

LISTENING COMPREHENSION IN ACADEMIC
LECTURES: A FOCUS ON THE ROLE OF DISCOURSE
MARKERS

by

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I declare that LISTENING COMPREHENSION IN ACADEMIC LECTURES: A FOCUS ON THE ROLE OF DISCOURSE MARKERS is my own work and that all the sources that I have used or quoted have been acknowledged by means of complete reference.

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ABSTRACT

Increasing involvement with students at the University of Namibia has indicated their overall difficulty with comprehending and recalling information from oral content lectures. It has also been observed that in general very little attention is given to the development of listening skills in L2 ESP and EAP courses. For this study, I conducted a quasi-experiment to determine whether the recognition and interpretation of discourse markers will enhance students' listening comprehension in academic lectures. Students were tested to determine their comprehension of content information in a video-taped lecture. Qualitative data were collected by means of a questionnaire. After an intervention period of eight weeks, where the experimental group received strategy training in the recognition and interpretation of discourse markers in spoken texts, both groups were again tested. Their results were statistically compared. I also looked at related findings of other researchers. Finally, aspects for possible future research will also be considered.

Key terms: authentic lectures; bottom-up and top-down processes; cohesion; Discourse markers; ESL students; lecture listening; listening; listening comprehension; listening instruction; note-taking;

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CHAPTER ONE

INTRODUCTION

1. Introduction

This chapter discusses the rationale for and the context of the research problem that underlies my study. It further states the aims and hypotheses and defines important concepts. It describes the research method and discusses the process of data analysis. Finally, it outlines the contents of the dissertation as a whole.

1.1. Research problem

The central issue in this study is whether tertiary level students can benefit academically from explicit instruction in the recognition and interpretation of discourse markers in spoken academic lectures. Research, as well as personal contact with tertiary level students, has shown that effective listening comprehension skills are vital for students to achieve academic success (Benson, 1994; Dunkel, 1991; Flowerdew, 1994; Kaplan-Dolgoy, 1998; Retief, 1995; Strauss, 2002; Vandergriff, 2004). While the other language skills often receive direct instructional attention, lecturers usually expect students “to develop their listening capabilities by osmosis and without help” (Mendelsohn, 1984, as cited in Oxford, 1993:205).

However, it appears that students’ listening skills are not developed to the extent that they can productively extract content information from spoken lectures (Khuwaleih, 1999; Mendelsohn, 2002; Olsen and Huckin, 1990; Retief, 1995; Strauss, 2002). Furthermore, there is a sense in many English Second Language (hereafter ESL) programmes for university students that the skill which “will take care of itself” is listening comprehension because of the great exposure that the students have to spoken language (Mendelsohn, 2002:65).

Nevertheless, it seems that exposure to academic listening situations is not enough. Conway's review of various studies (1982, as cited in Oxford, 1993:206) shows that deficient listening skills were a stronger factor in college failure than were poor reading skills and poor academic aptitude. An alarming fact is that after listening to a ten minute presentation, the average listener has understood, properly evaluated and retained only about 30.5% of what was said, with the retention rate dropping to 20% after forty-eight hours (Breecher, 1982, as cited in Oxford, 1993:206).

1.2. The context of the research problem

Although ESL students may have the minimum requirements in English to be accepted at tertiary institutions, they usually find the transition from school learning to independent learning (§ 5.4.1) at tertiary level difficult. Apart from other constraining issues, their ability to function in an English environment seems to be the most inhibiting factor to academic success (Allison and Tauroza, 1995; Carrier, 1999; Chaudron and Richards, 1986; Vandergriff, 2004).

In order to address some of the difficulties incoming ESL students at the University of Namibia (hereafter UNAM) experience, a Language Centre has been introduced to meet the needs of these students. Examples of courses introduced at the Centre are: a general communication course for diploma students who, because of their limited proficiency in English, do not qualify for degree courses; a semester course in English for those degree students with a low level of proficiency in English and a semester course in academic English (hereafter UCA). At the moment much time is devoted in the UCA course to developing the students' academic reading and writing skills and some attention is also given to presentation skills. Listening comprehension skills, however, are largely neglected as listening is still largely regarded as "a passive skill meriting little classroom attention" (Vandergriff, 2004:3). I have also found that a number of my colleagues still assume that "if a student can hear, s/he can also listen." In the current UCA study guide listening comprehension in academic lectures is only mentioned in passing.

My increasing involvement with ESL students' assignments has, however, indicated that much of their inability to comprehend spoken lectures and correctly recall content information may be because of the fact that they tend to concentrate on the lexico-grammatical level of the oral presentation. In other words, they only listen to the words and concentrate on understanding the grammar of the language used, rather than focusing on the message conveyed by the speaker. In so doing, they miss important semantic cues which could enable them to synthesise the content of the lecture. As students focus their attention at word level, much working memory capacity is occupied; thus preventing them from building words into higher-level meaning (Field, 2004:365). A possible reason for this may be that they are not made sufficiently aware of the listening process or of the fact that they can regard an academic lecture in the same way as a chapter in a textbook – a more or less complete unit of instruction but delivered orally by the lecturer. The students in the present study appeared to be typically *at risk* students (Kaplan-Dolgoy, 1997:4). These are students whose academic progress is endangered because they lack those skills which would ensure successful listening comprehension in academic lectures.

Another aspect of students' listening comprehension difficulties at UNAM is that they are exposed to a variety of lecturers, all with different English accents and pronunciation features. Most of the instruction students receive is presented in face-to-face contexts and the classes are heterogeneous in terms of social class, culture and ethnic background. Many of the lecturers are not English First Language (hereafter L1) speakers themselves and come from other African countries or countries such as China and Russia and are usually English Foreign Language (hereafter FL) speakers. It is clear that heavy demands are made on students' ability to comprehend accented English. I assume that these difficulties also contribute to the fact that students seem to concentrate mainly on the lexico-grammatical features of the spoken text, instead of listening for meaning.

When students enter university, they are expected to be able to take responsibility for their own learning. This implies not only studying existing material, but also creating their own sources of information such as reliable notes taken during lectures. Much of the subject information that students receive at university is provided in the form of lectures. It is,

therefore, essential that they be able to relate to the spoken lecture as a source of cognitive input. In order to derive maximum intake from the lecture, they should be able to perceive not only the overall structure of the lecture but also recognise when direction is changed and new aspects are introduced. The structure of the lecture as well as transition stages in the lecture are often indicated through the use of discourse markers such as “*Let us look at the following ...*” These devices work at a discourse level and are not dependent on the smaller units of talk (sentences) of which discourse is composed (Schiffrin, 1988:61).

Louwerse and Mitchell (2003:203) regard discourse markers as “conversational glue that participants effectively use to hold the dialogue together at different communicative levels.” According to Carrier (1999:68), discourse markers are also closely related to syntactic and morphological modifications which are used to make aural input more comprehensible. Students need to be aware when the lecturer returns to a point already made or when important points are highlighted. If students, therefore, are aware of the role of discourse markers (§ 2.3.2) which structure the lecture, they should be able to extract factual information from the lecture more effectively.

It appears, however, that many ESL students find it difficult to become independent learners who take responsibility for their own learning. This inability to function satisfactorily is not an isolated phenomenon. Sarinjeive (1997:71) reports that at Vista University in Sebokeng the quantity as well as the quality of English that the ESL students bring to campus is inadequate for tertiary studies. They come to university with “an uneven mix of abilities” (Sarinjeive, 1997: 72). The students enrolled at UNAM are assumed to have the necessary cognitive abilities to attend an institution of higher learning. They are, however, hampered by the fact that the working English they bring to university such as the ability to effectively derive meaning from listening to oral texts appears to be inadequate for successful tertiary studies; therefore, it can be deduced that providing them with training in skills areas such as listening comprehension could assist them in developing the requisite skills to achieve academic success.

With this background in mind, my study concentrates on developing students' listening skills for increased comprehension of authentic lectures. The characteristics of such lectures are outlined in the following section.

1.2.1. Characteristics of authentic lectures

According to Chaudron and Richards (1986:114), the function of a lecture is to instruct by conveying information in such a way that a coherent body of information is presented, readily understood and remembered. However, as a planned and primarily informational type of language, lectures share certain properties with various types of written texts (Flowerdew and Millar, 1997:33). For example, the phonological boundaries are marked visually in the written text (Flowerdew, 1994:10) by means of punctuation marks. In the spoken text, on the other hand, the listener is guided by intonation patterns to recognise such boundaries.

Because academic lectures are usually not memorised and delivered but written and read, they contain what Tannen (1982, as cited in Hansen and Jensen, 1994:245) regards as "oral features" such as pauses, hesitations, misspeaks and disfluencies. These features reflect the fast pace and temporary nature of spoken discourse. In addition to this, lectures exhibit a greater degree of syntactic complexity and contain more literary vocabulary than is normally found in informal speech situations, due to the planned nature and formality of the speaking occasion (Hansen and Jensen, 1994:245).

1.2.2. Listening comprehension in authentic lectures

As far as listening proficiency in authentic lectures is concerned, it should be kept in mind that listening comprehension consists of more than simply understanding words; it implies an understanding of what speakers mean. According to Morley (1999, as cited in Vandergriff, 2004:3), it is critical to second language (hereafter L2) acquisition and "deserving of systematic development as a skill in its own right." Listening is further an active process involving hearing, understanding, integrating and responding. Content

information is not always clearly stated and the listener often has to determine what the speaker actually means through inference, since meaning is not only contained in the passage but also constructed by the listener (Buck, 1999:4).

In an academic lecture students are expected to assimilate the information they receive orally. They are further expected to process it into intake to be recalled at a later stage for examination purposes. In my observation of UNAM students during lectures I was struck by their passive attention to what the lecturer was saying. Very few of the students took any form of written notes during the lecture. Furthermore, their attention seemed to be easily distracted by the slightest disturbance. Test marks and casual interviews with students who came to ask for assistance after a lecture further indicated that many students were not successful in converting lecture input into intake.

In order to comprehend spoken language, especially that which is academic in content, the listener has a crucial part to play in the process. The listener not only activates various types of knowledge but also applies what is already known to what is heard in order to understand what the speaker means. Effective listeners engage in the process of comprehension: they apply the relevant, internal information available to them in order to construct their own interpretation of what has been said. They do not “passively receive and record” (Anderson and Lynch, 1991:6). Active listeners will, furthermore, pay attention to linguistic devices such as discourse markers that signal structural changes in the discourse pattern and indicate when a new direction is taken or when the speaker returns to a previous topic.

Discourse markers function as cohesive devices in relationships of addition, opposition, causality as well as organising, ordering and reformulating operations that control the communication or introduce and explain precision (Poblete, 1999:173). In order to process successfully and to achieve a coherent interpretation of speech, especially in a monologue, the listener needs to grasp the “network of concepts and semantic relations underlying the surface text” (Beaugrande and Dressler, 1981, as cited in Thompson, 1994:58).

It is imperative that students are encouraged to develop skills which will equip them to assimilate oral information more effectively and to process it into intake, if the success rate of students at tertiary institutions is to be improved. Encouraging students to become aware of the role discourse markers play in denoting the structural turns in spoken lectures may improve the quality of their listening comprehension in the academic situation.

1.3. Discourse markers

Many students are not aware of the existence of discourse markers or the role they play in simplifying the interpretation of a monologue. Discourse markers may be regarded as “organizational signal[s] that appear [...] at the beginning and/or end of a unit of talk and [are] used by the speaker to indicate how what is being said is related to what has already been said” (Hansen, 1994:143).

They are further regarded as:

- “[d]evices that explicitly signal micro- and macro-structures” (Dunkel and Davis, 1994:56);
- signs of “the information structure of discourse by emphasizing directions and relations within discourse” (Chaudron and Richards, 1986:115);
- “indicators of topic continuation” (Chaudron and Richards, 1986:115);
- signs of “the point at which there is a change from one topic to another in two contiguous pieces of discourse” (Hansen, 1994:133).

I decided to undertake this study in order to establish the effect that an awareness of the role of discourse markers might have on the listening comprehension of students in academic lectures. I will now discuss the aims and objectives of the study.

1.4. Research aims and objectives

My study was inspired by work done by researchers such as Chaudron and Richards (1986), Flowerdew and Tauroza (1995) and Young (1994) who studied the effect discourse markers, used in lectures, had on the listening comprehension of students. My main aim was to establish whether making students aware of discourse markers and their function would improve their listening skills in academic lectures.

The second aim of my study was to design and implement an intervention programme. I intended to raise the participants' awareness of the role of discourse markers in listening comprehension in academic lectures. In order to form a holistic picture of the participants in the study, I further aimed to determine the previous contact they had had with English as a language of instruction and communication.

These aims formed the basis for the research questions and hypotheses that are presented below.

1.5. Research questions and hypotheses

The central question posed was whether students would improve their listening comprehension if they were made aware of the role of discourse markers in authentic lectures.

Subsequent questions were:

- would such an awareness-raising benefit students when answering gap-filling questions, multiple-choice questions and inference questions posed on the content information in a spoken lecture?
- would there be a significant difference in the pre- and post-test scores suggesting that the intervention programme benefitted the students' listening comprehension in academic lectures?

- would there be a significant difference in the pre-and post-test results of the experimental and control group; suggesting that the improvement could be ascribed to the intervention programme and not solely to natural maturation?
- would students' listening comprehension be enhanced if they were introduced to the structure of an academic lecture and made aware that the lecture contained discourse markers and of what their roles were?.

A general hypothesis was formulated:

H1 – *An intervention programme on the role of discourse markers will significantly improve students' listening comprehension.*

This was tested as three specific hypotheses.

H2 – *An intervention programme on the role of discourse markers will significantly improve students' scores in gap-filling questions.*

H3 – *An intervention programme on the role of discourse markers will significantly improve students' scores on multiple-choice questions.*

H4 – *An intervention programme on the role of discourse markers will significantly improve students' scores on inference questions.*

In order to test these hypotheses I employed the following research method.

1.6. Research method

I conducted a qualitative study to determine whether the students would gain a practical skill which they could employ to enhance their listening comprehension in academic lectures. I compared the test performances of two groups of students. One group had been introduced to a particular construct in an intervention programme and the other group had not.

I designed an intervention programme in which I raised students' awareness of the role of discourse markers in the structuring of academic lectures. To test the efficacy of such a

programme I used an experimental and control group of university students and a pre-test – intervention – post-test design to test their listening comprehension in an authentic lecture. In the pre-test I tested the existing listening comprehension of both the experimental and control groups before any awareness-raising. After an eight-week intervention programme in which the experimental group was made aware of discourse markers and their role in structuring academic lectures, I tested both groups' performance in a post-test. The control group of students was not exposed to the intervention programme and they only attended the regular lectures in the UCA course.

A discussion of the research procedure and the instruments used now follows.

1.7. Research procedure and instruments

A questionnaire was piloted on a separate group of UCA students before I commenced with the main study. A copy of the questionnaire is included as Appendix A. The rationale for designing the questionnaire was to collect important background information from the participants to assess their previous contact with English as a language of communication and instruction. I also made use of descriptive analysis to measure some of the questionnaire items. The biographical details collected added a socio-linguistic dimension to the study, as they presented information on the level of proficiency and quality of English the students had acquired before entering the university. This information enabled me to form a holistic picture of the working English (§ 1.2) participants in the study had brought to university as I wanted to determine whether their listening skills were sophisticated enough to derive content information from academic lectures.

As source material for this study a video-taped lecture was initially shown to all the participants, including those in the control group. A pre-test – intervention – post-test design was used and the data thus collected were analysed and statistically processed. A copy of the lecture and the test is included as Appendix B. F-tests and t-tests were used to compare the results of the experimental and control groups in the study (§ 3.5).

The experimental group participated in an eight-week programme consisting of eight lectures explaining the role of semantic discourse markers. The main emphasis was on macro-markers, namely those which constitute reference and conjunction. Examples are “*Let’s now go back to ...*” and “*When we compare the following with ...*.” The control group received no specific instruction in discourse markers. A copy of one of the intervention sessions is included as Appendix C.

After the intervention period both groups of students watched the same video-taped lecture that had been shown at the beginning of the study and wrote the accompanying test. These test data were statistically analysed and compared to the first set of data. The period of two calendar months between the first and second testing minimised the possibility of recall of the previous test.

In order to make inferences about the efficacy of the programme the data collected were analysed as follows.

1.8. The process of data analysis

After the completion of the intervention programme and the taking of the post-test, the quantifiable data from the pre- and post-tests as well as the questionnaire were statistically analysed. The SPSS software program version 0.9 was employed to quantify the information by means of t-tests and F-tests. I also made use of descriptive analysis for the questionnaire items. This enabled me to derive ethnographic information which was interpreted qualitatively.

1.9. Outline of chapters

1.9.1. Chapter One: Introduction

This chapter discusses the rationale for and the context of the research problem, the aims and hypotheses as well as important concepts. It describes the research method and the process of data analysis.

1.9.2. Chapter Two: Literature Review

In this chapter I review relevant research and discuss what it reveals about the role of semantic discourse markers in the listening process. I focus on constructs, theories and models of listening comprehension.

1.9.3. Chapter Three: Methodology

This chapter deals in detail with the research methods and procedures followed in the empirical study. It describes the subjects, data collection and instruments used.

1.9.4. Chapter Four: Findings

This chapter presents the results of the study and provides interpretations of these results.

1.9.5. Chapter Five: Conclusion

This chapter consists of an overview of the study and its contribution to SLA research. The focus of this chapter is on the findings, their implications and the limitations of the study. Finally it presents recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2. Introduction

This chapter presents a review of research into listening comprehension, particularly the role of discourse markers in improving students' listening comprehension. It includes a discussion of constructs, theories and models of listening comprehension and considers semantic cohesion and coherence in the academic lecture.

2.1. The nature of academic lecture listening

In a lecture situation listening seems to be an isolated skill, not interacting with other language skills (Oxford, 1993:205). Students frequently experience difficulties in listening and comprehending in their own languages. It can, therefore, be expected that they will experience even more difficulty in listening in a second language. Furthermore, despite the recognition that academic listening skills are essential for academic success, relatively little research has been done into ESL listening (Flowerdew, 1994:7).

According to Flowerdew and Millar (1997:32), it is generally accepted that while different types of spoken language have a great deal in common, they may vary according to contextual parameters. These parameters can be the degree to which they are planned or unplanned and whether they are informational/involved or explicit/situationally dependent. On the one hand, lectures that are informational tend to be conducted monologically and convey factual information explicitly. Very little opportunity in the course of the lecture is provided for students to become actively involved and to negotiate meaning. Conversely, lectures that are involved and situationally dependent comprise communicative interaction between the presenter and the listeners and students can employ their own schemata to a

large extent. Such lectures are easier to follow than lectures that convey new information explicitly.

The lecture, as a spoken genre, shares distinctive features with other types of spoken language. However, lectures share properties with written texts as well, as they are planned and employ primarily an informational type of language. The lecture genre itself brings its own particular and potential areas of difficulty for students, as it requires of them to be able to concentrate on and understand long stretches of talk without the opportunity of engaging in the facilitating functions of interactive discourse such as asking for repetitions and negotiating of meaning (Benson, 1994:189).

Models of listening comprehension (§ 2.2.2) indicate that when listeners take in raw speech, words in verbatim form are not retained in memory but are replaced by a representation of the finished interpretation of the sentence (Richards, 1983; Vidal, 2003). Jarvella (1971, as cited in Vidal, 2003:57) states that if the abstract representation of the speech that is heard is to be retained in long-term memory, further recording and rehearsal processes are needed. As students do not store the exact wording when listening for meaning, the question arises whether the oral academic lecture can be an important source of lexical input. Although this remains a controversial and debatable issue, in the real life situation academic lectures remain the most common vehicle for conveying academic content information to students.

Therefore, it can justifiably be assumed that if academic success is to be achieved, ESL students at university will need all available strategies to assist them in assimilating as effectively as possible content information presented in oral lectures. Research has shown that the introduction of appropriate discourse markers as well as training students to recognise and interpret them may assist the lecturer in ensuring that his/her intended meaning is conveyed. This is deemed necessary as there is usually not much room provided for the negotiation of meaning in the lecture situation (Chaudron and Richards, 1986; Flowerdew and Tauroza 1995; Goh, 2002; Louwse and Mitchell, 2003; Vandergriff, 2003; Young, 1994).

In lecture discourse listeners require knowledge of the specialist subject matter and must distinguish between what is relevant and what is less important to the main purpose. The emphasis in lectures is generally assumed to be on the content conveyed. Particular skills that are associated with lecture listening are:

- the ability to concentrate on and understand long stretches of talk without the opportunity of engaging in the facilitating functions of interactive discourse, for example asking for repetition;
- negotiating meaning and using repair strategies;
- note-taking;
- integrating incoming messages with information derived from other media such as handouts, textbooks, the blackboard and the overhead projector.

The fact that students are often expected to combine spoken input with input from other sources such as handouts may also complicate the listening process, since their attention becomes divided between listening to the lecturer and consulting the handout (Jordan, 1997:179).

When asked to indicate the relative importance of listening, reading, speaking and writing skills for international students' success in their academic departments, US and Canadian professors gave the receptive skills of listening and reading the highest ratings (Dunkel, 1991:437). Boyle (1984, as cited in Dunkel, 1991:442) identified those factors most salient to English First Language (hereafter EFL) listening comprehension of academic lectures as:

- speaker factors such as the language ability of the speaker; quality of the speech signal, prestige and personality of the speaker;
- factors in spoken discourse such as complexity of the lexis and syntax; level of cohesion and organisation evident in the text;
- listener factors such as intelligence, memory, gender, motivation, background knowledge.

Khuwaleih (1999) reports that preliminary informal discussions with ESL students showed that their lack of academic success resulted more from a lack of understanding of

academic lectures than from an inability to comprehend the subject content conveyed in them. She conducted a study with ESL students to examine the functions and contexts of chunks, phrases and body language in the discourse of academic language at the Jordan University of Science and Technology. Chunks are “conventionalized structures that occur more frequently and have more idiomatically determined meaning than language that is put together each time” (Nattinger, 1986, as cited in Khuwaleih, 1999:251). Her study consisted of two tape-recorded lectures of fifty minutes each on constructional materials in engineering. These lectures were transcribed and studied to compare and contrast the English used by lecturers in terms of the students’ comprehension of the lectures, the chunks and phrases as well as other linguistic aspects used to clarify the message. Khuwaleih found that chunks, phrases and body language do play a crucial role in students’ comprehension of academic lectures (1999:259).

The student population at UNAM consists mainly of ESL students and “giving a lecture may not always entail the good understanding of learners” (Khuwaleih, 1999:249). It thus becomes crucial that lecturers at this university consciously employ discourse markers or “chunks” in their lecture texts. Moreover, students should be made aware of the role such markers play in structuring text, if comprehensibility of lectures is to be enhanced.

Chiang and Dunkel (1992:346) investigated the listening comprehension of 388 high- and low- intermediate listening proficiency Chinese EFL students. They found that attempts to comprehend and retain English lecture information may be thwarted by a number of cognitive and linguistic factors as well as by academic and cultural issues such as the following:

- inability to anticipate discourse markers and logical relationships in the English lecture. This assumption has been confirmed by research on the effect of discourse markers on the listening comprehension of university students by Chaudron and Richards in 1986 (§ 2.3.2).
- inability to detect the main points of the lecture or to “grasp the usual goals of particular genres of discourse situations of which the discourse is a part” (Chiang and Dunkel, 1992:346). This conclusion was further strengthened in

an exploratory study on point-driven understanding in the comprehension of a lecture in engineering (Olsen and Huckin, 1990). The researchers asked fourteen non-native English speakers to watch an authentic sixteen-minute video-taped lecture on a topic in mechanical engineering. The students had to provide immediate-recall summaries of the lecture. The researchers found that although the lecture was clearly structured around several main points, most of the students failed to grasp the important aspects conveyed in the lecture.

Research findings on academic listening confirm my own observation that the listening competence of non-native English students, not only at UNAM but globally, is often not adequate for successful academic performance. A study of previous research findings could provide a basis on which support programmes in academic listening comprehension could be developed. I will now present a review of previous research into listening comprehension.

2.2. Review of research into listening as a construct

In contrast to hearing, listening demands that one selects appropriate meanings and organises ideas according to their relationships. Listening further calls for evaluation, acceptance or rejection, internalisation and sometimes also appreciation of the ideas expressed (Lerner, 1997:367). Listening is “complex, dynamic and fragile” (Celce-Murcia, 1991:460) and all languages present the listener with difficulties in the form of “acoustic blurring of lexical boundaries in connected speech” (Lynch, 1998:3). According to Kaplan-Dolgoy (1997:72), listening has a linear, sequential nature which implies that one cannot go back over the discourse as one can in written texts. The medium is, therefore, more “ephemeral.” It is clear that listening is a more complex process than hearing words or the simple perception of sounds. Even though perception forms the foundation of listening, listening also includes the comprehension of meaning-bearing words, phrases, clauses, sentences and connected discourse.

Listening comprehension has until recently been regarded as an inevitable by-product of language learning. Now scholars are beginning to accept that listening is a receptive skill which involves a complicated process depending not only on cognitive strategies but also on a myriad other factors (Carrier, 1999; Vandergriff, 2002; Vandergriff, 2004). Listening is a fundamental language skill that typically develops faster than speaking and often influences the development of the person's reading and writing abilities (Scarella and Oxford, 1992, as cited in Oxford, 1993:205). It can no longer be relegated to the status of an enabling skill that simply helps students to speak (Nord, 1981, in Oxford, 1993:205).

As early as 1689 John Locke (Dunkel, 1991:431) said the following:

To make Words serviceable to the end of Communication, it is necessary ... that they excite in the Hearer, exactly the same *Idea*, they stand for in the mind of the speaker. Without this, Men fill one another's Heads with noise and sounds; but convey not thereby their Thoughts, and lay not before one another their Ideas, which is the end of Discourse and Language.

This clearly states that the endeavour of today's scholars to define the processes involved in listening comprehension in the native language as well as in the second language is something that has engaged philosophers for centuries.

2.2.1. Early attempts to define listening as a construct

Mendelsohn (1998:81), with reference to studies by Dunkel (1991) and Joiner (1997, as cited in Mendelsohn, 1998:81), rather assertively assumes that there is "no accepted definition of listening" and that there has not been "adequate research as yet on many aspects of the listening process" (Rubin, 1994:199). However, a large number of scholars have attempted to describe listening as a construct. It appears then to be somewhat presumptuous to maintain that none of them have managed to define some workable constructs of listening comprehension which would allow language practitioners to develop models and theories of listening comprehension in the native as well as in L2 or FL.

Descriptions and definitions compiled by scholars in their research serve to illustrate the different facets of listening as a construct. Murphy (1991:50), for instance, has described listening as a “pervasive experience that operates in contours ranging from simple conversations to academic debates.” In the same vein, Oxford (1993:205) says that listening is perhaps “the most fundamental learning skill.” Wipf (1984, as cited in Oxford, 1993:206) defines it as a “complex problem-solving skill, which is more than just the perception of sounds. It includes comprehension of meaning-bearing words, phrases, clauses, sentences and connected discourse.” According to Rubin (1994:210), listening is “an active process in which listeners select and interpret information which comes from auditory and visual cues in order to express what is going on and what the speaker is trying to say.”

Richards (1983:220) identifies three related levels of discourse processing in listening: propositional identification, interpretation of illocutionary force and activation of real world knowledge. The ability to recognise discourse markers and determine their role in a specific stretch of discourse could be categorised at the level of propositional identification. In my study, I set out to test the students’ levels of propositional identification in a spoken academic lecture before immersing them in an awareness-raising programme concerning the identification and interpretation of discourse markers in the spoken lecture.

Traditionally, listening has been regarded together with reading as a passive language skill. However, Anderson and Lynch (1991:6) regard understanding not as “something that happens because of what a speaker says; the listener has a crucial part to play in the process.” The effective listener engages in the process of comprehension by applying the relevant internal information available to construct an own interpretation of what has been said. The listener does not passively receive and record but needs to activate various types of knowledge. This can be done by applying what is known to what is heard in order to understand what the speaker means.

For successful listening to take place Van Niekerk (1996:59) believes that the following sub-skills are vital:

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- the ability to determine the subject of a conversation from the speaker's introductory words;
- the ability to make predictions about the development of the conversation, in order to react to it;
- the ability to recognise and indicate when s/he does not understand enough of the input to make predictions or to recall information.

As far as listening to academic lectures is concerned, it would be possible to define listening comprehension as a problem-solving skill in which the student plays an active and crucial role. The listener determines not only the subject of the spoken text from the introductory words but also makes correct predictions of the possible development of the spoken text. Academic listening is more than the correct matching of sounds and words. It also involves deriving meaning from meaning-bearing words such as conjunctions and discourse markers. The students further have to be able to select and interpret input from aural and visual cues. Furthermore, they should be able to recognise and indicate when they fail to understand enough of the input to make predictions or to recall the content information conveyed in the lecture.

A number of scholars have developed models and theories which describe the listening process. Those models and theories relative to my study are discussed in the following section.

2.2.2. Listening comprehension: Models and theories

Lang (1985, as cited in Dunkel, 1991:435) points out that current theories of Second Language Acquisition (hereafter SLA) emphasise the key role that listening plays. Dunkel adds that model building

forms the foundation of theory development and should be vigorously pursued [...] if we are to advance the knowledge base about the process of listening comprehension in general and L2 listening comprehension in particular.

(Dunkel, 1991:446)

Some of the models of listening comprehension are:

- The Intake Model (Chaudron and Richards, 1986). According to this model, the human brain not only takes in information but also stores, locates and organises it. It further facilitates operations and decisions and generates responses to the information (Lerner, 1997). Even if input is understood by the listener, it may not be processed by his/her internal mechanisms. Comprehensible input is not a sufficient condition for learning, since learning can only take place when input becomes intake (Ellis, 1985:159). It can be assumed that the effective use of discourse markers which help in structuring the academic lecture could enable students to follow the macro-organisation of the lecture. It may assist them in receiving content information as comprehensible input. This input can be processed as intake available for recall in examination situations.
- The Monitor Model or Input Hypothesis (Krashen, 1985). This model states that an important condition for language acquisition to occur is for the listener/reader to understand (via hearing/reading) input language that contains structures which are *just a bit beyond* his or her current level of competence. As the content information conveyed by the spoken lecture relies on the students' schemata and is also supposed to instruct them, it is assumed that they would be assisted in their comprehension processes if discourse markers indicated the internal coherence of the lecture.

Tyler and Warren (1987, as cited in Tsui and Fullilove, 1998:435) have also found that comprehension takes place when a listener can successfully decode incoming input and integrate the new information into an existing knowledge system. Voss (1984, as cited in Jensen and Hansen, 1995:102) further observes that for successful speech perception, the listener has *to check* linguistic and acoustic information in the text against the semantic information to either confirm or reject the hypothesis. Buck (1991, in Tsui and Fullilove, 1998:435) feels that listeners should check and monitor their developing interpretation "in the light of linguistic input and

their background knowledge” to ensure that the interpretation is a reasonable one. Discourse markers employed in the spoken texts may thus become key pegs onto which students can hang information in order to check it against their existing schemata as well as against the linguistic features of the text.

- A model by Sperber and Wilson (1986), adapted by Rost (1990), is based on paradigms used in pragmatics to explain how communication occurs in actual social contexts. Pragmatic models tend to be top-down as they posit that comprehension is goal-driven. The listener activates the probable knowledge base needed to interpret the meaning of the utterances; the listener attends to the utterances selectively, interpreting their propositional meaning through phonological-syntactic-lexical analysis; the listener interprets a possible pragmatic meaning of utterances, that is, a plausible intention for the speaker making the utterances in the particular context; the listener further orders the interpreted propositions into a hierarchical representation to be retained in long-term memory. Sperber and Wilson (1986, as cited in Rost, 1990:73) imply that participants in any interaction pay attention only to information which seems to them relevant to their purposes or needs. A central tenet of this model is that the *stages* are overlapping and interdependent.

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Listening comprehension of the academic lecture is much more complex than listening comprehension in a social context, since there exists little room for negotiation of meaning. However, many of the above-mentioned stages of listening in a social context can be recognised in the academic listening situation. Therefore, in the process of selectively listening to utterances, discourse markers may be able to assist the listener in selecting the most probable interpretation of the possible pragmatic meaning of the utterance. In other words, the hierarchical representation that is stored in the long-term memory would be more directly in line with the original structure of the lecture text. I believe that students will be able to recall more exactly what the lecturer conveys should they be conversant with the roles that discourse markers play in the spoken academic lecture.

- Van Dijk and Kintsch (1983, as cited in Hansen and Jensen, 1994:243) have developed a model of discourse comprehension in general and for listening in particular. They theorise that the stream of sound is held very briefly in the short-term memory where phoneme recognition and phoneme chunking have begun. It is here that listeners call on their knowledge of syntactic structure to organise the chunks into clauses. These clausal units are matched with information from the long-term memory to elaborate and verify the interpretation of the input.

Van Dijk and Kintsch (1983, as cited in Hansen and Jensen, 1994:244) further state that for comprehension to take place, listeners use two major strategies, namely global and local coherence strategies. Local strategies, which are bottom-up, are used to connect a clause to one preceding it to make sense of the discourse at the sentential level. Global strategies, which are top-down, are used to define the macro-structure of the discourse theme or topic, to recognise the relationship between the major ideas of the discourse and to recognise the overall structure of the discourse.

The interplay between the local and global coherence strategies is used in local strategies to predict and verify sentence constructions. Local strategies, however, need the support of information from the global level to be able to interpret consecutive sentences within a discourse passage. If such information is not available, language users would build a text base without reference to all the information relevant to an adequate understanding of the text. Interpretations that are created through local strategies are used to verify the validity of global guesses. All this guessing, interpreting and interaction at global and local level happens without waiting for a clause to be completely interpreted or even stored in the short-term memory space.

Proficient language users use both strategies to understand discourse. Therefore, in order to establish whether students would benefit from strategy training in the recognition and interpretation of discourse markers at the global level in which higher order macro-markers enable more efficient top-down processing, I included three inference questions when

designing the pre-test/post-test design used in my study. To establish the benefits of local level strategies where micro-markers function at sentential or bottom-up processing level and contribute to better interpretation of consecutive sentences in a discourse passage (§ 2.2.6), I included seven multiple-choice questions in my test design.

2.2.3. Factors influencing listening

Many factors can be regarded as influential for listening because they may be suspected, on logical grounds, to affect listening or because they are thought to be relevant, based on parallels found in reading research (Rubin, 1994:199).

Some of the factors which influence the ease or difficulty of tasks for the L2 listener are a fusion of the type of language heard, the context in which listening occurs and the task or purpose of listening (Anderson and Lynch, 1988, as cited in Rubin, 1994:443). It seems further that text, interlocutor, task, listener and process characteristics also affect listening comprehension (1994:199). It is important to note, however, that many of the factors listed by Anderson and Lynch (1988) and Rubin (1994), such as process and task characteristics, relate to general language and language learning rather than exclusively to listening (Steven, 1999:89). Furthermore, listening appears to involve physiological as well as cognitive processes at different levels. It also involves attention to contextual and “socially coded acoustic clues” (Swaffar and Bacon, 1993, as cited in Vandergriff, 2004:4).

2.2.4. Listening in the native language versus listening in an L2 or FL

According to Rixen (1991:15), native language listeners seem to experience fairly few difficulties in “disentangling” the words they hear in their own language. They also do not necessarily seem to be aware of the “messiness” of the signals they need to deal with. This is most probably because they have strong grammatical expectations which assist them in filling in words or even parts of words that are not clearly received. The listener summarises the sense of what is aurally received as the discourse progresses. The information received is remembered but the exact words are forgotten or “purged.”

Ridgeway (2000:180) regards listening to another language as a task “at a high level of difficulty in cognitive terms” and therefore demanding full attention. Second language listeners appear to fall into two groups, namely the *risk-takers* and the *risk-avoiders* (Field, 2000:187). The first group of listeners form hypotheses as to meaning while recognising little of the signal. The latter demand a large amount of hard bottom-up evidence before they draw conclusions as to overall meaning. Neither group of listeners, however, react in the way they would to L1 listening problems where they employ different listening skills/techniques.

Even though many research studies indicate that L2 listening comprehension is complex and difficult to describe, it has not always been approached as a language skill in its own right. More recently there appears to be a movement towards regarding listening comprehension, and particularly listening in academic contexts, as a skills area that specifically needs investigation (Allison and Tauroza, 1995; Carrier, 1999; Kaplan-Dolgoy, 1998; Steven, 1999).

2.2.5. Current approaches to listening comprehension

Listening is often treated like a “neglected stepchild” and is “an overlooked dimension in language acquisition” (Oxford, 1993:205). Although other language skills often receive direct instructional attention, teachers frequently expect students to develop their listening skills without help. Lerner (1997:365) also sees listening as “an element of the language system that has been neglected by educators.” Flowerdew (1994:11) argues that lecturers at tertiary level often believe that L2 students will not experience any real difficulties with the purely linguistic processing of the material. They falsely assume, however, that students’ poor performances in tests and examinations are related to their problems in assimilating the content information imparted by the lecturer.

Informal interviews and discussions with colleagues at the Language Centre at UNAM made it clear to me that there exists a great need for specific instruction in listening

comprehension for students. A general remark from colleagues is often, “The students did not hear a word I said.” In reality, however, students have never learnt that listening for meaning in an academic environment differs greatly from listening to a casual conversation where meaning can be negotiated.

Up until fairly recently the listening process has been considered under the *listening to repeat* approach of the audio-visual period or in a *question and answer* comprehension approach. More recently, though, the approach has been towards real-life listening in real time. The little listening instruction that takes place is expanding from a focus on the product of listening – *listening to learn* – to an emphasis on the process – *learning to listen* (Vandergriff, 2004:3). I do believe that ample room should be provided in English for Academic Purposes (hereafter EAP) courses for the specific training of students in how to *learn to listen*.

In order to develop specific training programmes in listening comprehension in academic lecture situations, it is necessary to scrutinise the processes that constitute listening.

2.2.6. Listening as a top-down/bottom-up process

Chaudron and Richards (1986:113) describe listening comprehension as involving both bottom-up and top-down processes. Bottom-up processes refer to the analysing of incoming data and categorising and interpreting them on the basis of information in the data. In language comprehension, bottom-up processes could be regarded as those which assign grammatical status to words on the basis of syntactic and morphological cues. They also include those processes that assign topics and meanings on the basis of syntax and word order and the meanings of lexical items used in the message. Top-down processing, on the other hand, makes use of prior knowledge as part of the process of comprehension. This may include expectations of the topic and structure of a piece of discourse based on real-world knowledge and reference to various types of frames, schemata and macro-markers. Top-down processing involves prediction and inferencing on the basis of

hierarchies of facts, propositions and expectations. It also enables the listener to by-pass some aspects of bottom-up processing.

It is clear that discourse markers play a significant role in both bottom-up and top-down processing as far as listening comprehension is concerned (Field, 2004; Goh, 2002; Jordan, 1997; Noblitt, 1995). Macro-markers indicate major transitions in the lecture structure as well as helping top-down processing by initiating expectations and predictions about the lecture. These expectations are confirmed and supported by the speaker's use of discourse signals of the relationships between successive episodes and moves in the lecture (Chaudron and Richards, 1986:116). Micro-markers work with bottom-up processing. They mark inter-sentential relations and function as pause fillers. Examples include "well", "right" and "let's see." Markers seem to enable listeners to attend to the more relevant text information since they guide the listeners' cognitive resources in an optimal manner.

Strictly speaking, the terms top-down and bottom-up do not refer to particular levels of processing but to directions of processing. In a bottom-up process, small or *lower level* units are progressively reshaped into larger ones; in a top-down process, larger units exercise an influence over the way in which smaller ones are perceived. Top-down and bottom-up processes are also not alternatives; rather, a great deal of synergy exists between these two processes (Smit, 2005:2). Ongoing discussions in L2 research have been concerned with whether listeners first use top-down processing, that is their knowledge of the world, situations and roles of human interaction on meaning and then bottom-up processing – their knowledge of words, syntax and grammar to form meaning – or whether it works the other way round (Lynch, 1998:5).

When looking at meaning on a discourse level, Anderson and Lynch (1991) point out that, in the early stages of language learning, the meaning level may consist of merely recognising the topic of a conversation or being able to make predictions about likely developments in the topic. Wolff (1987, as cited in Rubin, 1994:210) found that while students appeared to make "harmonious use of bottom-up and top-down processes" with

an easy text, they used more top-down processing strategies with more complex texts. Conrad (1985, as cited in Rubin, 1994:210) found in his study of university students of English, with scores ranging between 83.7% and 96% for the Michigan State University English Examination that ESL listeners relied more on syntax than on contextual semantic cues as their proficiency levels decreased. Shohamy and Inbar (1991, as cited in Tsui and Fullilove, 1998:431) further found that while “high level listeners seemed to process the text in a knowledge-based manner, low-level test takers seemed to process it in a data-driven manner.” In my study I included inference questions in the pre- and post-tests to determine the extent to which students responded in a knowledge-based manner to the text. The multiple-choice questions in the test, on the other hand, were data-driven.

Tsui and Fullilove (1998:432) investigated over a period of seven years the kind of processing skills that is most important in identifying the performance of L2 learners on listening test items, in large-scale public examinations in Hong Kong. They looked at the schema type of the aural text and the question type used in these public examinations. They traced a correlation between level of listening skill and success in answering items which were not schematically supported. This suggested that it was the less-skilled listener who relied most heavily upon top-down processing to compensate for problems of perception. The researchers also found evidence that it was the poorer listeners who were sometimes misled by false assumptions based on contextual cues.

It is thus evident that the relationship between top-down and bottom-up processing is a complex one which is based to a large extent on a considerable degree of interdependence (Tsui and Fullilove, 1998:366) or “parallel processing” (Rubin, 1994:210). When investigating L2 listening comprehension, it appears to be not about which path is taken but rather which of the two processing routes is preferred over the other (Field 2004:364).

Comprehension has in the past generally been viewed as simply a question of understanding. However, it is increasingly being recognised as a process of “constructing meaning based on multi-dimensional relationships between the learner and all the internal and external influences and the intrinsic and extrinsic elements involved in that learner’s

reality” (Vogely, 1995:42). This includes meta-cognitive and cognitive knowledge. According to Flowerdew (1994:9), *comprehension* is a two-stage process: the first stage consists of the results of the linguistic processing and the second of the application of these results to background knowledge and context.

In my own study I observed that the participants’ English language proficiency was adequate to comply with the university’s admission requirements, namely a minimum of a C-symbol in the International General Certificate of Secondary Examinations (hereafter IGCSE); however, their initial comprehension of the content conveyed in the video-taped lecture was poor. This observation led to further assumptions that other aspects, apart from linguistic competence and background knowledge, negatively influenced the quality of students’ listening comprehension in academic lectures. It thus seemed important to consider aspects such as the relationship between top-down and bottom-up processing in listening comprehension and whether or not discourse markers could play a significant role in supporting the listening process in the academic lecture.

Throughout my research I found that scholars were consistent in their agreement that organisation was a facilitative variable of discourse recall and that certain features of texts were conducive to organisation of text content. According to Bartlett (1978), one such feature is top-level structuring. This implies that component structures of a prose/discourse passage are hierarchically-related in a tree structure from top-level units or “bits of meaningful information” (1978:7) to increasingly subordinate units at a lower level of this tree structure. He continues to say that top-level structure is a type of frame and similar to the notions of macro-structure. It is an organisation of “super-ordinate information of a passage” (1978:7). Such information consists of content and relations “intermixed at the most salient level for memory and comprehension of the passage” (1987:8). Bartlett concludes from research findings that top-level structures differ in the extent to which they facilitate recall of the same information. The top-level structures in discourse contribute to the coherence of the text. According to Louwse and Mitchell (2003:203), “cohesion facilitates coherence,” as cohesion relations macro-manage discourse by structuring the hierarchy of discourse. They also micro-manage it by relating adjacent text units.

2.3. Coherence, semantic cohesion and markers in discourse

Written as well as spoken texts do not just consist of strings of sentences. They are, furthermore, not simply large grammatical units or a kind of *super-sentence*. A text should be seen as a semantic unit or the unity of meaning in context, “a texture that expresses the fact that it relates as a whole to the environment in which it is placed” (Halliday and Hassan, 1983:293). As a semantic unit the text is realised in the form of sentences and in this way the relation of text to sentence can best be interpreted. The expression of the semantic unity of the text depends on the cohesion among the sentences of which it is composed.

2.3.1. Semantic cohesion

Spoken discourse is different from written work as it is not pre-planned but rather the product of on-going time through mutual co-operation. It is, therefore, necessary for listeners to use cues or discourse markers to identify directions in the topic development (Richards, 1983:226).

In a lecture situation communication can be described as monologic, presenting few opportunities to review the exact wording of what has been said. The principal characteristic of the monologue is that turn-taking mechanisms are suspended (Thompson, 1994: 59). The primary responsibility for creating coherent discourse lies with the speaker who must predict the likely interpretation made by the listeners. Therefore, the speaker must create discourse which can be easily processed in real time through the auditory channels. The speaker needs to make greater use of semantic cohesive devices in monologue than in conversation. In a monologue, cohesive devices such as discourse markers signal explicitly the coherence of what may be a complex and densely-argued text (Thompson, 1994:60).

In oral discourse the speaker uses cohesion to signal texture and the listener reacts to it in

his/her interpretation of this texture. Therefore, cohesion can reasonably be used as a criterion for the recognition of the boundaries of a text (Halliday and Hassan, 1983:295). For most purposes, new text can be considered to have begun with a sentence which shows no cohesion with those that precede it. Even though isolated sentences or other structural units do not necessarily cohere with those around them, they may form part of a connected passage. Usually, however, if a sentence shows no cohesion with what has gone before, it does indicate some kind of a transition.

Cohesion can be considered as a set of relations in language which is a necessary, though not sufficient condition for the creation of text (Halliday and Hassan, 1983:299). The continuity that is provided by cohesion consists in expressing at each stage in the discourse those points of contact with what has gone before. Discourse markers provide an effective vehicle for creating cohesion in texts.

2.3.2. The role of discourse markers

Studies by Tyler (1992), Tyler and Bro (1992) and Williams (1992, as cited in Flowerdew and Tauroza, 1995:436) indicate that a reduced use of markers makes the speech of ESL speakers appear less comprehensible to L1 listeners. It is thus evident that it would also affect the L2 listeners adversely. Spoken text with few discourse markers provides less assistance to listeners in dividing up the units of information in the text. Nattinger and De Carrico (1992, in Flowerdew and Tauroza, 1995:437), citing the study by Chaudron and Richards (1986) on the role of discourse markers in academic lectures, argue strongly that special attention should be given to macro-discourse markers in EAP lecture comprehension training.

2.3.2.1. Defining discourse markers

Schiffrin (1988:31) regards discourse markers as “sequentially dependent elements which bracket units of talk.” She has developed a list of conditions that identify an expression as a discourse marker. These conditions are listed below. They have to:

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- be syntactically detachable from the sentence;
- be commonly used in the initial position of an utterance;
- have a range of prosodic contours such as tonic stress and must be followed by a pause or phonological reduction;
- be able to operate at both local and global levels and on different planes of discourse. They either have to have no meaning (“*well*”), a vague meaning (“*all in all*”) or be reflexive (of the language; of the speaker). (Schiffrin, 1988:328)

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Van Niekerc (1996:312) defines discourse markers as “*verbale, onafhanklike merkers, naamlik gambiete, openingsmerkers en afsluitingsmerkers.*” [verbal, independent markers, namely gambits, introductory markers and concluding markers]. According to Richards et al. (1997:118), in conversational analysis, *gambit* is sometimes used to describe a word or phrase which signals the function of the speaker’s next turn in conversation. Gambits also give an indication of the semantic frame in which a speaker wants his/her utterance to be interpreted. Van Niekerc (1996:313) further identifies certain discourse markers as paralinguistic markers such as intonation and tone of voice which can be distinguished from the verbal context.

It appears that semantic markers differ from one another, as one can distinguish between conjunctions (“*To continue ...*”), context indicators (“*Firstly ...*,” “*Secondly ...*”) and meta-lingual markers (“*As you are aware ...*”). These markers give an indication of the semantic framework. They all assist the listener in his/her orientation regarding the next utterance (Van Niekerc, 1997:313).

Discourse markers usually occur at the beginning and only seldom in the middle of an utterance (De Bruyn, 1998:128). Especially if preceded by a pause, they serve as a barrier between two messages that run parallel. The potential relationship with the message that follows the preceding discourse marker is not necessarily dependent on the presence or absence of the discourse marker. Where no discourse marker is used, the interpretation relies on the specific context or intonation (De Bruyn, 1998:129). Özbeck (1995, as cited in Sönmez, 2001:56) further states that the detachment of an expression or word used as a

discourse marker in an utterance does not cause a change in meaning since discourse markers do not contribute to the propositional meaning of the utterance in which they occur.

Furthermore, discourse markers contain valuable information about the text which makes comprehension easier. It is thus a logical assumption that if students are not able to recognise and interpret specific markers in a lecture, they will listen less effectively. Van Niekerk (1997:317) feels strongly that students need to be trained in the recognition and interpretation of discourse markers to enhance their listening comprehension. Lecturers should also make sufficient use of markers in their presentations, since markers will have a positive effect on the comprehensibility of their lectures. The ultimate goal is that:

high frequency expressions of various sorts should become second nature to the students, leaving them free to focus their attention on other items (information).

(Van Niekerk, 1997:318)

2.3.2.2. Research into the role of discourse markers

In their study, Chaudron and Richards (1986) researched ESL students' comprehension of academic lectures. They aimed to establish what effect the use of discourse markers, which indicated the overall organisation of the lecture, had on students' listening comprehension. They were firstly concerned with macro-markers which they described as those markers that "signal the macro-structure of a lecture through highlighting major information and the sequencing or importance of that information" (Chaudron and Richards, 1986:116). They also considered the effect of micro-markers on L2 learners' comprehension of lectures. Micro-markers were described as those markers which "indicate links between sentences within the lecture, or which function as fillers" (Chaudron and Richards, 1986:116).

In order to answer their research questions, Chaudron and Richards prepared a lecture on American history based on a natural, live performance lecture on the topic by an ESL teacher. Four different versions of the lecture were audio-recorded. Each version included a different combination of micro- and macro-markers. These lectures were then played to

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L2 learners of different ability levels and measures were taken of their comprehension. The researchers were testing three hypotheses:

- H1 – L2 learners would comprehend the lecture better when micro-markers were added than when no markers were added;
- H2 – L2 learners would comprehend the lecture with macro-markers better than the lecture with only micro-markers;
- H3 – L2 learners would comprehend best the lecture with both micro- and macro-markers.

The four different versions of the lecture were assigned at random to the different classes in their respective subject groups. All the subjects' responses were scored either right or wrong. An exact-word scoring method was used for the cloze items with only minor errors in spelling or grammatical form being considered acceptable. The researchers looked at the correlation between the cloze and comprehension measures. They found a consistent result across the groups listening to the lectures that macro-markers, that is the "higher order markers signalling major transitions and emphasis in the lectures" were more conducive to recall than micro-markers or "lower-order markers of segmentation and inter-sentential connections" (Chaudron and Richards, 1986:122).

In another study, Young (1994) aimed at identifying some of the more prominent micro-features that contribute to the macro-structure of the university lecture. Her research was based on an analysis of seven two-hour lectures from third and fourth year courses. She chose a model that would not only reveal the macro-structure of the lecture but would also identify some of its most significant micro-features. She used the Systematic Functional Grammar Model which allowed her to identify both the macro-structure of a language variety as well as the micro-features which make up this variety (Young, 1994:161). She found that her study confirmed her assumption that "an acquaintance with the correct schematic patterning of lectures will greatly assist students" (Young, 1994:173). She concluded that especially for foreign students who had great difficulty in taking notes, it was important to note that lecturers often explicitly announce new topics by using, for instance, discourse markers.

Young further hypothesised that “if knowledge of macro-structure is as significant as suggested for narrative discourse, then presumably it is equally so for expository discourse – written and spoken” (1994:160). She suggested that it might even be of greater importance in terms of the spoken mode, given its timed nature, where the listener does not have the opportunity to go back to reconfirm his/her interpretation of the content of the discourse. After scrutinising those lectures that she used in her study, she found specific types of features that characterised the discourse structuring phase of the lecture and that were evident across disciplines.

From her study it appeared that lecturers explicitly indicated that they consistently used very similar verbal groups such as “*give a list ...*”, “*for example ...*,” as a description of what they intended to focus on in the lecture (Young, 1994:169). She concluded that, given this insight into the narrative structure of the lecture, it seemed particularly important to acquaint teachers of ESL and English for Specific Purposes (hereafter ESP) courses, “particularly those in post-secondary institutions, with an accurate macro-structure of university lectures so that they can present students with a schema that will fully reflect what is going on in this generic situation” (Young, 1994:174). Lecturers in the different disciplines need to be made aware of the contribution of discourse markers in the assimilation of content information as it may contribute to the more effective use of such markers which might add to students’ chances of academic success.

In another study, Flowerdew and Tauroza (1995) also examined the effect of discourse markers on L2 lecture comprehension. They used an authentic lecture with the control group and exposed the experimental group to a version of the lecture from which the naturally occurring markers had been deleted. They used a video-recording of the lecture rather than the audio-recordings used by Chaudron and Richards. As subjects they used sixty-three electronic engineering students in their first year at the City University of Hong Kong. They decided on this specific lecture because the lecturer provided an example of moderate use of micro-markers and the lecture was suitable for the particular students. They used self-assessment, written partial recall and a short answer test to provide a

different perspective of how the students comprehended the lecture. They concluded that the “agreement across the three different measures of comprehension makes us confident that [...] subjects comprehended a lecture better when discourse markers are included than when they are deleted” (Flowerdew and Tauroza, 1995:449).

In my own research I wanted to build on the outcomes of these three studies which show that a knowledge of discourse markers as used in academic lectures does enhance students’ listening comprehension of content lectures. I hypothesised that, if students were sensitised and trained in the recognition of those discourse markers which indicated major transitions in spoken academic lectures, their listening comprehension and recall of content information would be enhanced.

Not all studies have had such positive results: Dunkel and Davis (1994:55) found that the use of markers was not necessarily conducive to better intake in different kinds of communication situations. They wanted to test the effect of the presence or absence of English rhetorical cues in lecture discourse on the note-taking practices and information recall of non-native speakers of English. Twenty-six university-level students studying ESL and twenty-nine native speakers of English were tested in intact classes at the Pennsylvania State University. The subjects listened to an audio-taped lecture on the wrecking and sinking of the *Titanic* and the *Andra Doria*. The lectures followed two commonly used rhetorical structures namely narration and comparison-and-contrast. The lecture in the evident form contained explicit cues indicating the two rhetorical structures in the lecture as well as “pointer words” (“*First ...*”, “*In contrast ...*”). In the lecture in the non-evident form these cues were deleted. The researchers defined the “evident form” of the lecture as containing one piece of information omitted from the “non-evident” form of the lecture – that “a court of inquiry into the accident blamed the shipping company for its negligence” (1994:60).

The researchers found that, while it is thought that the listener benefits from the presence of signalling cues in discourse messages, their study did not support this contention, if “amount of notes made and quantity of information recalled in protocols are used as

metrics of comprehension and retention of lecture information” (1994:69). To assess their conclusion, one should, however, take into consideration that the discrepancy between their study’s results and those of the Chaudron and Richards’ 1986 study may be due to differences in experimental procedures. According to Dunkel and Davis (1994:68), there were two main differences between their study and that of Chaudron and Richards (1986). Firstly, the narrative and comparison-and-contrast structures of their text as well as inter-sentential relations “may have been sufficiently salient to listeners, so that signalling devices were not necessary.” Secondly, unlike Chaudron and Richards who used cloze, true-false and multiple-choice tests, they used a different assessment measure, namely written recall protocols.

In another study on point-driven understanding in engineering lecture comprehension, Olsen and Huckin (1990) also found that the teaching of macro- markers “though certainly worthwhile is not by itself sufficient to make students aware of the discourse level pragmatics of academic lectures” and that a “more context-sensitive point-driven strategy is called for” (Olsen and Huckin, 1990:42). It should not be forgotten that the nature of their lecture was problem-solving rather than conveying content information.

In my own study, based on an expository lecture which conveyed content information, the results of the test showed a marked increase in the comprehension of the lecture in the experimental group in comparison with the results of the control group (see Table 4.5). It is clear that knowledge of the use of discourse markers in an academic lecture is not a panacea for all students’ listening comprehension difficulties at tertiary level. I do, however, believe that it should be part of any skills-training course to assist students in acquiring strategies that can be transferred to their own fields of study so that they can cope more successfully with the demands of academic study.

2.3.2.3. Discourse markers and rhetorical organisation

Discourse markers occur throughout discourse. It is, therefore, taking a risk to focus only on a limited type of talk, as the general function of a marker may be mistakenly equated

with its particular use within a specific discourse type. Markers should be considered wherever they appear since context and meaning interact to produce the full communicative force of those expressions which are used as discourse markers. Conversational genres are open and fluid and may be defined as mutually exclusive types; therefore, it is unlikely for lecture discourse to contain genres that are totally distinct from one another. It is necessary to consider markers wherever they occur (Schiffrin, 1988:71).

Cook (1975, as cited in Chaudron and Richards, 1986:114) describes the macro-structure of an academic lecture as being composed of a number of *expositions*, namely “an optional episode of expectation, an obligatory focal episode, an obligatory developmental episode together with optional developmental episodes and an obligatory closing episode.” Discourse markers signal the information structure of discourse, as they emphasise directions and relations within discourse. Murphy and Candlin (1979, as cited in Chaudron and Richards, 1986:115) identify a number of markers of the rhetorical organisation of lecture discourse. They are markers (“*Well ...*”, “*Right ...*”, “*Now ...*”), starters (“*Let’s get on with ...*”) and meta-statements (“*I want to mention ...*”). They believe that these signals also reflect the interactional nature of lectures and are probably used more frequently in conversational style than in reading style lectures.

It can thus be summarised that the content information provided in a spoken academic lecture differs from content information derived from a text book. There may be an absence of visual signals such as headings and sub-headings that are used in written discourse to signal topic shifts. Students need to grasp the structure of the spoken academic lecture to be able to derive maximum comprehensible input. Discourse markers which signal the point at which there is a change from one topic to another in two contiguous pieces of discourse can, therefore, assist students who experience difficulties in listening comprehension with improved intake of content information (Hansen, 1994:133).

Some of the difficulties that students experience when listening to academic lectures will be discussed in the following section.

2.4. The nature of perceived oral lecture comprehension difficulties

The primary difficulty in L2 listening, according to Rost (1994:133), seems to be developmental. Regardless of whether a critical age in language learning or even just a *sensitive period* (Oyama, 1982, as cited in Vidal, 2002:136) for language learning exists, many adult learners have considerable difficulty in learning to listen in a L2. They may be unable to use the superior grammatical and lexical knowledge available to them during reading and writing when processing speech. Extended discourse, because of the varying nature of comprehension, will be experienced differently by different listeners and may also be interpreted differently. A listener may pay particular attention to a specific part of the message and structure the rest of the message around what was for him/her the main point.

Furthermore, communication is always collaborative – even in a formal lecture situation which is more planned than spontaneous, casual conversation. Clark and Wilkes-Gibbs (1986, as cited in Lindeman, 2002:420) call this the “principle of mutual responsibility.” The participants in the discourse make an attempt to establish, roughly by the initiation of each new contribution, the “mutual belief that the listener has understood what the speaker meant in the last utterance to a criterion sufficient for current purposes.”

The academic lecture is, in essence, inherently different from everyday discourse and students often experience difficulties in relating to the oral input they receive during lectures. The concept of lecture discourse and the perceived difficulties students experience in converting spoken lecture discourse into meaningful intake must be investigated.

2.4.1. Linguistic competence and phonological problems

As early as 1984 Byrnes (as cited in Van Niekerk, 1996:59) said that “linguistic competence precedes production in all cases, and there can be no production unless linguistic input was provided and became comprehensible intake for a listener.” In my study

I attempted to show that even if students have an adequate level of proficiency in English to follow spoken content lectures, the high failure rate at university indicates that between the lecture and the examination things go drastically wrong. It seems that the main problem lies with the students' inability to extract meaningful information from the linguistic input. This input could not be synthesised into intake of the content information and recalled when necessary.

Rixen (1991:31) finds that many listeners know English well in its written form, but when it comes to listening to the spoken language their knowledge of the language is of little help. Once words are used in a connected natural speech, some of their sounds are different to those used in very carefully delivered speech and many become harder to recognise. Major et al. (2002:174) found that "accented language may affect the listening comprehension of L2 listeners differently, depending on their native language." In a tertiary environment such as that of UNAM, a fair number of lecturers themselves are not native speakers of English and the students are also mostly ESL speakers who come from diverse ethnic backgrounds. Therefore, phonetic difficulties, when listeners need to make a distinction between the different speech sounds, should not be disregarded.

It is, therefore, clear that the listening process is complicated and it may become very difficult for L2 students to derive content information from spoken lectures. Should students be adept at perceiving the mega-structure of an academic lecture and be able to notice major transitions in the spoken text, this may alleviate many of the problems discussed and enable them to follow the organisation of the lecture more successfully.

2.5. Conclusion

Academic listening skills are an essential component of tertiary studies as the students' eventual success depends very much on their ability to understand the content material provided in spoken lectures. According to Flowerdew (1994:7), comprehension is a two-stage process. The first stage consists of the results of linguistic processing and the second stage of the application of these results to background knowledge and content.

This is important for the study of L2 lecture comprehension as ESL students are often expected to have already acquired most of those skills involved in the first stage of the process. Any training they are offered in lecture comprehension tends to emphasise the *higher level* skills of the second stage. As was shown in the discussion, however, it seems that a high level of linguistic competence in English is not the major factor behind successful listening comprehension. Other aspects need to be taken into consideration when training students in effective listening comprehension strategies.

Research into the lecture comprehension process is thus of value. An understanding of how lectures are comprehended can suggest appropriate ways to encourage L2 learners to listen more effectively in lectures. It can further feed into ESL teaching methodology on the one hand and learner strategy training on the other. In addition, information about listening comprehension strategies can be employed to make content lecturers aware of how they can facilitate students' understanding of subject content in spoken lectures by presenting their lectures in a way that will ensure optimum comprehension.

Finally, I fully agree with Lynch (1998:6) who says that "the underlying paradox in listening research is the routine unconscious ease of listening and the extreme difficulty of investigating it, particularly as the process itself is unseen and inaccessible." More research into what specifically constitutes listening and how students can be made aware of their active participatory role in deriving content information from spoken lectures is essential if the listening skills of students at university are to improve.

CHAPTER 3

METHODOLOGY

3. Introduction

This chapter revisits the hypotheses formulated in this study and explains the sampling method used to identify an experimental and control group of participants. It further discusses the design of the instruments and describes the research methods and procedure employed. Finally, it explains the methods used in the statistical analysis of the data.

3.1. Hypotheses – a brief rationale and formulation

In this study I aimed to establish whether comprehension of lectures would be improved by making students aware of the role of discourse markers in structuring spoken text. The research questions that were posed and the hypotheses that were formulated from these questions will be discussed next.

3.1.1. Research questions and hypotheses

The central question posed was whether students would improve their listening comprehension if they were made aware of the role of discourse markers in authentic lectures. Subsequent questions were:

- would such an awareness-raising benefit students when answering gap-filling questions, multiple-choice questions and inference questions posed on the content information in a spoken lecture?
- would there be a significant difference in the pre- and post-test scores suggesting that the intervention programme had benefited the students' listening comprehension in academic lectures?

- would there be a significant difference in the pre-and post-test results of the experimental and control group, suggesting that the improvement could be ascribed to the intervention programme and not solely to natural maturation?
- would students' listening comprehension be enhanced if they were introduced to the structure of an academic lecture and made aware that the lecture contained discourse markers and of what their roles were?

A general hypothesis was formulated:

H1 – *An intervention programme on the role of discourse markers will significantly improve students' listening comprehension.*

This was tested as three specific hypotheses.

H2 – *An intervention programme on the role of discourse markers will significantly improve students' scores in gap-filling questions.*

H3 – *An intervention programme on the role of discourse markers will significantly improve students' scores on multiple-choice questions.*

H4 – *An intervention programme on the role of discourse markers will significantly improve students' scores on inference questions.*

3.2. Sampling of participants

I used UNAM students who were doing the UCA course (§ 1.3) as participants in this study. These students are mainly non-native English speakers and although they have fulfilled the English language proficiency requirements of the university (§ 2.2.6), in general they find listening comprehension in an academic English environment difficult. The Language Centre at UNAM was established as a service centre to cater for students' academic needs. Constant upgrading and tailoring of the existing courses occurs to streamline them in order to fulfill students' needs. Because my research study aims at identifying and describing a problem area that requires attention, it can be regarded as being in line with developments at the Language Centre.

Although I selected both the experimental and control groups from intact classes of students, the sample groups in this study reflect a generalisable reality namely a situation where each student has an equal chance of being selected (Graziano and Raulin, 1997:170). As the total UCA population at the Language Centre consisted of approximately five hundred students at the time of the study, the experimental and control groups of twenty-seven students each together represented ten percent of that population. Furthermore, a questionnaire that was distributed among all the participants indicated that the majority of the students in both groups were B Juris students, although in each group five students were from other disciplines.

Table 3.1: Fields of study – experimental and control group

Study fields	No	B Juris	Media Sc.	BA Art	B Comm	B Sc	Dipl. I S
Experimental Group	27	22	3	1	1	0	0
Control group	27	22	0	0	1	3	1

The students who participated in the study all indicated that they had studied English as a subject before coming to UNAM.

Table 3.2: Number of years students studied English prior to university

Number of years	4	5	7	8	9	10	11	12	13	15
Exp. Group: 27	0	1	2	1	0	3	3	1	15	1
Percentage	0	1.9	3.8	1.9	0	5.7	5.7	1.9	28.3	1.9
Control group: 27	1	0	1	1	1	3	2	0	15	3
Percentage	1.9	0	1.9	1.9	1.9	5.7	3.8	0	28.3	5.7

*Mean 10.55 years

Ninety-eight percent of the participants in the study indicated that they had studied English as a subject at school.

Most of the participants in the study came from urban areas in Namibia; however, a number of them were from the rural areas and a few were foreigners. In general, the foreign students at UNAM come from countries such as Angola and China where the English courses that they completed at school can be regarded as English foreign language courses. These students often have fairly well-developed basic interpersonal communication skills (hereafter BICS) but their cognitive academic language proficiency (hereafter CALP) is usually not adequate for tertiary studies through the medium of English (Cummins, 1980).

Table 3.3: Areas of schooling

	Experimental group	Control group	%
urban	17	18	64.8
rural	6	5	20.8
foreign	4	4	15.1

The instruments used in the study are described in the next section.

3.3. Instruments

My study was made tangible by collecting data from intact classes of university students by means of a pre-test – intervention – post-test design in order to investigate whether an awareness of discourse markers would improve listening comprehension. This was measured by scores in gap-filling, multiple-choice and inference questions.

The design of the experiment involving the comparison of matched groups of students and the use of three different means of measurement allowed me to place confidence in the results, as it is unlikely that the same group would be consistently favoured on all three measures.

3.3.1. Hypothesis testing

H1 – *An intervention programme on the role of discourse markers will significantly improve students' listening comprehension.*

I showed both groups a video-recorded lecture and tested them on the content to determine whether there would be any difference in the listening comprehension abilities of the experimental and control groups before the intervention. The test consisted of three different sections, each assessing the participants' abilities to recall content information from a different angle. To minimise the necessity for written answers, the test format consisted of a gap-filling section, circling correct answers in the multiple-choice questions section and short sentence answers in the inference questions section (see Appendix B). The results of the participants gave an indication of their academic listening comprehension proficiency before the commencement of the intervention programme.

To establish whether the experimental group had benefited significantly from the eight-week intervention programme, both groups of students were tested at the end of the experiment using the same video-taped lecture and test as in the pre-test. Their test results were statistically analysed and compared with the previous test.

H2 – *An intervention programme on the role of discourse markers will significantly improve students' scores on gap-filling questions.*

The purpose of including ten gap-filling questions in section one of the pre-test/post-test was to test the students' skills of lexical retrieval (Rost, 1993:183). In the gap-filling section of the pre- and post-tests, answers one to four were directly related to the following phrase used in the lecture text: *"Today we are going to look at ..."* Answers five and six were related to the phrase *"I will briefly point out ..."* Answers seven to ten came from a section which was introduced by *"To explain the concept of common law we will look at ..."* The purpose of these questions was to establish whether certain linguistic pointers in the lecture discourse would alert students to important words which could help them

understand the framework of the lecture as a whole. Even if the spelling of the word was incorrect, phonetically recognisable answers were taken as correct.

After the post-test, I compared the performance of the experimental group of participants in this section to their scores on the same section in the pre-test. I wanted to establish whether they showed a significant improvement in their ability to recognise individual words as tested by means of gap-filling questions. I hypothesised that such improvement could be ascribed to their awareness of the discourse markers which introduced the information in the lecture. I followed the same procedure for the control group of students by comparing their performances in the pre- and post-tests. I then compared the performances of both groups in each test.

H3 – An intervention programme on the role of discourse markers will significantly improve students' scores on multiple-choice questions.

The second section of the test consisted of seven multiple-choice questions. It assessed whether the participants were able to select detail introduced by means of discourse markers from spoken text. An example of such a question is:

The term "common law" is used to describe:

- a. laws made for everybody
- b. laws made in England
- c. laws made by judges
- d. laws made by the King

The answers to these questions were introduced by means of discourse markers such as "Which means that ... "; "By this we mean ... "; "Please note ... "; "Today we will use"

The aim of the multiple-choice questions was to establish whether bits of information highlighted by means of discourse markers were easier for students to assimilate, should they be aware of the role discourse markers play in simplifying the lecture text. It was thus important to establish whether the experimental group performed differently in this section in the pre- and post-tests. The performance of the control group in the same tests was used as a control measure to determine the effect of awareness-raising in this experiment.

I again looked at the performance of both groups in this section of the pre-test to determine whether there was any significant difference between the two groups at the beginning of the programme. I then compared the performance of the experimental group in the two tests to determine whether any significant improvement had occurred in this section of the post-test. I subsequently did the same for the control group. I further compared the results of the two groups with each other to establish whether the experimental group performed significantly differently from the control group.

H4 – An intervention programme on the role of discourse markers will significantly improve students' scores on inference questions.

The last section of the test consisted of three inference questions aimed at establishing whether the participants could make inferences from specific information given they recalled, for example:

What is the main difference between an accusatorial and an inquisitorial court procedure?

The reason for including inference questions in section three was to establish whether the participants could formulate informed opinions about the subject content conveyed in the lecture and whether their awareness of the general role of discourse markers in spoken text aided them in deriving information. In this case the answers consisted of deductions by the participants and were not related to specific discourse markers.

The scores for both groups in this section of the pre-test were compared to the results in the same section of the post-test to establish whether there was any significant improvement for the experimental group compared to that of the control group. I followed the same procedure in the analysis of the scores in this section as I had in the previous two sections of the tests.

3.3.2. Pre- and post-test

To test my hypotheses I designed a test based on the content of an authentic academic lecture concerning specific information on the English legal system. I video-recorded the lecture beforehand and played it to all the participants in my experiment. The lecture content consisted of a 1213 word text on facts derived from *English Law and Language* (Russell and Locke, 1992:2 – 5). A 50 word introduction to the lecture preceded the tested content. This served as a pre-listening exercise during which the participants could become used to the lecturer's recorded voice and the idea of attending to images on a television screen rather than to a person-to-person lecture. I took care to include about 250 words and expressions constituting mainly macro-markers in the text. These words and phrases indicated the overall structure of the lecture. Examples of macro-markers used in the lecture text were *"Today we will look at ..."*; *"I will now point out ..."* and *"This was then in short ..."* I delivered this lecture in clear, standard, academic English at a normal speaking pace (Mason, 1994:204) which is regarded as approximately a 150 words per minute (Flowerdew, 1994:23). Immediately after the pre-test all the participants noted that the topic was new to them and that they had had no previous extensive knowledge of the English legal system.

The recorded lecture was useful in that the authentic speech used in the lecture reflected hesitations, false starts and pauses which normally characterise natural speech. I established that none of the participants in the study had comprehensive knowledge of the content covered in the video-taped lecture as I wanted to assess whether they could follow the flow of the lecture which was facilitated by the use of discourse markers and, in so doing, determine the main points of information, despite gaps in word recognition that they might experience (Field, 2003:325).

In designing the test instrument based on my research approach, I took into consideration previous research on the effect of discourse markers on academic listening comprehension. I was also aware that the statistical validity of my study might be threatened should the measures I used to assess the dependent variable, namely

academic listening comprehension, be unreliable. Furthermore, there were no standardised tests to use as test instruments. So I designed the test that was used in this experiment myself. The test consisted of ten gap-filling questions, seven multiple-choice questions and three inference questions.

After conducting the pre-tests I analysed the total marks scored by the participants and compared the mean scores in order to determine whether there existed a significant difference between the results of the experimental and control group. I followed the same procedure after the post-tests to establish whether the results were significantly different. This would indicate whether each of the three different assessment domains showed significant improvement that could be associated with the awareness of discourse markers as they occur in the lecture text.

A second instrument that I used to collect data was a single questionnaire.

3.3.3. Questionnaire

Students in both groups were requested to complete the questionnaire prior to the intervention (see Appendix A). It was first piloted on a group of UCA students in 2004 to establish any pitfalls or ambiguous questions. Items that needed rephrasing were identified and revised.

The questionnaire I designed covered three areas of significance to me. Some biographical detail and details indicating the respondents' proficiency in English were obtained. These were measured as quantifiable data. The questionnaire further examined the respondents' personal experiences with English as an L2. The third area of significance was the students' perceptions of their proficiency in and experiences with English as a language of instruction and communication. This qualitative information allowed me to organise, interpret, verify and categorise the socio-cultural information and its possible influence on the findings of this experiment (§ 4.1.3).

The first section of the questionnaire concerning personal details consisted of closed questions with predetermined options. Participants were identified by number only for the purpose of collecting and comparing subsequent data. I wanted to establish whether the students came from urban or rural areas (see Table 3.3), in order to debunk a popular myth existing at UNAM. Many lecturers still think that students' difficulties in English – specifically listening comprehension difficulties – can be directly related to supposed substandard teaching that students received in previously disadvantaged schools. A further area of inquiry was whether or not the students had completed their schooling through the medium of English and how many years they had studied English as a subject (see Table 3.2). These data would shed light on the amount of English the respondents had been exposed to before entering UNAM.

In the second section, namely the respondents' own perceptions of their proficiency in English, the majority of questions were scored by means of the Likert scale (§ 3.5.3). An advantage of this scale is that shades of opinion can be given numerical values, while a disadvantage may be that the midpoint can be difficult to interpret and that people vary in degrees of caution when forming an opinion (McDonough and McDonough, 1997:176).

The respondents were aware that the data would not be associated with them personally. I can, therefore, assume that truthful information was obtained. Before piloting the questionnaire, I was concerned that the students might not want to criticise their former teachers or give honest information concerning their own perceptions of the quality of the English they had been taught at school. I was also not sure whether their perceptions of their own abilities in English would be inflated. I was, however, encouraged by their openness and willingness to give personal information and well-founded opinions about their own experiences with English as a language of learning and communication. Therefore, I am confident that the subsequent data collected in this study, by means of the questionnaire, could be reliably converted into descriptive information and used to shed light on the socio-linguistic background of the participants (§ 4.1).

In the final part of the questionnaire, respondents were required to write about their personal experiences of English. These data supplied ethnographic information and gave an indication of how the respondents perceived themselves as functioning in an L2 academic environment.

I was aware of Tuckman's (1999:118) warning against instrumentation bias or a latent influence that may disturb the analysis of the data (Collins, 1999:138). Respondents may become more experienced as the experiment proceeds. They may inadvertently provide cues which could influence the data collected. As I used a single questionnaire and only I was responsible for collecting the data, the danger of instrumentation bias was minimised as far as possible. Since the wording in the questionnaire was straightforward, it also prevented differing interpretations of questions. I further attempted to formulate the questions in such a way that only specific information about the respondents' experiences of English as a language of instruction and communication was required. When I constructed the questionnaire I also aimed at avoiding ambiguous questions.

The open-ended questions required the respondents to give their own opinions about certain aspects of their experience of English L2 learning, for example: "*How do you regard the quality of English spoken by your English teacher?*" I am aware that, although open responses place a minimum restraint on answering questionnaire items, they are much more difficult to analyse (Wolfaardt, 2001:166). I interpreted most of these items qualitatively as part of the descriptive analysis of the data. Since the questionnaire was conducted anonymously, the threat of revealing incriminating information did not exist and not one of the students indicated an unwillingness to make critical statements.

3.3.4. Intervention

The intervention consisted of an eight-week programme commencing directly after the pre-test was written. The participants in the experimental group were trained in the recognition and interpretation of discourse markers used in academic content lectures. The

programme consisted of eight previously prepared academic lectures based on the content of the UCA course at the Language Centre at UNAM (see Appendix C).

Although students were introduced to both micro- and macro-markers, I focused more specifically on making them aware of the role of macro-markers such as “*To begin with ...*” ; “*On the other hand ...*”; “*To sum up... .*” These seem to be the road signs indicating the direction a lecturer is taking in a specific lecture (see Appendix C). Macro-markers signal the information structure of discourse, as they emphasise directions and relations within discourse (Cook, 1975, as cited in Chaudron and Richards, 1986:114). Micro-markers, on the other hand, indicate transitions and emphasis of salient information at sentential level. Therefore, incorporating discourse markers in the lecture text taught the participants to interpret a stretch of text according to a particular frame of reference by means of macro-markers or by forming a mental model by means of micro-markers.

I will discuss the research procedure employed in this study next.

3.4. Research procedure

My study was outcome-oriented. I identified a possible problem area that ESL students experienced at an English medium university and devised an intervention programme as remedy. I carefully planned and structured the research design before the experiment commenced. I did not make drastic changes to the original design during the study. I collected *hard* and replicable data which were mostly numerical and thus statistically interpretable (Nunan, 1998:4).

3.4.1. The pre-test/post-test

Although the lecture was prepared in writing in advance, I took great care to record it as a spoken lecture and not simply read it to the students. I did this as it has been claimed that written lectures read to students are much more difficult to process than written material read from a text book (Flowerdew and Tauroza, 1995:442).

In the preparation of the test setting, extraneous, confounding variables such as background noise which might have had an influence on the results, were identified and eliminated. I played the video-taped lecture to the experimental and control groups in the same venue and at the same time of day but on different days. Due to space constraints and the relatively small size and low volume of the television set, it was not practical to have both the experimental and control groups take the test at the same time. I did, however, attempt to keep all the environmental and situational variables as similar as possible.

As the aim was to test the listening comprehension of the students, the presenter of the lecture remained seated throughout the recording and very few non-verbal cues were used. I attempted to minimise gestures and conducted the lecture in the formal lecture style which can be defined as “formal register and close to spoken prose” (Morrison, 1974 as cited in Dudley-Evans and Johns, 1979:31).

In the pre- and post-intervention tests I maintained an objective approach to data collection. I identified participants only by student numbers and remained distant from them as individuals. I subscribed to the so-called “outsider perspective.” In line with this, I used no field workers and employed a strictly objective approach throughout the study (Seliger and Shohamy, 1989:27).

3.4.2. The intervention programme

One week after the pre-test the experimental group started the intervention programme which consisted of eight lecture sessions: one per week during the normal course of the UCA programme. The duration of each session was forty-five minutes. The first lecture consisted of an interactive discussion of listening as a construct. This introductory lecture was used to raise students’ awareness of the different listening situations and the different skills needed to become successful listeners in differing listening environments. At the end

of the lecture I requested the students to complete the questionnaire that was designed for this study.

The second lecture covered one of the aspects in the UCA course, namely authentic academic lectures and listening comprehension in content lectures. I conducted this lecture in formal academic lecture style, introducing the lecture style that I would employ during the intervention programme.

Six lecture sessions followed. Each one consisted of an audio-taped lecture in which further subject content of the UCA course on academic conventions was employed. I started each lecture by briefly mentioning and discussing the particular discourse markers used in that specific lecture. I sensitised students to the existence and function of discourse markers in as far as they contribute to the macro-structure of the lecture. I also pointed out that macro-markers can indicate points of departure from a current point of view as well as focus on important, note-worthy information conveyed in the lecture (see Appendix C).

At the end of the introductory phase of the lecture, I gave the students a task which was designed to direct the listening process and also to assess their recall of the lecture content, for example:

At the end of this lecture you will have to explain the contents to another student who could not attend and who asked you to make notes for him/her.

After each lecture I allowed the students fifteen minutes to complete the set task by using the notes they had taken during the lecture.

I tape-recorded the lectures beforehand and then played the recordings to them in the language laboratory. The rationale behind audio-taped lectures was that the students should not be influenced by any other variables such as gestures and body language. The lectures inevitably conveyed aspects of intonation and emphasis prevalent in normal speech. Audio-recorded lectures, however, had the advantage that students who had

missed a particular session could attend exactly the same lecture content in their own time. The use of audio-taped lectures had an added advantage as it contributed to the replicability of this study.

During the intervention sessions which took place on the same day each week in the same time slot, I attempted to keep all the physical conditions as similar as possible. Two weeks after the intervention programme had been completed both the experimental and the control groups wrote the post-intervention test and these results were qualitatively analysed.

3.4.3. Data analysis of questionnaire items

The data collected from the questionnaire supplied quantifiable as well as qualitative information. The first section of the questionnaire comprised the subjects' student numbers for further data collection purposes. I determined their fields of study to ensure validity when compiling the sampled experimental and control groups (see Table 3.1). I analysed the data concerning the different areas in which the participants completed their school careers and presented the results in Chapter Four (see Figure 4.1).

The second section was concerned with the respondents' previous contact with English as a language of communication and instruction. I wanted to form a holistic picture of the English background of the student population of UNAM as represented by the fifty-four students taking part in this experimental study. The information was thus gathered collectively. The subsequent data were descriptively analysed and are presented by means of graphs and interpreted in Chapter Four.

The last section of the questionnaire was designed to provide an insight into the participants' own perceptions of the quality of their contact with English as a language of learning. This information revealed not only their opinions about the quality of English they had been in contact with but also their perceptions of how they functioned in an English academic environment. I regarded it as important to collect these data since I initially

assumed that aspects such as amotivation and demotivation (Vandergriff, 2005:72) might have an influence on the low listening comprehension levels of students.

The data obtained in this part of the questionnaire were inductively analysed. I was led by patterns as they emerged from the data, as I did not impose specific categories on the data beforehand. After collection I categorised and ordered the data and qualitatively assessed their trustworthiness to refine my understanding of the emerging patterns. It allowed me to synthesise the concepts that emerged (MacMillan and Schuhmacher, 1993:481). These findings will be dealt with in detail in Chapter Four.

3.4.4. Data analysis of the test instrument

The test designed for this experiment consisted of twenty questions and each correct answer was awarded one mark. The participants' scores were calculated. I compared the means of the experimental and the control groups' performances in the pre- and post-tests to determine whether there was a significant improvement in the test scores.

I will next describe the methods and tests employed in the statistical analysis of the data collected.

3.5. Statistical analysis

Paired-sample t-tests as well as independent t-tests were conducted. F-tests were also conducted to analyse variances. Descriptive analysis was employed in the questionnaires.

3.5.1. The F- test and the t-tests

In analysing the data collected I made use of t-tests to compare the results of two groups. Before employing t-tests, F-tests were used to establish whether the variances were equal and to determine which of the t-tests (equal variances assumed – equal variances not assumed) were to be used (Fox, 1969:300). Variance of a set of scores on a test indicates

how much the scores obtained differ from the mean (Richards et al., 1997:397). As equal variances were assumed in the pre-test, an independent t-test was employed to assess whether the scores in each of the test sections differed significantly from that of the control group of participants.

After the intervention programme a paired-sample t-test was used to determine whether the means of the pre-test differed significantly from the post-test for each group. I used the paired-sample t-test as the same groups of participants were tested twice by means of one test only. The marks obtained were not independent, since it is inevitable that the participants would recall some of the lecture content from the pre-test when doing the post-test.

3.5.2. Significance testing

The probability or stability of the degree of variance of results between groups was used to determine whether the differences were significant or not. This is known as the confidence or significance levels at which the null hypothesis is rejected. At a value between one and five the null hypothesis is rejected. The significance level is 5% or below and it is written as $p < 0.05$. This value indicates that there is a probability (p score) of less than 5% and that the difference is due to chance. If a significance level of 10% ($p < 0.01$) is used, there is a 10% probability that the differences obtained are due to chance. I used a significance level of $p < 0.05$; therefore, I could determine that there was a 95% probability that the results were due to the intervention programme employed as part of the experiment (Tuckman, 1999).

3.5.3. Descriptive analysis

The majority of the items in the questionnaire were measured by means of descriptive statistics. Most of the quantifiable data collected were rated by means of the Likert or equal-appearing interval scale which makes use of a three/five/seven point scale on which respondents rate their answer to the statement made in the questionnaire (Tuckmann,

1999:192). Respondents can, furthermore, relate to terms other than *agree* or *disagree*. Data rated on the Likert scale also provide descriptive information which can be manipulated in even more complex ways (Anderson and Arsenault, 2001:174). Since descriptive statistics do no more than reflect the nature of the data and do not in themselves determine outcomes of a study, their interest lies mainly in the fact that inferences about them can be made (Fox, 1969:168).

3.6. Conclusion

This study was specifically designed to test whether the recognition and interpretation of discourse markers would enhance students' listening comprehension in academic lectures. The video-recorded lecture was compiled from academic content material which was new to the participants and, therefore, just above their existing level of knowledge (§ 2.2.2).

During the intervention period the objectives of the study were constantly kept in mind to ensure that the students in the experimental group would be alerted to the presence of discourse markers in lecture texts and would be able to interpret their function in the lecture context. The questionnaire enabled me to form a holistic impression of the participants and thus interpret the statistical results of the study more meaningfully.

The findings of the study will be presented and discussed in the next chapter.

CHAPTER FOUR

FINDINGS

4. Introduction

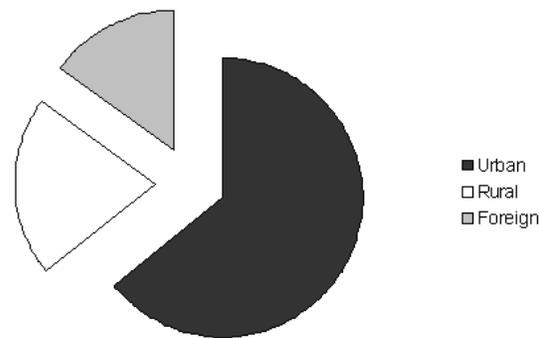
This chapter deals with the findings of the study. The hypotheses are presented and explained and the results are discussed and interpreted in terms of these hypotheses.

4.1. Findings: the questionnaire

I gathered both quantifiable and qualitative data from participants by means of a questionnaire (see Appendix A). This student questionnaire became a rich source of background data. Firstly, it gave an insight into the participants' own attitudes towards English. Secondly, it established their experience with English as a language of instruction and communication before they came to UNAM. It further provided information about the physical area in which they had completed their school careers.

A large number of UNAM students come from remote rural areas where they are still isolated from many of the technological and educational advantages that are available in urban areas. To a large extent, English is still an FL for most of the population in these rural areas. When compared to students from urban areas, students from rural areas are usually assumed to be disadvantaged in English as a medium of learning and their weak performances are often automatically attributed to deprived educational backgrounds.

Figure 4.1: Area of schooling



Twenty percent of the students in this study were from the rural areas and fifteen percent were foreigners. Sixty-five percent came from urban areas in Namibia. This implied that they came from better resourced schools. However, the pre-test results of my study indicated that the listening skills of most of the participants did not allow them to comprehend the information presented in the lecture effectively, regardless of their secondary education (see Table 3.2). Initially the pre-test adhered to the audio-visual approach in which I used a question and answer approach. In other words, I subscribed to the most commonly held approach that students *listen to learn*. The scores in this pre-test showed that the students did not derive sufficient content information from the spoken text (see Table 4.1).

From the qualitative data in the questionnaire I found that many of the respondents felt that their experience with English as a subject was very positive and that the teachers encouraged them to read English and to use English as much as possible. Some described a very positive contact with English at school as it played a significant role in their general school life. Some of them said that their teachers did not constitute a problem as far as English was concerned but that they found that the English they used to communicate with their friends was not very good.

The participants had a very positive attitude towards English. Some of the students even described English as “classy” and said that they were proud of being able to speak and communicate in English “like white actors.” One student even went as far as to describe the fact that s/he could use English well as “a dream come true.” In general the respondents

rated their own proficiency in English as good. They all indicated that they liked talking in English. One of them said that “English has become part of how I think and listen.” Another student wrote that s/he had neglected English in the past but wanted to improve, “if I am to succeed in life.”

4.1.1. Contact with English as a language of instruction

The experimental and control groups in my study were largely homogenous as far as exposure to English as a language of instruction was concerned.

The qualitative data from the questionnaire indicated that the respondents, in general, regarded the quality of the English they had been exposed to at school as fairly good to good and that most of them had had adequate contact with English to ensure the necessary proficiency level for tertiary studies (§ 2.2.6). It was, therefore, surprising that the mean scores in the pre-test for both groups were below 40%.

Table 4.1: Students’ own perceptions of their abilities to understand English lectures.

	No	LIKERT RATING			
		Poor	Moderate	Good	Very good
Experimental group	27	1	6	15	6
Percentage		1.9	11.3	26.3	11.3
Control group	27	1	7	15	6
Percentage		1.9	12.9	26.3	11.3

The information derived from the questionnaire indicated that 52.8% of respondents maintained that their listening comprehension in lectures was good while 24.5% of them indicated that they did not always understand their lecturers very well (see Table 3.4). It appeared that those students who indicated that their listening comprehension was adequate or even good might have had an inflated opinion of their own skills as the scores in the pre-test indicated an overall low listening comprehension compared to most of the participants in the study.

The students participating in the study initially seemed sensitive to the fact that I would use personal information in a relatively public context. I accessed all data only by means of student numbers and assured the participants of the confidentiality of the test results; they were thus appeased and willingly participated in this experimental study.

4.1.2. Use of English in the community

When the data on the use of English in non-educational situations were considered, it was clear that some of the respondents had had fairly limited contact with English as a language of communication. It did, however, appear as if a large number of them communicated fairly regularly in English in social situations. Therefore, although English was a second or even a third language for most of the respondents, it appeared that their contact with English was better than what was normally expected from students coming from rural areas; their proficiency in English as a language of instruction and of communication could thus be regarded as sufficient for tertiary studies at a university where English is the medium of instruction (§ 2.2.6).

Other causes for students' low academic success rate, therefore, had to be explored. I decided to investigate listening comprehension to determine the need for support in this skills area. In the next section I will discuss the research questions and hypotheses that prompted this study.

4.2. Hypotheses

The central question posed was whether students would improve their listening comprehension if they were made aware of the role of discourse markers in authentic lectures. Subsequent questions were:

- would such an awareness-raising benefit students when answering gap-filling questions, multiple-choice questions and inference questions posed on the content information in a lecture?

- would there be a significant difference in the pre- and post-test scores, suggesting that the intervention programme benefited the students' listening comprehension in academic lectures?
- would there be a significant difference in the pre-and post-test results of the experimental and control group, suggesting that the improvement could be ascribed to the intervention programme and not solely to natural maturation?
- would students' listening comprehension be enhanced if they were introduced to the structure of an academic lecture and made aware that the lecture contained discourse markers and of what their roles were?

A general hypothesis was formulated:

H1 – An intervention programme on the role of discourse markers will significantly improve students' listening comprehension.

This was tested as three specific hypotheses.

H2 – An intervention programme on the role of discourse markers will significantly improve students' scores in gap-filling questions.

H3 – An intervention programme on the role of discourse markers will significantly improve students' scores on multiple-choice questions.

H4 – An intervention programme on the role of discourse markers will significantly improve students' scores on inference questions.

4.2.1. H1 – An intervention programme on the role of discourse markers will significantly improve students' listening comprehension.

In order to accept or reject this general hypothesis, the pre- and post-test results of the experimental and control groups of students participating in the study were collected and compared. When the scores of both groups of participants in the pre-test were compared, they indicated no significant difference. The raw scores are included as Appendix D.

Table 4.2: Group means for the different sections in the pre-test

	Group	No	Mean	Std. Dev.
Gap-filling questions: pre-test	Exp.	27	34.44	16.95
	Control	27	32.96	17.72
Multiple-choice questions: pre-test	Exp.	27	54.52	26.85
	Control	27	51.89	25.70
Inference questions: pre-test	Exp.	27	34.52	25.43
	Control	27	25.81	29.72

At this stage of the experiment both groups of participants were attending the same lecture and it appeared as if they derived the same amount of information from the text. Therefore, it can be assumed that they both started from the same level of proficiency and that the sample of students used in this study represented the listening comprehension profile of UNAM students in general.

The scores for the two groups in the post-test revealed a different picture. To establish whether there was a significant improvement in the achievements of the two groups in the post-test, an F-test was first conducted to determine which t-test should be employed (§ 3.5.1). The results of the F-test ($F = 0.009$; $p = 0.926 > 0.001$) indicated that the variances were equal and an independent t-test (variances equal assumed) was employed (§ 3.5.1). The independent t test investigated both test scores of the students in the one group and compared them with those of the students in the other group.

Table 4.3: Independent samples test for post-test/pre-test improvement

	Equality of Variances		t-test for Equality of means			
	F	Sig.	t	df	Sig.(2-tailed)	Mean Diff
Pre-test	0.009	0.926	0.351	52	0.727	1.48
Post-test	0.106	0.747	4.137	52	0.000*	21.11
Improvement	0.008	0.931	6.461	52	0.000*	19.6296

* $p < 0.001$

The two-tailed test measured whether there was any difference between the scores of the two groups at both test levels. This test was used as opposed to a one-tailed test, as I did not know whether one group would achieve a higher score than the other. The appropriate null hypothesis would have indicated that there was no difference between the scores of the two groups. The alternative or general hypothesis, however, was that there was a difference but without indicating which group performed better.

At the pre-test level the experimental and control groups did not differ significantly as the independent samples t-test indicated $t = 0.351$ ($p = 0.747$; thus $p > 0.05$). At the post-test level, however, the experimental and control groups differed significantly as the independent samples t-test indicated $t = 4.137$ ($p = 0.000$, thus $p < 0.05$). The improvement in the post-test showed $t = 0.931$ ($p < 0.001$). Because the groups did not differ significantly at the pre-test level, it seemed unlikely that the improvement of the experimental group was by chance. My general hypothesis was thus confirmed. In other words, as the intervention programme constituted the only difference in the treatment of the two groups, it could be assumed that the awareness-raising of the role of discourse markers was responsible for the significant improvement of the experimental group's listening comprehension as measured by the pre-test/post-test design of my study.

To further assess whether the improvement within groups in listening comprehension was significant, paired samples t-tests (§ 3.5.1) were done on the scores of both groups at the post-test level. The paired samples test compared the performances of each student in both tests to establish if there was any improvement in the post-test.

Table 4.4: Paired samples test for post-test/pre-test improvement

	Paired difference		
	Mean	t	Sig. (2-tailed)
Experimental group	18.333	8.211	0.001
Control group	-1.2963	0.629	0.535

These paired samples tests indicated that the improvement in the post-test within the experimental group was significant ($p = 0.001$, thus $p < 0.05$) and that the control group's improvement was *not* significant ($p = 0.535$, thus $p > 0.05$). Since the construction of both the sample groups was very similar and their performances in the pre-test also gave similar scores, the fact that there was improvement in the scores of only the experimental group could not be ascribed to maturation. Maturation refers to changes such as physical growth and mastering developmental skills which may affect experimental results that occur over time within subjects (Collins, 1999:911). The improvement in the post-test scores could rather be ascribed to extrinsic factors such as attending the intervention programme. Even over a relatively short period of time students seemed to have benefited from the intervention programme directed at improving their listening comprehension at tertiary level.

The post-test scores of the experimental group showed consistent improvement in the three different sections of the tests. It could, therefore, be inferred that they were able to derive more information from the lecture post-intervention than at pre-test level. The control group of students showed some improvement in only the gap-filling section of the test, thus reinforcing the assumption that the intervention programme in awareness-raising of the role of discourse markers was in some way responsible for the improvement of the experimental group's results.

The raw scores in the different sections of the pre- and post-tests for both the research and control groups are included as Appendix E.

4.2.2. H2 – An intervention programme on the role of discourse markers will significantly improve students' scores on a gap-filling test.

The general hypothesis was tested in terms of three specific hypotheses. H2 as the first of these three hypotheses will be discussed in this section.

The first section of the pre-test comprised ten gap-filling questions directly related to specific discourse markers used in the lecture text (§ 3.3.2). I decided to use gap-filling questions as test items since they allowed me to gauge the participants' comprehension of the lecture information that was regarded as important (Flowerdew and Tauroza, 1995:445). These discrete items were limited to minimal writing and could provide useful evidence of listener attention and understanding (Rost, 1994:127).

Table 4.5: Group means for gap-filling questions in the pre-test

		Number	Mean	Std. Deviation
Gap-filling questions: pre-test	Experimental	27	34.44	16.95
	Control	27	32.96	17.72

At the pre-test level the group mean of 34.44 for the experimental group in this test section was slightly greater than the 32.96 of the control group but both groups scored low in this section of the pre-test. Gap-filling questions can be regarded as “closed tasks” of “fixed difficulty” (Rost, 1994:124) in contrast to multiple-choice questions where alternative possible answers are provided. The results obtained from calculating the students' scores in this section could therefore be regarded as reliable.

Table 4.6: Independent samples test for the gap-filling questions section in the pre-test

	t-test for Equality of means		
	T	df	Sig. (2-tailed)
Gap-filling questions: pre-test	0.314	52	0.755* $p > 0.05$

The independent samples test for the gap-filling questions in the first section of the pre-test was $t = 0.314$ ($p = 0.755$; thus $p > 0.05$), indicating that no significant difference existed at this level.

When the results of the post-test were analysed, a different picture emerged.

Table 4.7: Group means for gap-filling questions in the post-test

		Number	Mean	Std. Deviation
Gap-filling questions: post-test	Experimental	27	55.56	21.00
	Control	27	33.70	17.79

The group means in the post-test revealed a more than 20% difference between the scores of the two groups in the gap-filling questions section of the post-test, showing that the two groups achieved significantly different scores in this section.

Table 4.8: Independent samples test for the gap-filling questions section in the post-test

	t-test for Equality of means		
	T	df	Sig. (2-tailed)
Gap-filling questions: post-test	4.125	52	0.000*

* $p \leq 0.001$

At the post-test level the independent samples test scores were 4.125 ($p = 0.001$). There was therefore a highly significant difference in the results of the experimental and control groups in this section of the post-test.

When the test answers were considered individually, the following observations were made. Only one of the participants in the experimental group scored two marks less in this section of the post-test than in the pre-test. This did not have a significant influence on the test scores as all the other participants improved on their initial results. In the intervention programme students were made aware that discourse markers often indicated that important, notable information would follow; it appears that the students therefore were able to recognise exact words and phrases used in the lecture while they were attending to the video recording. According to Ur (1997:67), people remember individual words better if they can link items together in sense units. Discourse markers often define such sense units. Therefore, it can be assumed that the students in the experimental group were aided by their ability to recognise and interpret the discourse markers used in the lecture and link items together, subsequently remembering individual words better.

The results for the control group, on the other hand, indicated a less homogenous performance as only six of the participants improved on their pre-test scores in the post-test and eleven of them attained the same scores as in the pre-test. Nine participants scored less in this section of the post-test than they had in the pre-test. According to Field (2004:369), L2 listeners tend to construct a schema relating to the topic of a listening text and use this to guide their processing of incomplete bottom-up information. It might thus have been that these students altered their version of what they had heard to fit it to preconceived ideas of what the text should cover. The students attending the intervention programme however, appeared to be alerted to relevant content information and were also able to match individual words to known words which were supported by top-down evidence.

As the gap-filling questions section of the test was designed to test the students' auditory recognition of specific words that were used in the lecture, these were directly related to the use of specific discourse markers (§ 3.3.1). I have attempted to show that listening comprehension problems of L2 students should not be attributed only to lack of knowledge of vocabulary but that an incapability to interpret discourse markers played a big role.

The students in the experimental group were more aware of the fact that the lecture was a structured, verbally delivered text; they were able to recognise and recall individual words better than those students who were only relying on the lexico-grammatical content of the lecture (§ 1.2). They were more successful in trans-coding from hearing to writing specific information which was stressed by means of discourse markers in the lecture text (Ur, 1997:113).

4.2.3. H3 – An intervention programme on the role of discourse markers will significantly improve students' scores on multiple-choice questions.

The second section of the test comprised seven multiple-choice questions (§ 3.3.1). The rationale for using multiple-choice questions was that they indicated understanding of a text as they identified propositions in the text. They can further be regarded as selected probes

of text representation which eliminate disturbing and prejudicial material from the items (Rost, 1994:133).

Table 4.9: Group means for multiple-choice questions in the pre-test

		No	Mean	Std. Dev.
Multiple-choice questions: pre-test	Experimental	27	54.52	26.85
	Control	27	51.89	25.70

In this test section of the pre-test the means for the experimental and control groups were 54.52 and 51.89 respectively. These results indicated that at the beginning of the experiment the experimental group achieved a slightly higher average score than the control group. I ascribed this to the fact that there were more students from the rural areas in the experimental group than in the control group. It appeared as if rural students from a mainly teacher-centred schooling background were used to answering multiple-choice questions. However, the difference between the two groups was not significant.

It should be noted that both groups attained mean scores of more than 50% in this section of the pre-test. From the similar performance of the two groups in this section I made the assumption that a similar listening comprehension profile could exist among the student population of UNAM.

Table 4.10: Independent samples test for the multiple-choice questions section of the pre-test.

	t-test for Equality of means		
	T	df	Sig. (2-tailed)
Multiple-choice questions: pre-test	0.368	52	0.715
			$p > 0.05$

The independent samples test for this section of the pre-test showed $t = 0.368$ ($p = 0.715$; thus $p > 0.05$) indicating that the two groups' marks did not differ significantly at the pre-test level. However, when the results in the post-test were analysed, they differed significantly from those in the pre-test.

Table 4.11: Group means for the multiple-choice questions section in the post-test

	Group	No	Mean	Std. Dev.
Multiple-choice questions: post-test	Exp.	27	66.07	26.62
	Control	27	51.93	28.82

The difference in the means of the two groups in the multiple-choice section of the post-test was 14.14. This showed that the experimental group convincingly outperformed the control group in the post-test, a test domain that was cognitively fairly undemanding. This is because possible answers to the questions were provided and students also had the opportunity to guess what the possible answers might be. Furthermore, their performance provided some evidence of selection of strategies during listening. The weaker performance of the control group indicated that they had made inferences based on links between unmatched items from the text and, as a result, had not formed an acceptable representation of the relevant part of the listening task (Rost,1994:135).

Table 4.12: Independent samples test for the multiple-choice questions section in the post-test

	t-test for Equality of means		
	T	df	Sig. (2-tailed)
Multiple-choice questions: post-test	1.874	52	0.067

**p < 0.05*

The independent samples test showed $t = 1.874$ ($p = 0.067 < 0.05$). A significant difference existed between the scores of the experimental and control groups at the post-test level.

Although the initial scores for both groups in the multiple-choice section of the pre-test were quite high, the experimental group showed an increase in the post-test of 11.55% in their mean scores and the control group only 0.04%. As the intervention programme constituted the only difference in the tutoring of these two groups and the answers of the multiple-choice questions were all introduced by means of discourse markers (§ 3.3.1), it seemed clear that the experimental group’s awareness of the role of discourse markers did assist them in deriving content information from the lecture. This enabled them to answer multiple-choice questions more correctly. In my observation during the post-test it seemed

as if the students in the experimental group completed this section in the post-test with confidence and they did not have to resort to guessing correct answers.

When the test scores of the two groups were studied separately, the individual scores of the participants in the two groups reflected completely different profiles. Twenty of the students in the experimental group improved their initial scores. Only four scored less in the post-test than in the pre-test. These latter students had also achieved fairly low marks in the pre-test and could be regarded as below-average students in general. Thus their weak performance might have been due to existing habits of guessing when answering multiple-choice questions. Three participants achieved the same scores as in the pre-test. On the whole, the test-takers in the experimental group showed a healthy progress in their proficiency in answering multiple-choice questions which tested the content of the lecture because they became aware of the role discourse markers play in structuring text.

In many content subjects multiple-choice questions seem to be a favourite test item. The experimental group's improved performance in this section of the post-test, therefore, indicated that they would be better equipped to cope with the demands of multiple-choice questions in content subjects than before they attended the intervention programme.

The analysis of the post-test scores of the individual students in the control group reflected that they had answered the questions in an unstructured way as they gave wrong answers to questions which they had answered correctly in the pre-test. Eight of them improved their test results in this section, while eight scored lower marks in the post-test than in the pre-test. These students were also low achievers in the pre-test. Eleven students attained the same score as in the pre-test. It again indicated their lack of awareness of any structuring of the lecture text as reflected in the chronological order of the questions asked in the test. This most probably contributed to their inability/unpreparedness to persevere in carrying forward representations of the text even if their understanding was flawed or incomplete (Rost, 1994:129). They probably lost interest because they were listening to a stream of discourse and not listening for meaning. An awareness of discourse markers and

the role they play in giving structure to an otherwise uninterrupted non-collaborative stream of discourse could have assisted them in making meaning.

4.2.4. H4 – An intervention programme on the role of discourse markers will significantly improve students’ scores on inference questions.

The questions in this section of the tests were designed to test the students’ ability to draw conclusions from the information they had received when attending the lecture. These questions were thus not related to the use of specific discourse markers in the lecture text.

Initially, the means of the test scores achieved by both groups in the third section of the pre-test, comprising three inference questions, indicated some difference between the experimental and the control group.

Table 4.13: Group means for inference questions in the pre-test

			Mean	Std. Deviation
Inference questions: pre-test	Experimental	27	34.52	25.43
	Control	27	25.81	29.72

The means of the experimental and control groups were 34.52 and 25.81 respectively. As the ability to make inferences when attending to academic texts is regarded as an important skill in tertiary learning, I was concerned about the low average scores of the participants in this section of the pre-test. I was thus particularly interested to establish whether the intervention programme would improve the students’ abilities to make inferences or not.

Table 4.14 Independent samples test for the inference questions section of the pre-test.

	t-test for Equality of means		
	t	df	Sig. (2-tailed)
Inference: post-test	1.156	52	0.253

p > 0.05

In the section containing inference questions the independent samples test showed $t = 1.156$ ($p = 0.253$; thus $p > 0.05$), indicating that the two groups' low scores did not differ significantly at the pre-test level. I thus assumed that this inability to make inferences when listening to an academic lecture would be a problem for other first year students at UNAM as well.

When I compared the mean scores in this section of the post-test for the two groups a significant difference was revealed.

Table 4.15: Group means for the inference questions section in the post-test

	Group	No	Mean	Std. Dev.
Inference questions: post-test	Exp.	27	59.22	29.87
	Control	27	25.48	26.75

The mean scores of the results in the inference questions section of the post-test indicated a difference of 33.34 between the two groups in the post-test, compared to a difference of 8.71 in the pre-test.

Table 4.16: Independent samples test for the inference questions section in the post-test

	t-test for Equality of means		
	t	df	Sig. (2-tailed)
Inference questions: post-test	4.373	52	0.000*

* $p \leq 0.001$

For the inference question section of the post-test the independent samples test further showed that $t = 4.373$ ($p = 0.000$; thus $p \leq 0.001$), indicating that the scores for the two groups differed very significantly at the post-test level.

There was no significant improvement in the scores of the control group of participants. It, therefore, appeared as if no natural development of their listening comprehension skills had occurred. They showed regression rather than progress in their ability to listen critically to the lecture. They were not aware that the discourse markers used by the speaker

signaled that the speaker was giving special attitudinal weight to the utterance. According to Rost (1994: 63), non-understanding in listening refers to the conflict between the type of inferences that the speaker expects the listener to draw from the speaker's utterances and those that the hearer actually draws. A perfect match between the speaker's intended message and the listener's received information cannot ever be made (§ 5.1). Discourse markers however do seem to pave the way to a better match between speaker and listener as "understanding spoken language is essentially an inferential process based on a perception of cues rather than the straightforward matching of sounds" (Rost, 1990:33).

When the scores were scrutinised individually, they revealed that seven participants in the experimental group failed to answer any of the questions in this section of the pre-test correctly. In the post-test only one of the participants failed to answer the questions correctly. Three of the participants further scored lower marks in the post-test than they had in the pre-test. These three students achieved low test scores in the pre-test as well. It might have been that they still found it difficult to use available information to form hypotheses by attending to input or by filling in missing information, despite attending the intervention programme. Two of these students came from urban educational backgrounds. All three of them had been exposed to English for educational purposes for ten years and more. It appeared that their inferencing skills might still have been underdeveloped despite attending the intervention programme.

However, eighteen of the participants in the control group improved their scores on this section of the post-test. It seemed that the intervention programme did benefit most of them. Their newly acquired awareness of the role discourse markers play in structuring spoken text might have enabled them to pay closer attention to what was relevant in the text and thus derive more factual information from the lecture. They seemed to be able to discriminate between what was important and what was less important (§ 2.1). By employing these cognitive tactics they were more successful in constructing the big picture in terms of local cohesion (within the text) and global cohesion (with information outside the text) (Goh, 2002:191).

The picture for the control group of participants, however, looked very different. Twelve of them failed to answer any of the questions correctly in the pre-test as well as in the post-test. Three of the students who originally failed to answer any question correctly did, however, each answer one question correctly in the post-test. Another eight of the participants scored lower in the post-test in this section than they had in the pre-test. It should be noted that three of the students who scored less in this section of the test were foreign students and another two were from rural areas. It can thus be assumed that these students might not know how to draw inferences from academic texts. An intervention programme in listening comprehension could have benefited these students even more than those students who were more proficient in English at the beginning of the experiment.

Only six of the students in the control group managed to improve their scores in this section of the post-test. The overall results of this group thus indicated that they failed to apply a logical system of analysis and synthesis when listening to lectures. It appeared as if they still perceived the lecture as a stream of talk but failed to listen for content information from which they could derive meaning.

I was struck by the lack of consistency in the control group's test performances. The ability to make inferences in academic texts is generally regarded as a major contributor to success in studies at tertiary level; it does, however, pre-suppose the ability to distinguish between lower order and higher order comprehension. The latter relates to inferencing and critical evaluation (§ 5.2.1). It was thus rather disheartening to see that these students were obviously lost in what they probably perceived as a non-collaborative monologue (Rost, 1994:122). It might also have been that these students were more concerned with absorbing information per se than with the speaker's intentions and goals.

If exposure to the lecture situation in the tertiary environment (§ 1.2) was sufficient to develop students' listening comprehension, a degree of improvement could have been expected in the post-test scores of the students in the control group. However, their post-

test scores indicated stagnation rather than natural growth and progress in their academic listening comprehension abilities.

In order to make effective inferences in non-collaborative discourse such as in the academic lecture, listeners may enact various editing strategies to update their representations of the discourse. This includes the sub-skills of recognising indicators of discourse for introducing ideas, changing topics, emphasis, clarification and expansion of points as well as expressing contrary views. Furthermore, they need to be able to predict subsequent parts of the discourse on a conceptual level and identify elements in the discourse that can help in forming schematic organisation (Rost, 1994:137). These sub-skills all assume knowledge of discourse markers as well as the correct interpretation of their roles as signposts of important transition stages in lectures.

It thus seems imperative that students should be supported by means of intervention programmes in lecture listening and that the awareness-raising of the role discourse markers play in structuring oral text should not be underestimated. The participants in the experimental group who were made aware of the role of discourse markers were able to gain a clearer perspective of the lecture as a whole and could arrive at informed interpretations of what had been said.

4.2.5. Summary

The results of both the paired samples and independent t-tests allowed me to come to certain conclusions about the students' performance in the tests designed for this experimental study.

Firstly, at the beginning of the study when I conducted the pre-test with the experimental and control groups, I did not observe any significant differences between the participants' abilities to reproduce content information gleaned from listening to an academic lecture. The students in the two groups scored very similarly in all three sections of the pre-test. Their mean scores were also relatively low, indicating that they were not very successful in

deriving information from the lecture. At the beginning of the study these two groups displayed very similar listening comprehension proficiency levels and it appeared that the listening comprehension difficulties that the students in the sampled groups of my study experienced were not isolated. I could thus assume that the same listening comprehension profile existed in the larger student population of UNAM. This, in turn, contributed to the validity of my study which aimed to address UNAM students' listening comprehension difficulties.

The results of the post-test, however, showed a significant difference between the test scores of the experimental and control groups. In each of the three sections of the test the experimental group improved their initial scores and out-performed the students in the control group. The only difference in the treatment of the two groups was that the experimental group was made aware of the role of discourse markers in spoken text during the intervention programme. It appeared that the intervention programme had a positive effect on the test results of the experimental group of students.

The analysis of the different sections of the test indicated that the awareness-raising programme enabled the students in the experimental group to improve their ability to answer gap-filling, multiple-choice and inference questions. The significant improvement of the students in each of the three test domains indicated that the intervention programme had had beneficial effects on the global listening proficiency of the students (§ 2.2.2) as well as on their abilities to answer the three types of questions in a test on the content of a spoken lecture. The students in the control group showed no significant improvement in their average scores in any of these sections. It can thus be inferred that natural growth and exposure to listening situations need to be supported by awareness-raising programmes such as the one designed for this study.

4.3. Intervention programme

The main objective of this research study was to investigate the effects of a listening programme in which I raised tertiary students' awareness of the role of discourse markers

in academic lectures. I trained them through direct teaching. According to Aarnoutse et al. (1998:118), an important feature of direct instruction is that students learn strategies step-by-step.

The first intervention session consisted of a lecture on listening comprehension as a construct. The participants in the experimental group came to realise that much more is involved in lecture comprehension than what can mostly be regarded as *listening to speech* or informal spoken discourse (Ur, 1997:106). In order to illustrate to the students that their own perceptions about their lecture listening proficiency might have been inflated (see Table 4.3) and that their listening comprehension skills were not adequate to derive content information in lectures, they were given their scores for the first exercise they were asked to do after intervention session three (§ 3.4.2). This exercise was marked out of a possible forty-four correct answers and the scores were then calculated as percentages. Most of the students were shocked by their results. They were actually confident that they had managed to assimilate most of the subject information conveyed in the taped lecture. It was as if they became aware, for the first time, of the fact that their listening skills were inadequate to assimilate information presented in a lecture.

I again gave them their scores for the next task assigned after the second audio-taped lecture – intervention, session four. In this exercise they were asked to write a summary, in note-form, of the content information they derived from the spoken text. This exercise was scored out of a potential sixty marks and calculated as a percentage.

Table 4.17: Group statistics for the third and fourth intervention sessions

Intervention	Participants	Mean
Exercise one	27	49.167
Exercise two	27	70.522

The group statistics indicated a significant difference of 21.5% between the scores in these two exercises. Most of the students showed fair to significant improvement on the first task and it was as if this small success brought home to them the realisation that they needed to

become actively involved in the listening process. They seemed to realise that listening is a skill that can be learnt and therefore became more motivated to improve their listening comprehension in academic situations.

As the intervention programme progressed, the given tasks gradually narrowed down the participants' focus and became more structured and directed. The students were led to focus on specific features when listening to lectures. By anticipating content introduced by discourse markers, the students avoided word recognition problems and processed the input more quickly. They used "real-time assessment of input-strategy" while they were listening in order to assess how important certain parts of the input were. Their decisions directly determined whether these parts were given further attention or not (Goh, 2002:198). As they learned to recognise and interpret the discourse markers used in the lecture text, they could simplify the process of assimilating input into intake. They could thus vary their attention and make the listening process less stressful.

4.4. Conclusion

The statistical tests employed to determine the outcome of the experiment were descriptives, standard deviations and means, t-tests and F-tests. The main findings of my experiment can be set out as follows.

Firstly, the results of the groups differed significantly in the post-test, indicating that the intervention programme had had a constructive effect on the listening comprehension proficiency of the participants in the experimental group. Secondly, the post-test-pre-test improvement reflected a significant difference between the scores of the two groups as the experimental group's scores statistically showed significant improvement but the control group's not. Thirdly, the experimental group improved significantly in each of the three sections of the post-test.

The results in both the pre- and post-tests of the control group in the three different test sections, however, remained very similar. It appeared that these students had not become

“test-wise” (Rost, 1994:133). They did not find the information and the test-item more salient than what they already knew. According to Rost (ibid), such listeners need either more background information or a different orientation to the concept to make it more salient. Such orientation could have been simplified by the effective use of appropriate discourse markers in the lecture text and by making students aware of the role of such markers. Apart from the fact that the experimental group outperformed the control group in the post-test, it is important to note that the students who attended the intervention programme showed improvement in all three sections of the test, most significantly in the inference questions section. From this data it can be deduced that first year students at a tertiary institution respond positively to intervention programmes similar to the one I designed on the role of discourse markers.

In the Namibian situation where only a very small number of students at an English medium university are English L1 speakers it is strongly advisable that academic listening comprehension in English should receive a great deal of support. Lecturers should furthermore be made aware of the contribution they could make by simplifying their academic lectures through the use of discourse markers which indicate the structure of content lectures.

In the next chapter the implications of the study and its contribution to SLA research will be discussed.

CHAPTER FIVE

CONCLUSION

5. Introduction

This chapter consists of an overview of the study concerning the role discourse markers play in listening comprehension. It describes the contribution of the study to SLA research and to the current understanding of the factors that influence effective listening in academic lectures. It further reports on the findings in the light of the research problems explained in Chapter One and makes recommendations for further research into listening comprehension in academic lectures.

5.1. Review

Students' listening comprehension of academic lecture content, however well it is processed and encoded in notes, will be influenced by the clarity of the structure and presentation of the lecture (Chaudron et al., 1994:77). If it is the case that spoken academic discourse is composed of differing structural strands in addition to content and exemplification phases (Young, 1994:173), then this is what students need to be taught. Foreign students, particularly those from non-Western backgrounds, may differ widely in background and their schemata may differ accordingly; thus, they need to know how to determine the macro-structure of a lecture to improve their listening comprehension in academic lectures.

5.1.1. Summary of major findings

It was clear from information provided in the questionnaire which formed part of the study that students' low success rate at UNAM could not be attributed solely to their disadvantaged past (§ 4.1) as most of the students who took part in this experiment came

from urban areas where teaching was of better resourced. The students further seemed to know English well in its written form as they appeared to be proficient in reading and writing English texts. This knowledge did not seem to assist them in the listening process since the auditory recognition skills involved in listening decoding are clearly different from the visual recognition skills required for reading (Rost, 1994:10). The low scores in the pre-test initially came as a surprise as it was expected that the students from urban areas should be proficient listeners. It was clear that students could not rely only on their general proficiency in English to derive content information in the lecture. They needed the ability to access those mechanisms which made the spoken lecture an interpretable unit of talk.

The results in the pre-test indicated that the majority of the participants in the study initially lacked both global and local listening strategies associated with deriving content information from lectures (§ 2.2.1). The means for both groups in the gap-filling questions were below 40%. This indicated a lack of local listening strategies which help students understand that one clause or phrase is connected to a preceding one and to make sense of the discourse at sentential level. The very low mean scores of both groups in the inference questions section of the pre-test indicated a lack in global listening strategies by which the relationship between the major ideas and the overall structure of the discourse could be recognised. It appeared that, quite apart from the question of L2 proficiency, students' expectations of discourse development contributed very substantially to the difficulties they faced in interpreting unexpected moves in more elaborate lecture discourse.

The findings in my study seemed to correspond to those of Khuwaleih (1999). She found that students' failure was due to a lack of understanding academic lectures rather than to an inability to comprehend the subject content conveyed in the lectures (§ 2.1).

The agreement across the three different measures of comprehension of participants made me confident that as predicted in my general hypothesis students comprehend a lecture better when they are aware of discourse markers and the role they play in structuring lecture text. The positive effect of the intervention programme is clearly

demonstrated by the experimental group of students' significant improvement in all three sections of the test. The most significant improvement was in section three which dealt with inference questions. It appeared that the students had become aware of the content of the lecture and made successful use of this knowledge to facilitate recall of content information (§ 2.2.6). They seemed to have understood top-level structuring which implies that component structures of a discourse passage are hierarchically related from top-level units or "bits of meaningful information" (Bartlett, 1978:7) to increasingly subordinate units at a lower level. Therefore, their interpretation of the content and their subsequently improved performance in the inference questions indicated an awareness that a spoken text is a semantic unit relating as a whole to the environment in which it is placed (§ 2.3).

It is thus clear that the importance of listening cannot be underestimated and it should not be treated trivially in second and foreign language curricula. It should also not receive cavalier treatment from SLA researchers (Dunkel, 1991:438). Listening research should be fostered to advance the state of SLA theory building and to expand the knowledge base about the process of L2 listening comprehension.

The implications of the findings of my study will now be discussed.

5.2. The implications of the findings

In this study my findings on the role discourse markers play in academic lectures correspond with those of Chaudron and Richards (1986). Discourse markers, especially macro-markers which are the highest order markers signalling major transitions and emphasis in a spoken academic lecture, were conducive to successful recall.

Therefore, the outcomes of the study suggested that students entering a tertiary institution could benefit from language training programmes. Those students who attended the intervention programme showed significant improvement on the post-test (see Table 4.5). It seemed clear that the participants in the intervention programme had learned how to listen, instead of just listened to learn (§ 2.2.5). In other words, instead of striving for

“correct comprehension” to indicate understanding of the utterances they had heard, they showed increased capacity to interpret and respond to language events (Rost, 1994:155).

In the light of the theory of information-processing and top-down comprehension (§ 2.2.6) my findings that macro discourse markers led to better comprehension of text material should not be surprising. The participants in the experimental group were evidently aided by the lecturer’s signals of major segments and emphasis in organising the major ideas in the lecture. Macro-markers explicitly expressed the planning of the lecture information and the lecturer, presenting the lecture, devoted some attention to the phrasing and the particular placement of the markers. The anticipation and processing by the listeners thus followed accordingly. They seemed to have learnt that they could disregard minor pause fillers and rather make use of the time to process significant parts of the lecture text.

5.2.1. Testing listening comprehension as a construct

Listening comprehension as a construct is notoriously difficult to define and assess. Rost (1990:7) points out that

although some models of verbal understanding have been attempted, they are for the most part broad descriptions of linguistic and pragmatic competence or narrow descriptions of verbal processes.

Under the present *comprehension approach*, success in listening is in effect measured by correct responses to questions and tasks. Thus it focuses on product rather than on the listening process itself (Field, 1998:11). When a listener supplies the correct answer, there is no indication of how that answer has been arrived at. It seems unlikely that an exact match is ever achieved between intention and interpretation in listening comprehension. The listener would also probably not know if such a match had occurred. Listening comprehension is, therefore, never complete; it is always only approximate and relative to the purpose (Widdowson, 1990, as cited in Celce-Murcia 2001:366).

In an academic lecture situation, listening comprehension is not measured by correct responses as a listening outcome may be something intangible such as a shift in attitude or mental representation (Rost, 1994:168). Students should however be confident that what has been said by the lecturer has also been heard and understood by them. In my study it appeared that the ability to interpret discourse markers employed by the lecturer enabled the students to form a global impression of the text as well as determine different stages of transition and emphasis, as was indicated by discourse markers. When the scores in the gap-filling questions section in the pre- and post-test in my study were compared, the students in the experimental group matched their answers to the questions more correctly in the post-test than in the pre-test. These listeners appeared to be able to use information they had successfully parsed from the lecture because they understood the lecturer's intended meaning (Goh, 2000:67).

Furthermore, the relatively low profile of listening assessment reflects the inherent difficulties involved in describing and assessing an "invisible cognitive operation" (Brindley, 1998:171). It is also difficult to distinguish between the lower order of comprehension which relates to the understanding of utterances at a literal level and the higher order of understanding which relates to inferencing and critical evaluation (§ 2.2.6). In my study I opted for a diagnostic approach. I assumed that students failed to understand or correctly interpret the structure of the lecture; therefore, they failed to extract sufficient content information at a literal level as well as higher order information from the lecture to enable them to achieve success in examinations. My intervention programme was designed to facilitate improved listening comprehension in academic lectures by providing students with a skill to define the structure of a lecture when paying attention to the discourse markers used by the lecturer. The very significant improvement of the experimental group in the post-test, as far as inference questions were concerned (§ 4.3.4), indicated that these students found it much easier after the intervention programme to extract information of a higher order and to employ critical thinking skills than they had before.

Students who were supported by means of the intervention programme fared much better than those students who were left to their own devices. The former group had more

success in selecting and interpreting information from auditory cues in order to determine what the speaker meant (§ 2.2.1). The students furthermore appeared to have made better use of the short processing time available in the listening process because they had made greater use of semantic cohesive devices such as discourse markers in the monologic, complex lecture text (§ 2.3.1).

5.2.2. Discourse markers and independent learning

During the pre-test I observed that hardly any of the participants took notes in any form. They appeared to be passive listeners (§ 2.2.1). Qualitative data from the questionnaire indicated that the participants in the study all felt comfortable with English as a language of instruction. Their failure to take notes could not, therefore, be ascribed to what Mendelsohn (2002:67) sees as possible reasons, namely their sense of unworthiness and insecurity causing them to lose enthusiasm and become frustrated. I would attribute this observed indifference during the lecture to the fact that they had not previously been made aware of what listening to academic lectures entailed or how to deduce information from an oral presentation.

I further concluded that although their proficiency in English was adequate and they came from urban environments (see Figure 4.1), these students were not independent learners. They appeared to lack the ability to construct meaning based on multi-dimensional relationships between themselves as well as all the elements involved in their own reality (§ 2.2.6). This includes cognitive and meta-cognitive knowledge. According to Rost (1994:133), the primary difficulty in L2 listening is developmental (§ 2.4). It thus appeared that they had as yet not reached the Piagetian cognitive stage of formal operations deemed necessary for successful tertiary studies (Mamweenda, 1996:267). One of the characteristics of this stage is that the individual should have acquired the ability to be effective; that is, to act on his or her world and produce results. Furthermore, the individual should also be able to make use of predictions and generate hypotheses to enhance comprehension (Hendrick, 1990:442).

Very early on in the intervention programme the participating students did seem to realise that note-taking in a lecture was a complex and demanding task (§ 4.5). It required them to be able to comprehend the lecturer's stream of speech, separate important from less important information, provide a logical framework for this information and write down the information in its logical framework using the target language (Kaplan-Dolgoy, 1998:31).

The intervention programme in this study thus focused on training the students to notice when and how lecturers use discourse markers or "verbal signposting" (King, 1994:223) in their lecture texts. When the scores of the experimental group of students in the multiple-choice questions section of the post-test were compared to those in the pre-test, it was clear that they were much better equipped to extract factual information from the text than before the intervention programme. The findings in my study thus correspond with those of Chaudron and Richards (1986) and Flowerdew and Tauroza (1995), namely that there was a consistent result that macro-markers were conducive to recall of subject content in academic lectures (§ 2.3.2.2).

5.3. Contributions to SLA theory and research

It is naïve for a researcher to remain fixated on the politically tainted cliché that the low academic success of post-colonial black students can be directly linked to an educationally disadvantaged past. Although this aspect cannot be rejected completely, the low rate of academic success at tertiary level should be seen holistically as comprising several aspects such as linguistic, socio-cultural, meta-cognitive and cognitive factors. A need to establish Language Centres at universities, to serve as service centres for both the student and lecturer population, has been identified. This is an indication that students, no matter what their ethnic origin or background, need to be supported in acquiring skills and strategies which will enable them to become successful scholars.

I agree with Field (1998) that spending time on helping students tackle their listening problems is an important part of teaching listening. It is crucial that course designers include practice activities in their course design to help students overcome or cope with

listening comprehension difficulties. Students may then have better control over their listening comprehension. The outcome of my study clearly shows the benefits of an awareness-raising programme and accompanying practice activities.

However, in dealing with students' listening comprehension difficulties, much depends on the specific programme and how it is run (Cohen, 1998:91) and sustained. Furthermore, an ongoing evaluation and revision of the programme is necessary to ensure its success (Cohen, 1998:95). Students also need to be involved in their own learning processes to create an awareness of what is needed to become successful, independent learners at tertiary level. When the students exposed to the intervention programme were confronted with their low scores in the first audio-taped lecture, they realised for the first time that their listening skills were not adequate in deriving content information from spoken text (§ 4.6). Their motivation to improve their listening competence was proved by their involvement and cooperation in the rest of the programme.

The qualitative information derived from the questionnaires further showed that, although these UNAM students were aware that the level of competence in English they had brought to university might not be adequate for academic studies, they themselves did not see it as an insurmountable obstacle to their academic progress. They did, however, realise the importance of academic proficiency in English as a foundation for effective tertiary studies. It would thus be productive if a paradigm shift in listening instruction courses could be effected towards lecture-listening instruction. Listening as a construct, as well as the demands made on the listener in lecture listening, needs specific attention in English language curricula. To ensure that school leavers intending to pursue tertiary studies are able to derive optimum cognitive benefits from academic lectures, they should be supported by means of awareness-raising programmes to enhance their listening comprehension when they enter university.

These concerns are extremely important in educational systems such as those in Namibia and South Africa where large numbers of ESL students come into the university to be educated through the medium of English. They may neither have high levels of academic

English proficiency nor the necessary cognitive maturity to cope with synthesising content information from lectures. The onus therefore rests on the lecturers, both those in supportive language programmes as well as those in other disciplines, to facilitate the listening process in academic lectures for students. After all, the lecture remains the main mode of conveying subject-specific information at tertiary institutions.

5.4. Recommendations

Lecturers, not only at UNAM but also internationally, have found that students do not seem to glean enough subject information from their lectures (Carrier, 1999; Field, 2003; Goh, 2000; Mendelsohn, 2002; Vandergriff, 2004). Listening is more than an auditive activity. Since it is also a cognitive activity, it needs to be taught as early as school level, if comprehensive tertiary studies are anticipated (Retief, 1995:13). Listening instruction should assist students to develop the listening comprehension they may need for studies, work as well as socialising and to use listening skills to determine attitudes, assimilate information and formulate opinions (Retief, 1995:23).

Listening comprehension research, furthermore, needs to be focused on possible supporting programmes that will allow students to become selective, effective and active listeners in academic situations. At the UNAM Language Centre listening comprehension in academic lectures has as yet not been regarded as an individual skills area that requires specific training. In the light of the outcomes of my study it seems clear that listening to academic lectures as a skills area should be addressed at UNAM if the Language Centre intends to support students in becoming independent learners at tertiary level.

First of all, academic staff need to move away from assumptions that “because students can hear, they can listen” (§ 1.3) and that the main problem for students lies in the difficult content conveyed in lectures (§ 2.2.5.). I made use of a lecture topic that was unfamiliar to the students (§ 3.4.2). The pre- and post-tests were conducted with both the experimental and control groups. The fact that only the experimental group showed improvement at the end of the experiment can thus not be ascribed to students’ familiarity with the topic or

their natural ability to hear. Chiang and Dunkel (1992) found that one of the problem areas in comprehending and retaining English lecture information may be the inability to anticipate discourse markers and logical relationships (§ 2.1).

5.4.1. Listening and discourse markers

It may be beneficial if lecturers could make consistent use of discourse markers – macro-markers in particular – in their lectures. It is however important that discourse markers which commonly occur in conversational-style lectures are featured in EAP listening texts and not those more often associated with written texts, as listening problems can affect L2 students when they are habitually exposed to a model of speech that differs from authentic speech (Brown, 1990, as cited in Flowerdew and Tauroza, 1995:453). This would allow students to establish the structural framework of the text as well as to follow the coherent flow of the discourse. Discourse markers are further considered to have a semantic-pragmatic function and to act as gap-fillers in a stream of discourse (§ 2.5.3). They also provide more processing time to the students and thus greater opportunities for note-taking, allowing them to extract subject information from the lecture more effectively.

An awareness of the role of markers in structuring academic discourse would equip listeners to become actively involved in listening and recalling information in test and examination situations. Khuwaleih (1999:256) has found that “chunking” or discourse markers (§ 2.2) such as “*Finally ...*” and “*On the other hand ...*” was of great importance to students. Her study indicated that when taking notes, the students started another set of notes each time the lecturers used a chunk. “We found that chunks, phrases and body language play a crucial role on students’ comprehension of academic lectures” (1999:259).

Every year a large number of non-native English speakers enter UNAM, an English medium institution of higher learning. Much more research on the effects of an awareness of discourse markers and the role they play in structuring spoken academic texts is needed, as much of the existing research is associated with Western culture. Namibia belongs to a different culture which varies in its classroom discourse and preferences; thus

constituting a different set of variables than that which would be encountered in a First World academic environment. The teacher-centred approach, relying much on rote-learning of the subject content, is still prevalent in a large number of Namibian schools (Wolfaardt, 2001:11). Therefore, if school leavers are expected to be independent learners at university and to employ inferencing skills, they need to be supported in becoming critical listeners. Should they be able to determine the global structure of a lecture and critically interpret the direction a lecturer takes, they will learn to infer meaning and interpret the text rather than just receive and accept unquestioningly what lecturers say.

The presence of discourse markers can make a positive contribution to improved academic listening proficiency as far as comprehension and recall are concerned as they orientate the listener towards the text. Lecturers, who make more consistent use of discourse markers in their lecture texts, will find that students find their lectures easier to follow.

5.4.2. Listening and academic lectures

Another aspect that needs closer scrutiny is the academic content lecture or monologue as it features at tertiary institutions. Traditional materials appear to attribute most of the failure in lecture comprehension to sentence-level linguistic shortcomings such as speech perception, vocabulary and grammar. What characterised the failure of the participants in my study, more than anything else, was their inability to catch the lecture's main points. Thompson (1994:73) says that it is essential to consider how we might help our students to develop the particular skills required to create potentially coherent monologues and to interpret them coherently. He finds that this can be done, at least partially through the use of cohesive devices such as discourse markers.

It may be fruitful to explore how different lecturing techniques can be related to communicative educational goals and how lecturing as a practice may best be supplemented within the academic environment (Allison and Tauroza, 1995:157). In order to enhance effective listening comprehension in students when they attend academic

content lectures, lecturers need first of all to ensure that they speak at a normal speech rate (§ 3.4.1). Lectures should be well-organised, either with outlines on the board or overhead projector or in the form of hand-outs. Lecturers need to be trained to insert many more overt discourse markers that highlight the overall structure of their lectures. They could further increase the amount of redundancy by means of discourse markers indicating consecutive numbers such as “*firstly*”, “*secondly*.” It seems clear that pedagogic texts and course curricula should be revisited in order for lecturers of EAP courses to use materials that contain appropriate types of discourse markers.

Finally, the increased use of linguistic aspects such as discourse markers in lecture discourse can be interpreted as an effect of “personalisation” (Morell, 2004:335) or a short cut of the distance between the lecturer and the students, thus increasing the nearness of the topic to the students’ reality, for example “*As you are probably aware ...* .”

5.4.3. Listening instruction

With respect to listening instruction, enormous changes have taken place over the past fifty years. The Audio-lingual period of “haphazard listening to texts followed by comprehension questions” was succeeded by a strategy-based approach (Mendelsohn, 1998:81) in which students were taught specific listening strategies. In other words, they were taught *how* to listen. An extended period existed in which listening was viewed as a mirror of reading. Recently, according to Flowerdew (1994:6), listening has been seen more and more as a skill in its own right. Proficiency in listening comprehension could thus be improved by means of listening instruction programmes.

When I consider the significant improvement in the listening comprehension of the experimental group compared to the control group, it is clear that listening practice helps students to see the discourse functions of items such as the following:

- cue words and discourse markers which signal what the main and minor parts are;

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- lexical and structural cues that signal a new turn and/or a definition or some other notional construct;
- discourse markers and text segments that serve as higher order organisers;
- words and phrases which can be used to open or close a topic or to ask questions or to interrupt. (Celce-Murcia, 2001:376)

Understanding spoken language is essentially an inferential process based on a perception of cues rather than on a straight-forward matching of sound to meaning (Rost, 1990:33). If the aim is to provide opportunities for the students to acquire micro-skills in listening comprehension, they need to be provided with comprehensible input and purposeful listening tasks which develop comprehension (Richards, 1983:232). Each intervention session in my programme was specifically designed to expose the students to different categories of discourse markers. As they were first made aware of specific discourse markers and what their functions were in the lecture, they were able to recognise these markers in the lecture text as pegs onto which important content information was hung.

Listening skills need not necessarily be the end goal of L2 teaching (Van Niekerk, 1996:58). In the light of the demands of the L1 environment and the sub-skills demanded from a good listener, it appears, however, that it should at least be the point of departure. Progress in listening skills leads students to base their expectations on contextual, semantic cues. As it seems that even L1 listeners are dependent on different discourse markers for effective listening comprehension (Van Niekerk, 1996:59), it is imperative that L2 listeners should be made aware of the contributing role that discourse markers play in effective listening comprehension. If it is the lecturer's objective to teach L2 students to listen like L1 students, these students, especially foreign students who have great difficulty in taking notes (§ 2.3.2.2), must be instructed in the usage and decoding of contextual markers (Van Niekerk, 1996:62).

It appears, from previous research into lecture listening comprehension, that few experimental tests have been carried out to determine in which way discourse markers aid

listening comprehension. However, the importance of structural elements which allow students to make predictions about the spoken message has been stressed by different researchers such as Hendrick (1990), Ridgeway (2000), Thompson (1994), Van Niekerk (1996) and Young (1994). In my study I have attempted to show that a sound knowledge of contextual markers improves students' ability to predict moves and transitions in spoken academic discourse, since it allows them to recognise the discourse framework or meta-structure of the oral presentation.

However, attention focused upon a single component of oral communication and listening comprehension is insufficient. Attention to one area ought to be complemented by attention to others as systematically as possible (Murphy, 1991:67). Each subset of oral communication and listening comprehension needs to be incorporated within any informed curriculum design. According to Noblitt (1995:11), an interactive learning environment can easily incorporate different learning modes. Since native speakers of a language appear to listen more to the speaker's intent than to raw acoustic input, it is important for the L2 students to appreciate how intended meaning is negotiated in another language.

Further research is necessary to test the present findings and to determine whether materials and instruction which exercise students' abilities to recognise and interpret discourse markers in academic content lectures bring about a higher level of listening comprehension.

5.5. Conclusion

It was clear from the quantitative as well as qualitative data that the participants in my study, although English L2 students, were familiar with English. They had been extensively exposed to English not only as a medium of instruction but also as a medium of communication. They all indicated a love for the language and a desire to improve their proficiency. Most of them regarded English proficiency as an important prerequisite of academic and economic success. Apart from these aspects, at the beginning of the study

they failed to glean sufficient information from a spoken text to ensure that they would be successful tertiary students.

This situation changed drastically at post-test level when the experimental group of students outperformed the control group in all three sections of the test. The results of this empirical study have thus shown that a support programme in listening comprehension will enhance students' ability to cope with content information provided in academic lectures. It remains a fact, however, that no amount of meticulous planning, careful delivery or explicit signalling can guarantee the comprehension of an academic lecture. My study should thus be seen as contributing to the description of some of the complexities of listening comprehension as a construct. In the light and nature of the outcome of this study and as an indication of avenues for further research, it would be useful to speculate further on the role of discourse markers in the listening process

Finally, reviews of many studies (Oxford, 1993:206) have shown that deficient listening skills are a stronger factor in college failure than were poor reading skills and low academic aptitude. Therefore, to conclude, I would like to quote Lynch (1994:286)

In a sense, I am arguing for attention to remedy as well as prevention; in addition to trying to "design out" likely causes of comprehension difficulty, we should "design in" mechanisms that will encourage students to seek remedies in the inevitable cases where communication fails or breaks down. Naturally we should continue to run study skills courses that develop NNS [non-native speaker] students' listening skills, but we need also to assist lecturers to cope better with the demands of teaching international classes. Training which emphasizes key points in NS/NNS [native speaker/non-native speaker] communication [...] should pay dividends in making lectures more accessible – and not only for NNS listeners.

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APPENDIX A

QUESTIONNAIRE

Dear Student

In order to research the listening comprehension of lectures by students, I would appreciate it if you would be prepared to assist me by completing the following questionnaire. Please note that your response will be anonymous and all information given will be treated confidentially and exclusively for the purposes of the research study. In order for the study to be relevant, I will appreciate it if you give exact and true information. Thank you very much for your co-operation.

Ms T.C. Smit

UCA: 2005

1. PERSONAL DETAILS:

STUDENT NUMBER:.....

COURSE:.....

Where did you finish your school career? (Make a cross where applicable)

URBAN AREA RURAL AREA OUTSIDE NAMIBIA

1.2 In what language did you write your school leaving examinations?

.....

1.3. Was English a compulsory subject in your school leaving examination? (Cross out the correct answer)

YES NO

2. PROFICIENCY IN ENGLISH

2.1. How many years have you formally studied English:

a. at school?

b. any other English course?

2.2. For approximately how many hours per week were you exposed to English?

a. in the English class (speaking and listening to the teacher and other learners).....

b. in the school environment (in your content classes and during breaks, etc.)

.....

c. in the community (e.g. in the shops, neighbours, etc.)

.....

d. at home (with your parents/relatives, etc.).....

e. over weekends (e.g. watching TV, movies, etc.).....

f. socially (friends, parties, etc.).....

2.3. What contact did you have with English apart from studying at school?

a. how many English books have you read last year?

.....

- b. watching English videos: (Cross out the preferred answer)
 VERY OFTEN OFTEN SELDOM
- c. listening to English radio stations: (Cross out the preferred answer)
 VERY OFTEN OFTEN SELDOM
- d. reading English magazines: (Cross out the preferred answer)
 VERY OFTEN OFTEN SELDOM
- e. reading English newspapers: (Cross out the preferred answer)
 VERY OFTEN OFTEN SELDOM
- f. speaking English to friends: (Cross out the preferred answer)
 VERY OFTEN OFTEN SELDOM
- g. any other (specify and then cross out the preferred answer)
 VERY OFTEN OFTEN SELDOM

3. OWN RATING:

How do you rate your own English proficiency? (Cross out the answer you feel would describe it best)

- a. Your ability to understand spoken English:
 - i. socially?
 EXCELLENT GOOD MODERATE NOT VERY GOOD POOR
 - ii. university lectures?:
 EXCELLENT GOOD MODERATE NOT VERY GOOD POOR
- b. How would you describe the quality of English teaching you received at school?
 EXCELLENT GOOD MODERATE NOT VERY GOOD POOR

3.3 How would you grade your English teacher's ability to use English her/himself?
 EXCELLENT GOOD MODERATE NOT VERY GOOD POOR

4. PERSONAL EXPERIENCE:

4.1 How would you describe your contact with English as a language before you came to UNAM?

.....

4.2. What English related difficulties do you experience in your university studies?

.....

APPENDIX B

LECTURE AND PRE- AND POST TEST

Morning, Ladies and Gentlemen.

Today we are going to look at a few of the central features of the English legal system. At the end of this lecture you should have a rudimentary understanding of the English legal system as well as what is meant with the following:

- Common law
- Equity
- Conflict of variance

First of all, we will look at the English legal system.

The English legal system is centralised through a court structure which is common to the whole country.

It is hierarchical which means that the higher courts and judges have more authority than the lower ones.

The English law is based on the common law tradition.

By this we mean a system of “judge made” law.

This system has continually developed over the years through the decisions of judges in those cases brought before them.

These decisions are called “judicial precedents”.

Please note, the word is spelled *precedent* and should not be confused with the word “president” as it is normally used.

You should keep in mind that common law systems are different from the civil law systems found in Western Europe and Latin America, for example.

In these countries the law has been codified or we can also say “collected together”.

Secondly, English judges have an important role in developing case law as well as stating the meaning of the Acts of Parliament.

The third point I want to make is that the judges are independent of government and the people appearing before them.

This means that the judges do not investigate the cases before them.

They reach a decision based solely on the evidence presented to them by the parties in the dispute.

Note that this process is called the adversarial system of justice.

We can compare it to the inquisitorial procedure – stemming from the word ‘inquire’ – of some of the other European systems.

In these systems the judges have to investigate the cases to collect evidence.

This was then in short the background to the English legal system.

Let’s now look at the concept “Common Law”.

I will briefly point out four characteristics of common law.

1. It is a law which is common to the whole country.
2. It is based on judicial decisions or case law and not on laws made by Parliament, also known as statute law.
3. Common law legal systems are based on precedents while in civil law jurisdictions are based on civil codes.
4. Common law comprises rules developed in common law courts in contrast to the rules developed by the courts of equity.

To explain the concept of common law, we will look at its historical background and the development of common law.

Before roundabout 1066, the English legal system was decentralised and consisted of among others courts, shires and boroughs.

Each of these applied its own legal customary laws.

Usually the Norman kings allowed the different barons who were ruling over each region to run that region's court.

The barons could also take the office of the sheriff and then run the administration of the shire – this word means “rural district” like for instance Omusati which runs its own courts.

Many barons were doing this and thus became very powerful.

In the late 1100s, King Henry II who ruled from 1154 – 1189 feared that these barons would become too powerful and threaten his own power.

He, therefore, implemented a strategy of judicial centralization, meaning that only one legal system should be in place for the whole country.

This was done by implementing the permanent royal court of the “King's Bench” which was sitting in London and manned by special judges.

In addition, the King commissioned officials – usually judges of the central court – to travel around a circuit of the regions, hearing cases.

The following procedure was taken:

The legal issue in the case would first be decided by the royal courts in London.

The traveling judge would then take the ruling to the region concerned.

There the facts would be tried and the ruling applied to the facts of the trial.

This particular strategy enabled the royal judges to apply common law principles to most parts of the land.

Today we still use the term “common law” to describe a judge-made system of law.

Next we will look at the growth of equity.

Equity is founded on principles of natural justice and fair conduct.

In the Middle Ages, the courts of common law often failed to give redress – another word is compensation – in certain cases where redress was needed.

The disappointed litigants then directly petitioned the King who was regarded as ‘the fountain of justice’ and asked for extraordinary relief.

The King, then, through his Chancellor, called the Court of Chancery to deal with these petitions.

Gradually the rules of the Court of Chancery hardened into law and so became a regular part of the law of the land.

The most important branch of equity is the law of trusts.

You should however note that equitable remedies such as specific performance and injunction are also very much in need.

Now that you have some idea of common law as well as what equity entails, we will finally look at “conflict of variance.”

Sometimes there may be an irreconcilable conflict between the rules of common law and the rules of equity.

This is called a “conflict of variance.”

In such a case the rules of equity will prevail.

Let us look at a concrete example: Person A institutes action against Person B in the common law court.

In the view of the Court of Chancery this action is inequitable – or unjust.

Person B's proper course to follow is to apply at the Court of Chancery for a common injunction directed to Person A.

This common injunction would order Person A not to continue with the action. Should Person A defy this injunction, the Court of Chancery could put Person A in prison for contempt of court.

Equity, thus, worked “behind the scenes” of a common law action.

In theory, if you look at it closely, the common law principles were left intact but by means of this complicated mechanism they were superseded – replaced in function – by equitable rules.

You will surely agree that the “conflict of variance” is not an ideal mechanism in all cases – as somebody put it: “one court was set up to do an injustice and another to stop it.”

This system of “conflict of variance” went on till 1875, when, as a result of the Judicature Act of 1877, courts of common law and the Court of Chancery were abolished.

In its place a single Court of Judicature was established.

Note that these courts had full power to administer law and equity.

Common injunctions were also abolished.

Now, when a case of “conflict of variance” between the rules of common law and equity occurs, the rules of equity should prevail.

This is then as far as we will look at the English legal system, common law, equity and the conflict of variance for the time being.

Thank you.

COMPREHENSION EXERCISES:

1. Read the following and fill in words in the spaces to show your understanding of the lecture text:

In this lecture we looked at the central features of the legal system as well as at common law, and of variance.

Common law is common to the of the country and is based on of judges. The rules of common law were developed in common law in the late 1100s. Because King Henry II was afraid the would become too powerful, he implemented a strategy of judicial centralization. This was done by implementing a permanent royal court called the King's which was sitting in and manned by special

2. Choose the most suitable option for each of the following statements. Please circle the number of your choice.

2.1. “Hierarchical” means:

- a. the common law courts had most of the authority
- b. authority was shared by all the courts and the judges
- c. more authority was given to the higher courts and judges
- d. the lower courts were the most important

2.2. “Precedent” can also mean:

- a. a court case
- b. a person in charge
- b. an example
- c. a specific law

- 2.3. The term “common law” is used to describe:
- e. laws made for everybody
 - f. laws made in England
 - g. laws made by judges
 - h. laws made by the King
- 2.4. Equity is found on principles
- a. that the Court of Chancery described
 - b. that judges worked out in the regional courts
 - c. that the King implemented
 - d. of fairness and natural justice
- 2.5. Conflict of variance is:
- a. when rules of the King are in conflict with the Court of Chancery
 - b. when people disagree with the court ruling and directly petition the King for redress
 - c. when the judges in the common law courts punish the wrong person and the King pardons that person
 - d. when there is an irreconcilable conflict between the rules of common law and the rules of equity
- 2.6. In a case of conflict of variance
- a. the case will go to the high court
 - b. the Supreme court of Judicature will make a ruling
 - c. the rules of equity should prevail
 - d. the rules of common law should prevail
- 2.7. A characteristic of common law is that it is
- a. codified
 - b. decentralised
 - c. used all over the world
 - d. judge made

3. Please answer the following questions:

3.1. Why do we call the system we inherited from the English legal background “common law”?

.....

3.2. What is the main difference between an accusatorial and inquisitorial court procedure?

.....

3.3. What is meant with “One court was set up to do the injustice and another to stop it.”?

.....

APPENDIX C

EXAMPLE OF AN INTERVENTION SESSION

Today we will look at the use of semantic discourse markers in a UCA lecture where certain aspects are compared and contrasted.

Being aware of the markers and their functions will assist you in the listening comprehension of the lecture and will help to develop your note-taking skills.

This lecture will be about the academic versus non-academic register.

Please note the use of the following discourse markers.

The first group indicates to you that new information will follow.

These markers help you determine the overall structure (macro-structure) of the lecture, as they indicate another stage of the lecture.

- Today we 're going to look at ... ;
- First of all ... ;
- Will now be ... ;
- Firstly. ... ,
- as well as ... ;
- For the rest of this lecture...;
- ...will now be compared;
- The first aspect...;
- Let us now look at the third ...;
- Another characteristic...;
- Please note/ take note of ...;
- The last aspect of...;
- The last characteristic ...;
- To conclude ...;

The next group of markers indicates that some kind of explanation or elaboration of what has just been said will follow.

In other words, there will not follow new information but what has been said will be emphasized or explained:

- For your information...;
- Let us just refresh ...;
- Let us try to ...;
- With this is meant...;
- or ...;
- The following examples ...;
- We can consider ...;
- thus ...;
- In other words...;

The following group of markers is called “contrastives” or “adversatives”; they will show the opposite of what has just been discussed.

In this case, they will each time contrast academic with non-academic register:

- versus ...;
- on the other hand ...;
- conversely ...;
- compared to ...;
- albeit ...;
- alternatively ...;

- though ...;
- as a matter of fact ...;
- however ...;
- whereas ...;
- in contrast

The last group of semantic markers will show to you that the discussion is returning to the 'characteristics of academic register from the previous contrasting information about non-academic register.

In other words, you are returning to the main discourse again:

- to return to ...;
- now again,
- considering ...;
- furthermore ...;
- to go back to ...;

At the end of this lecture you will have to explain the contents to another student who could not attend and who had asked you to make notes for him/her.

Here follows the lecture:

Today we are going to look at what is meant by “academic register.”

Firstly, all writing is done with a specific purpose in mind.

It can be, for example, to inform, to communicate, to reprimand, to comfort as well as a legio other purposes which I'm sure you can think of yourself.

The purpose of writing as well as the intended audience usually determines the register to be used.

Let us just refresh – register is like register in music where every note should be in harmony with the rest.

Therefore, we learn to associate certain styles with specific writing types.

For example, we should be surprised if a scientific report was written in the style of a teenage magazine.

For the rest of this lecture we are going to look at those conventions associated with academic writing.

For your information, a convention is a generally accepted rule.

Let us try to define academic register:

- It is a formal register used in academic papers such as essays, reports and dissertations
- These documents are written in a particular style of writing
- Academic writing often contains jargon or vocabulary associated with a specific academic field

The characteristics of academic register will now be compared and contrasted with those of non-academic register.

The first characteristic of academic register is that of objectivity.

This means meant that the writer tries NOT to let his/her personality intrude too much into the writing.

In non-academic writing, on the other hand, the author usually writes from a very personal point of view.

To return to the academic writer, personal pronouns, especially “I,” are generally avoided and pronouns such as “it,” “one” and “their” are used instead.

Conversely, the non-academic writer will often use personal pronouns as well as express personal feelings and views.

Furthermore, the academic writer prefers to use the passive voice which is more impersonal.

The following examples will illustrate the point:

- It is thought that
- These points could be made rather than
- I thought
- I would like to make the following point

Now again, when considering non-academic writing, the active voice is preferred to the passive voice.

Another characteristic of academic register is that it is tentative, compared to non-academic register which is more assertive.

The academic writer is cautious of making categorical or definite statements or arriving at conclusions too hastily.

We can consider some reasons for this:

- The truth is complex
- New facets are constantly being discovered
- Albeit that there are very few things we can completely be sure of, we can say what seems to be true judging from evidence available at present

The non-academic writer, alternatively, is speaking from

- a personal point of view
- is often very sure of him/herself
- may make wild generalizations
- draw conclusions from insufficient evidence because the writing is personal

When considering the tentative academic writing, we will note that verbs such as “seems to; appears to; is likely to; would” and adverbial and adjectival qualifiers such as “apparently; seemingly; probably; maybe; perhaps; generally; often; on the whole” indicate tentativeness.

Another characteristic of academic register is that the sentences are clear, carefully constructed and balanced.

This shows the precise relationship between ideas.

Therefore, the writer needs to carefully use linking words.

Ideas are expressed concisely and not in a verbose – or wordy – manner with elaborate phraseology designed only to impress.

Flowery and descriptive language is not used.

Hackneyed expressions and clichés are avoided.

If we, on the other hand, look at non-academic writing, we will see that the sentences may be shorter and not necessarily carefully constructed.

Or they may be long and rambling and flowery and descriptive.

Verbose and elaborate phraseology which adds little to the content may be used to impress the audience.

The last aspect in the accuracy of academic register concerns punctuation.

Commas, full stops, colons and semi-colons are carefully employed to assist in meaning-making and the coherent flow of ideas.

Conversely, in non-academic writing the author often makes use of dramatic punctuation marks such as exclamation marks or rhetoric questions. On the whole punctuation may be carelessly used.

Let us now look at a third characteristic of academic register and how it differs from non-academic register.

It is of paramount importance in academic register to be precise.

Academic writing, thus, has to give precise evidence for facts that are presented.

Remember that objectiveness and tentativeness both contribute to accuracy in academic writing.

Non-academic writing, as a matter of fact, presents a personal view which needs not necessarily be accurate.

In non-academic writing feelings facts and opinions are not clearly distinct from one another and personal opinions may be presented as fact.

This, however, is totally unacceptable in academic writing.

Furthermore, in academic writing sources are carefully used and acknowledged and a generally accepted system of quoting and referencing is used.

In contrast, non-academic writers do not necessarily use sources.

If used, these sources may be carelessly used and plagiarism may even occur.

Please note that this is totally unacceptable in academic register.

Academic writing should be relevant to the topic and not repetitive, whereas non-academic writing may contain irrelevancies and repetition.

The last characteristic of writing we will look at today is formality versus informality.

In academic writing, full forms in contrast to contractions such as “don’t” and “shan’t” are used.

The latter may be used in non-academic writing.

The academic register employs more formal words, often with a Latin or Greek origin, compared to non-academic writing which uses shorter, less formal and more concrete language.

As a matter of fact, non-academic writers often use idioms, images, slang and colloquialisms.

In bad academic writing difficult words are sometimes used to impress – or even bewilder – the reader rather than to express precisely what is meant.

This then concludes our discussion of academic versus non-academic register.

You should make a point of actively looking at the register of written passages to determine their style.

As you will in future be required to employ academic register when you write your assignments, it is important that you should acquaint yourself in more detail with the discussion thereof in the study guide on pages 23 to 30.

Thank you.

APPENDIX D

RAW SCORES OF PRE- AND POST-TESTS

A. Experimental group

	Student no.	Course	Pre-Test	Post-Test
1	200202693	B. Juris	20	40
2	200250868	B. M.S	15	40
3	200408810	B. Juris	35	75
4	200414551	Radiol.	25	35
5	200500546	B. Juris	50	70
6	200500571	B. Juris	45	60
7	200504894	B. Juris	20	55
8	200504975	B. M.S.	55	80
9	200510789	B. Juris	75	95
10	200515420	B. Juris	45	35
11	200515560	B. Juris	45	65
12	200515900	B. M.S.	20	40
13	200516515	B. Juris	40	55
14	200516957	B. Juris	45	65
15	200517007	B. Juris	30	55
16	200517635	B. Juris	60	95
17	200518437	B. Juris	45	55
18	200518488	B. Juris	60	65
19	200518917	B. Juris	40	60
20	200519409	B. Juris	55	95
21	200521039	B. Juris	45	65
22	200522159	B. Juris	55	65
23	200523147	B. Art	45	65
24	200531719	B. Juris	30	35
25	200534131	B. Juris	65	80
26	200536168	B. Juris	50	50
27	200539426	B. Juris	25	50

B. Control group

	Student no.	Course	Pre-test	Post-test
1	8938784	B. Juris	20	45
2	9222499	B. Juris	50	60
3	9537309	B. Juris	40	40
4	200020463	B. Juris	60	55
5	200212109	B. Juris	65	65
6	200314521	B. Juris	40	35
7	200500449	B. Juris	35	45
8	200500481	B. Juris	55	65
9	200500872	B. Juris	70	80
10	200501101	B. Admin	30	20
12	200501593	B. Juris	40	35
12	200504398	B. Comm	40	35
13	200505157	B. M. S.	20	20
14	200506684	B. Juris	30	20
15	200508946	B. Juris	35	45
16	200510614	B. Juris	10	10
17	200410649	B. Juris	30	20
18	200510908	B. Juris	25	25
19	200517023	B. Comm	35	35
20	200517201	B. Juris	50	60
21	200518194	B. Juris	50	35
22	200518399	B. Juris	35	20
23	200519069	B. Juris	55	25
24	200531786	B. Juris	20	30
25	200537628	B. Juris	75	80
26	200538942	B. A.	40	35
27	200510649	B. Sc.	30	20

APPENDIX E

RAW SCORES OF TEST SECTIONS

Section One: Gap-filling questions

Experimental group		Control group	
Pre-test	Post-test	Pre-test	Post-test
20	20	30	60
10	30	60	40
20	50	70	60
10	40	50	40
70	80	50	40
30	50	0	10
20	60	40	30
50	80	50	30
60	90	30	50
50	30	60	80
30	60	20	10
10	40	20	30
40	50	50	20
40	70	30	10
20	30	20	20
50	100	10	60
30	50	0	0
50	60	10	30
30	50	20	20
50	50	30	30
40	90	30	30
40	50	30	30
40	50	40	40
30	40	30	30
60	90	30	30
20	50	40	40
10	40	40	40

Section Two: Multiple-choice questions

Experimental group		Control group	
Pre-test	Post-test	Pre-test	Post-test
14	29	14	43
0	57	71	71
43	100	29	43
57	14	100	100
43	71	86	100
71	57	43	43
29	43	57	57
86	100	29	71
86	100	57	100
43	43	71	100
71	86	43	43
14	29	57	57
43	57	57	29
71	71	14	14
29	71	57	14
86	100	43	43
57	71	43	29
86	86	86	86
43	57	57	29
57	57	29	14
57	100	86	43
71	86	0	29
57	100	100	100
29	14	43	43
100	71	29	43
100	43	43	29
29	71	57	29

Section Three: Inference

Experimental group		Control group	
Pre-test	Post-test	Pre-test	Post-test
33	67	0	0
33	33	33	33
0	67	0	0
0	33	0	0
0	33	67	67
33	100	0	0
0	67	0	0
0	33	0	33
67	100	67	33
67	33	100	67
33	33	33	0
67	67	33	0
0	33	0	67
67	100	33	0
33	67	33	0
33	33	0	33
33	0	0	33
67	100	0	0
33	100	0	0
67	100	33	67
33	33	33	33
33	33	0	67
0	67	33	0
33	67	33	33
67	33	33	33
33	67	100	67
67	100	33	33