh ˈTRUE and ˈFALSE ↗STATEments// and ↘↗FInally// they ˈHAD to comˈPLETE the ˈSTAges in a ↘GRAPH// //we proˈVIDed a ˈSImilar ˈGRAPH to

uh the →ONE// you've seen be↗FORE// and they had to com↗PLETE// →UH// ˈWITH the↖↗STAges// they have ˈREAD in the in the (↘TEXT)// (1.2 sec) ////

Paratone 5AC

//// and [↖↗FInally]// wiˈTHIN ah ˈREADing compre↗HENsion// we inˈCLUDed uh ˈTEXtual ↗REference// we ˈDID ↗SO// because uh we ˈTHOUGHT that ˈTEXtual ↗REference// has to ˈDO with the ˈCOMpreˈHENsion of the ↗TEXT// →UH// we ˈDIDn't have to pre↗SENT// →EH //ˈTEXtual ↗REference// we ˈHAD to ↗PRACtice// so →UH// //↘WELL// we ˈTOOK ˈSOME →UH// ↗PARTS from the text// and →WE// →UH// preˈPARED an ac↖↗TIvity// in which they ˈHAD to ˈPUT →EH// the (↘REferent)//

//(↗YES) ////…

Appendix H

Missing values of LT at the end of paratones

Presentation 1 (P1)

In P1 there were six paratones whose low pitch value at the end could not be measured - 2, 3, 5, 6, 8 and 9AU.

1. **Presence of a long pause and high pitch at the beginning of the next paratone.**

Following, there is an extract which shows the boundaries between 5AU and 6AU. The word on which low pitch level could not be measured, but still identified as having been produced in LT is highlighted in bold.

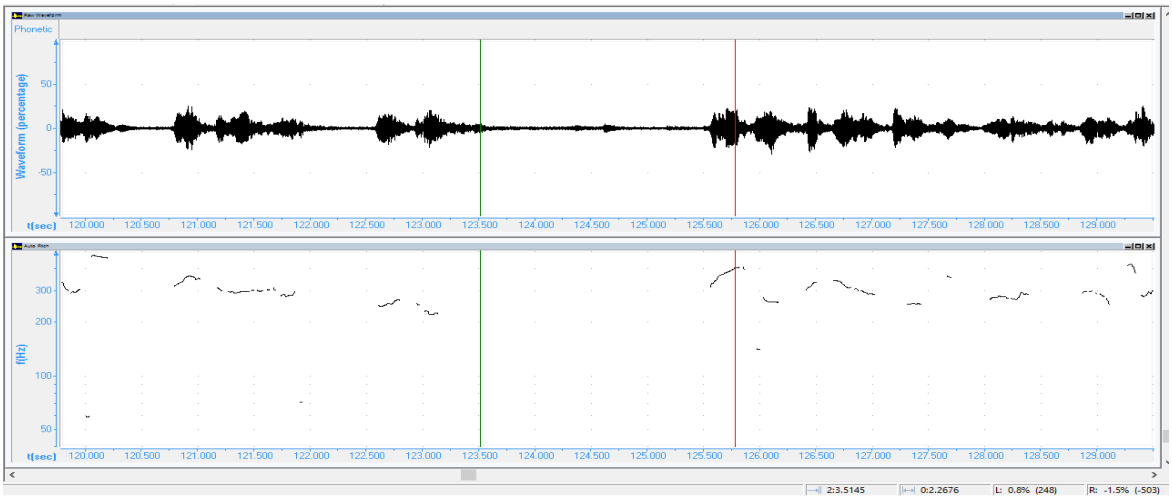
5AU

…having said this we can move to the selection of the **text**

6AU

we selected our text on the basis of the TAVI approach text as a vehicle for information…

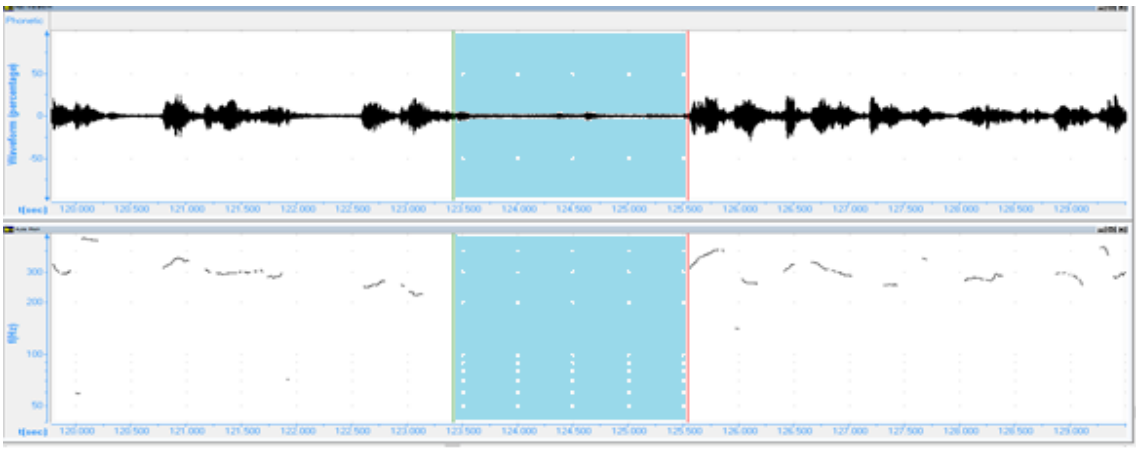
The figure below is a screenshot from the Speechanalyzer. The first vertical line in green indicates the end of 5AU, where LT on "text" could not be measured. The second vertical line in red shows the beginning of 6AU, where HK was realized on "we". The long pause was present between the two vertical lines.



Transcription:…text (LT) ////(Very long pause) ////[HK]we selected…

Fig. 1. End of Paratone 5AU and beginning of 6AU.

Figure 2 shows the use of the very long pause. The screenshot is the same portion of the talk illustrated in figure 5. However, the two vertical lines have been modified to indicate the presence of the pause which was highlighted in light blue.



Transcription:…text (LT) //// (Very long pause) ////[HK]we selected…

Fig. 2. End of Paratone 5AU and beginning of 6AU.

2. **Gradual descent in pitch and noticeable high pitch at the beginning of the next paratone.**

An instance in which LT could not be measured and there was no pause after the low pitch level choice was 8AU. Towards the final tone unit, the value of the F0 of the prominent syllables started to decrease. Low pitch level on the word "exploit" could not be measured but pitch height on the next tone unit was 333Hz, which was a clear use of HK to start a new paratone, 9AU. The example showing the boundaries between 8AU and 9AU is found below. The syllable where LT could not be measured is highlighted in bold.

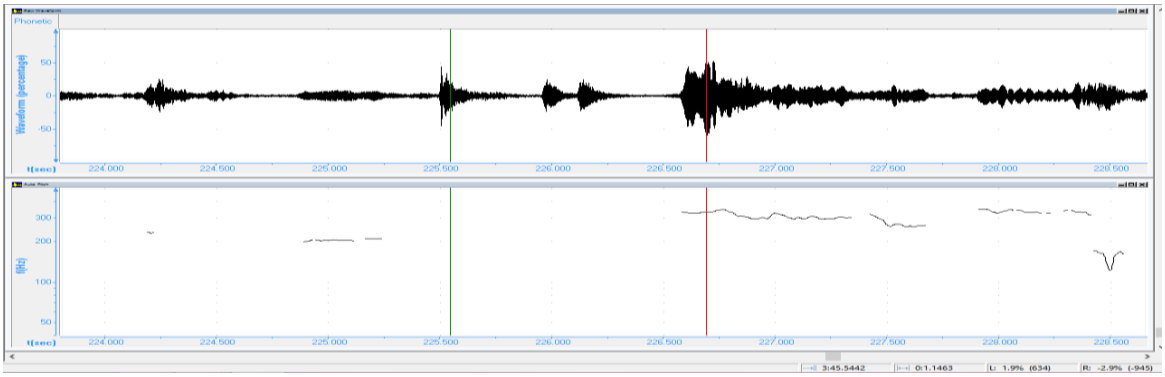
8AU

…were like a guide for us to focus on the aspects we needed to ex**ploit**

9AU

so ocean pollution what's the solution was the text we selected…

Figure 3 is a screenshot from the Speechanalyzer. The first vertical line in green indicates the LT choice on "exploit". The second vertical line in red indicates the use of HK on "so". In the screenshot, the second half of the screen shows a broken line. This broken line means that the software did not detect any voice sound. No sound voice was detected because the speaker used a very low volume and intensity could not be measured.



Transcription:…exploit (LT) //// ////[HK]so ocean pollution…

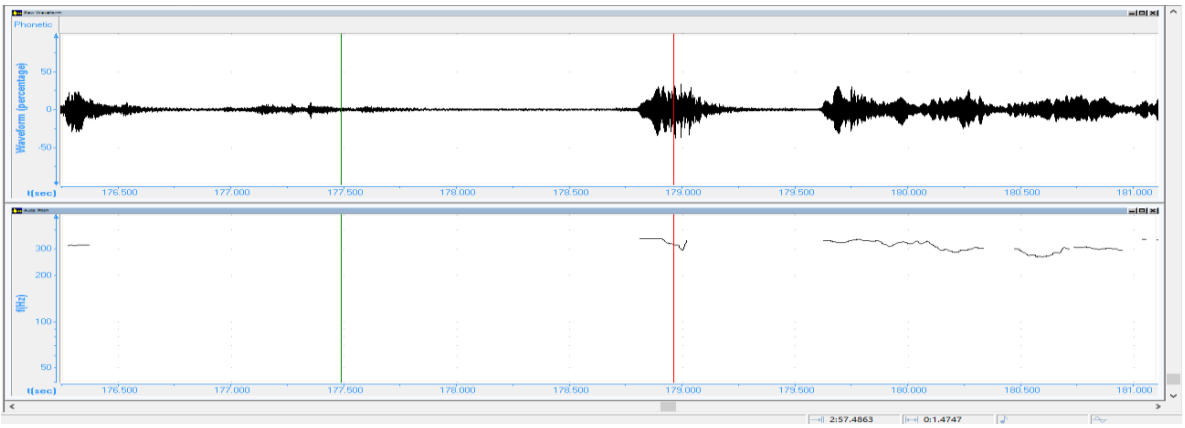
Fig. 3. End of Paratone 8AU and beginning of 9AU.

3. Laryngealization and pre-boundary lengthening.

An example in which there was laryngealization and pre-boundary lengthening was paratone 6AU. LT fell on the verb "present" and even though it could not be measured and laryngealization was not very noticeable, the duration of phonemes in the two last tone units was extended and the pace of delivery was slower compared to the timing of segments of the tone units at the beginning of the next paratone, 7AU. In the example below, bold letters have been used to show the word where LT could not be measured.

6AU
…and the linguistic aspects we had to pre**sent**
7AU
so first we selected another text which was useless for our purpose…

The screenshot below shows the point where the first vertical line, which indicates the use of low pitch level, contains no voice sound to measure. However, the speaker was pronouncing the word "present", but the F0 was not possible to obtain.



Transcription:…present (LT) //// ////[HK]so first…

Fig. 4. End of Paratone 6AU and beginning of 7AU.