The Enhancement of Foreign Language Listening Comprehension in Academic Lectures Using Discourse Markers

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Dedication

To the ones who faced the hardship of life,
to my late parents.
Acknowledgement

This work has been greatly improved by the comments of various people who have been kind enough to read part or all of the manuscript. I should like to thank Dr. Aiman Taha without whose assistance and technological expertise this dissertation would not have been completed. I would also like to acknowledge Dr. Ibrahim Osman for his practical advice, guidance and appreciated support.

I want to thank my supervisor, Dr. Abdulwahab Abashr for his invaluable assistance I further want to extend my appreciation to the students who were prepared to take part in the experiment.
Abstract

This study is entitled “The Enhancement of Foreign Language Learners’ Listening Comprehension in Academic Lectures Using of Discourse Markers”. It is a quasi experimental and quantitative study which focuses on testing the effects of discourse markers on the comprehension of lectures delivered in English. It aimed at raising the foreign language learners’ levels of listening comprehension in academic lectures in English as a foreign language (EFL) and English for Academic Purpose (EAP) contexts. It is based on the research problem that university learners have in overall difficulty with comprehending and recalling information from oral content lectures delivered in English.

The main hypothesis of the study is whether an intervention (training) program on the recognition and interpretation of discourse markers would enhance learners listening comprehension in academic lectures.

The sample of this study is 3rd year English language majoring university students at the faculty of Education of the University of Khartoum. Participants were randomly divided in two groups, the experimental group (subject to training, n = 30), and the control group (to which no training is offered, n = 30).

A pre-test, training, and post-test design was used for data collection. Initially participants were assessed to determine their
comprehension of content information in an oral lecture by means of a pre-test. After a training period of five sessions in which the experimental group received strategy training on the recognition and interpretation of discourse markers in oral spoken lectures, both groups’ performance was again examined in a post-test. Their results were statistically compared computed and analyzed for correlation (r=0.74), reliability (r = 0.82, for pre-test, r = 0.74 for post-test) and statistical significance using SPSS t-test. The level of significance stipulated for accepting the hypothesis is 0.05. Accordingly the main hypothesis of the research is supported. On the basis of this the study concluded that discourse markers significantly enhance learners’ comprehension in academic lectures.

Since time study was conducted where the medium of instruction of other discipline is Arabic, the study recommends that it would be in place to do similar research in other institutions where English is a medium of instruction. Practical implications of this study suggest that it’s findings on discourse markers’ effects on lecture comprehension should be given attention to, to determine instructional actions to be undertaken in different teaching contexts such as writing course material, syllabus design, curriculum development and supplementation.
Discourse Markers. The effect of the experiment on the study of the foreign language education, the students of the university enrolled in the English course, during the study of the foreign language, were divided into two groups: the experimental group (EFL) and the control group (EAP). The two groups of students were taught English, with the foreign materials used in the experiment. The students were divided into three groups: the students of the university, the students of the College of English, and the students of the College of Education.

The experiment was conducted over five weeks. The results of the experiment were analyzed statistically using SPSS-test (K) at the level of significance 0.05. The results were found to be significant, with a correlation of 0.74 (EFL) and 0.82 (EAP). The results were also compared with the results of the previous experiment, and the results were found to be significant, with a correlation of 0.05. The results of the current experiment were also compared with the results of the previous experiment, and the results were found to be significant.
البحث يوصي بإجراء وسيلة اللغة الإنجليزية في جامعات تستخدم لتدريب القرارات. يُوصى بدراسة هذه النتائج العملية والتطبيقات ومن هذه الأثر بنشأة الأدوات التعليمية المختلفة في وسائل الاستيعاب الفهم على وتطويرها وتصميمها والمناهج المقررة بوضع يختص في التدريس المتعلقة.
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CHAPTER ONE

INTRODUCTION

1. Introduction:

This chapter states the research problem, and the context of the research problem in detail, it also discusses the rationale for the study. The aims, questions, hypotheses, scope, and significance of the research are also provided. It further describes the research method, procedure, instrument, and process of data analysis. Important concepts of research are also defined. Finally it outlines the contents of the dissertation as a whole.

1.1 Research Problem:

The problem addressed by this research is that foreign language learners' (FLL) level of lecture comprehension in English medium is relatively low.

This was first observed during the researcher's professional career as a teaching assistant and then a lecturer at the College of Education of the University of Khartoum. He noticed that some students, although they are good in English, complain the lack of comprehension in lectures. The result is either a poor academic performance, sometimes accompanied by supplementary exams, repeating forms, and external cases, or end up quitting the academic programme, which is a total academic failure. On the bases of this the researcher generalized
the fact that lower levels of lectures' comprehension prevail regardless of learners' language proficiency.

FL learners even if endowed with a maximal requirement of a basic interpersonal communication skill (BICS) and a higher rate of fluency in it, don't have the guarantee to possess a higher degree of comprehension, good performance and better success in an academic program. And that the correlation between learners' proficiency levels and their performance is only something relative, for not all good students perform well. This raises the question why higher level proficiency learners are academically poor performers.

Since then the researcher has been formally observing the case and has reached the conclusion that language proficiency doesn't guarantee a higher level of lecture comprehension and then a higher rate of learners' performance in the academic program. A question of problem detection is also raised, that is why do these learners fail? Is it because of something in them? or a limitation in the material and presentation? or that of a limitation in the program?

Since some learners maintain the logical connection or correlation of proficiency and performance, that they succeed because they are good, and that the others fail because they are less proficient and low comprehenders, namely there is someone to succeed in the program, then the argument of the limitation in
the program is lacking the same as the first argument i.e. because of something in the learners, as is defeated by the common sense.

1.2 Context of the research problem:

The essence of the problem is likely to be the material, the way it is structured and presented to assist learners comprehension to raise their performance in the academic program. In support of this, research indicated that many L2 learners, even those with adequate English language proficiency, have difficulty comprehending academic lectures and fail to grasp the main points of the lecture (Lebauer, 1984, De Carre& Nattinger, 1992, Young, 1994, Thompson, 1994, Allison & Tauroza, 1995, Hyon, 1997).

A large body of research also demonstrated that L2 learners' difficulty in understanding lectures stems from difficulties at the discourse level as well as the sentences level. (e.g. pronunciation, grammar and vocabulary) (Yuan, 1982, Clerehan, 1995, Olsen&Hukin, 1999). Olsen and Hukin (1999) found that most L2 learners with proper comprehension of English at the sentence level have difficulty in identifying the main ideas in the lecture. This comprehension difficulty is mainly due to their inability to make use of discourse markers that signal the organizational pattern of a lecture Chaudron and Richards(1986).
Van Niekerk (1996), reported in Smit (2006) states: “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”. Smit (2006) also argued that “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 synthesized into intake of the content information and recalled when necessary.”

Rixen (1991:31) in Smit (2006) 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 speech, some of their sounds are different to those used in very carefully delivered speech and many become harder to recognize". Major et al. (2002:17, in Smit, 2006)) (found that “accented language may affect the listening comprehension of L2 listeners differently, depending on their native language.” Smit(2006) concludes "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 trained 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 organization of the lecture more successfully.”

Another conclusion made by Smit (2006) is that: “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) 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.

In her conclusion about the training of learners Smit (2006) remarked that “This is important for the study of L2 lecture comprehension as ESL expected to have already acquired most of those skills involved in the first stage of the process. Any training they are given in lecture comprehension is
meant to stress 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 a guarantee for 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. Smit (2006) concludes, An understanding of how lectures are understood can suggest suitable ways to encourage L2 learners to listen more successfully in lectures. It can further feed into ESL and EFL teaching methodology on the one hand and learners’ learning skills on the other. Furthermore, information about strategies on listening in academic lectures can help content lecturers aware of how they can facilitate students’ understanding of subject content in spoken discourse by presenting their lectures in a way that will provide full comprehension.

Smit (2006, reporting Lynch, 1998) “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".
As is shown on research, the lectures' material comprehension depends on the use of discourse markers in the form of micro and macro markers as highlighters to signal out the important information of a lecture. These highlighters are viewed to be part of cognitive academic language proficiency (CALP).

It is believed that BICS fluency means students are ready for college study or to major in the target language. In fact they cannot manage the cognitively demanding and decontextualized language and FL clearly need extensive development in CALP skills before joining the college classroom. Smit (2006).

1.3 Rationale:

The spread of English as a world language has been accompanied by over growing numbers of people studying at university level through the medium of English as a foreign language (FL) or a second language (L2), whether their own country of origin is an English speaking country, overseas students, or English as an academic purpose (EAP) . A major part of university study remains the lecture (Richards, 1983; Johns, 1981; Benson, 1986). Academic listening skills are thus an essential part of communicative competence in a university setting.
Lecture comprehension ability is one of the most crucial skills for L2 learners' academic success (Powers, 1986; Tagg, 1996). Richards (1983) states, "academic listening (in contrast to "conversational listening") has its own distinctive features, there has been relatively little research in this area.

Research on lecture comprehension has shown two possible ways to help non-native speakers understand lectures in L2 and FL. One is to improve the knowledge and skills in the target language until the comprehension is no longer a problem. The other is to somehow modify the form of the lecture, to vary the input so as to make it easier to comprehend Smit (2006). Chaudron and Richards (1986) found that modifications that included macro markers signaling major propositions within the lecture improved listeners' comprehension of lecture information. The first approach seems time consuming since the learners are already involved in the program.

Most previous research on listening centered on conversational listening, which deviates from a direct relevance to academia, content lectures, learning skills, and learners search for comprehension strategies i.e. issues only of relevance to academic listening; academic listening as a learning and comprehension strategy.

Although listening comprehension has held an important place in language teaching ever since the days of audio-
lingualism, most L2 and FL research into comprehension has been concerned with reading, and even those on listening focused on conversational listening. The same emphasis on reading also holds true for research into first language comprehension.

Research into the lecture comprehension process is of value in applied linguistics because an understanding of how lectures are comprehended can suggest appropriate ways to encourage second language learners to listen to lectures. It can thus feed into English as a second language (ESL) teaching methodology, on the one hand, and learners’ strategy training on the other hand. In addition, information about the lecture comprehension process can guide content academic lectures in how to present their lectures to ensure optimal comprehension.

Developing a skill in listening is also important because of the nature of sound. Sound is ephemeral; when a sound event has ended, it is gone. The listener has no choice but to comprehend at the same time as new material being perceived. In contrast, with a written text the reader can control the input, by dwelling on part of the text, skipping over the others, backtracking, etc. (Rost, 1990). O'Niell, McNally, Morley and Petrie (1999, p.19) note, "... while visual information is enduring auditory information is transitory, that is, once it has been heard, it is no longer in view". Sound is also dynamic, It
has a beginning and an end; it can reflect process or change. It exists in time and over space, while visuals exist in space and over time, summarized in Balzet, 2001).

In the search for learners autonomy, as part of our goal as language teachers, a need is felt to produce strategic listeners students who, even if they don't have complete control of the grammar or an extensive vocabulary, can at least fend for themselves in communicative situations. If this is the goal, students must be taught how to listen. Although Listening skills are learned through exposure to language; they need also to be explicitly taught and practiced Smit (2006).

The rationale displayed gives reasons why this research focused on academic listening comprehension since the skill has proved to be especially difficult for foreign students. In our context, where English is a foreign language learners do not have much access to spoken discourse. In addition, the lack of adequate strategies is often an obstacle for them to understand speech. As university students, they also face the demands to posses highly developed academic skills, which include some knowledge of the discourse of the lecture as well as practice in note-taking based on it. As supported by research, paying attention to elements of discourse markers to signal out the important information in academic listening as part of these
important learning strategies, would prove illuminating in the teaching of listening and in lecturing Smit (2006).

The researcher is also interested in doing the research into the above questions because of their connection to a number of courses in his academic program, which include courses on listening and speaking in academic and professional context.

Especially relevant to this research is a course titled Teaching Methods and another course titled Applied Linguistics which focuses on lesson planning and oral presentation. Given the importance of discourse markers, the research aims to enquire into their effects in speech comprehension and oral presentation.

1.4 Research aims and objectives:

The aim of this research is to find out to what extent the presence or absence of micro and macro markers and how they are sequenced and presented affect the comprehension of the material in a lecture.

The study actually aims at enhancing lectures comprehension delivered in English in a foreign language (FL) context. The main focus of the study is investigating the effect of the use of discourse signals in raising learners' comprehension of lectures by having the participants trained on the role of discourse markers.
In fact, the aim is of two fold; to find out to what extent the presence or absence of such elements affect comprehension, and to assess students perception of their effect in a lecture i.e. do they make use of them when they notice the presence or absence of these items in a lecture? Do they make use of them as part of their training when they are assessed for comprehension?

The study stems from the observation that academic listening skills of lecture comprehension in foreign language learners are very low. It assumes a deficiency in the comprehension of lectures due to learners’ inability to perceive and make use of discourse markers and signals important information in a lecture i.e. a deficiency for such elements. Based on this, a number of learning difficulties have been observed:

(a) Learners have deficiency in/or no cognitive academic language proficiency CALP.

(b) Based on (a) above they are unable to signal out the important information in a lecture.

(c) They are slow listeners.

(d) They can't comprehend well.

(e) They cannot take notes.
(f) They cannot make notes.

(g) Based on (a) above, due to the lack of CALP and acquiring only basic interpersonal communication skills BICS, even the proficient learners of BICS among students are of low academic performance.

(h) In proficient learners of BICS lacking CALP, there is a negative correlation between their language proficiency and academic performance let alone in none proficient learners of BICS.

(i) Due to deficiency in comprehension, learners have displayed negative habits such as lack of attention, gazing, and chat in a lecture… etc.

1.5 Questions:

Based on the objectives stated in the purpose, the researcher framed the following general question: (i) whether students perceive discourse markers and to what extent they make use of them to interpret the input.

Do learners perceive and to what extent make use of

(1) **(Textual discourse markers):**

**Logical connectives** (e.g. and, therefore… etc) used to express semantic relationship between main clauses/ sentences?
**Frame markers** (first, second… etc) to mark main transitions between different stages (e.g. sequence, materials, indicate topic shift)?

**Illocutionary markers** (e.g. I'd like to discuss; I shall highlight...etc.) to name the act the speaker performs or announcing speaker's intention?

**Reminders** (e.g. as I mentioned before; throughout this lecture… etc.) to refer back to other sections of the lecture?

**Attributers** (e.g. because of increasing evidence…etc) to provide support for the speakers' argument, including quotes!

**Code glosses** (e.g. that is, such as, for example… etc.) to clarify, explain, rephrase or exemplify propositional meaning?

(2) **(Interpersonal discourse markers):**

**Hedges** (e.g. not only, perhaps, I think, it appears… etc) used to withhold full commitment statement?

**Certainty** (e.g. of course, plain and simple… etc) used to express full commitment to the statement?

**Emphatics** (e.g. do in fact; most importantly… etc.) to highlight aspects of propositional content or mark salience?
Attitude (e.g. it is my opinion that; the more increasing topic of... etc.) to express the speaker's attitude towards prepositional content?

(3) Relational markers (e.g. you might be wondering; to the African student; nous n'ven pas[code switching]) to establish and maintain rapport with the audience (including rhetorical questions, direct appeal to the audience, etc.)?

Person markers (e.g. "I") explicitly refer to the speaker?

The second set of questions;

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

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

•would there be a significant difference in the pre- and post-test scores, suggesting that the training 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 training 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?

1.6 Hypotheses:

A general hypothesis was formulated:

**H1** — A training programme on the role of discourse markers will significantly improve students’ listening comprehension.

This was tested as three specific hypotheses.

**H2** — A training programme on the role of discourse markers will significantly improve students’ scores in gap-filling questions.

**H3** — A training programme on the role of discourse markers will significantly improve students’ scores on multiple-choice questions.

**H4** — A training programme on the role of discourse markers will significantly improve students’ scores on inference questions.
1.7 Scope:

The fields of relevance to this study are voluminous. A number of overlapping areas are distinguished; Cognitive, Psychological, Physiological, Neurological, Social, Academic, Discourse Analysis, Artificial Intelligence, Academic and conversational listening. However this study has a direct relevance to academic listening than is the case to the other field mentioned. The study investigates the effect of the use and perception of micro and macro markers as an academic listening and learning skill to enhance foreign learners’ lectures' comprehension. Especially relevant to this population, the 3rd year students at the English Department of the college of Education of the University of Khartoum, are purposefully chosen. On the basis of this the issues investigated are only of value to academic listening than to conversational listening.

1.8 significance:

This study is considered to be significant due to the following:

(a) It is an exploration of the issue of discourse markers effect on lectures comprehension in a foreign context and assumes to be the first study to handle the issue in Sudan.
(b) Academic listening has proved to be especially difficult for foreign students, a situation which is very demanding and in need of immediate intervention by research.

(c) The investigation of the effect of macro and micro markers as discourse markers on FL lecture comprehension will extend our knowledge about the importance of academic listening and will advance methodology in the field.

(d) It tests discourse markers' model in a new context.

(e) It is an evaluation of the traditional lecturing practice compared to lecturing styles based on discourse markers.

(f) It is related to a current issue, which is the deterioration of standards of English in Sudan.

(g) The research findings in our context would be generalizable to practices in other foreign contexts.

(h) Unlike the tradition in research on discourse markers effect on comprehension focusing on the written text, the current study pays attentions to the importance of presence of these items in lecture comprehension.

(i) About academic lecture and the use of discourse markers Eslami (2007, reporting Flowerdew & Miller, 1997) comments “Academic lecture, as one type of academic discourse, is an important part of most university fields
worldwide. The ability to comprehend academic lectures in English is thus an important need for university students.

1.9 Research method

A quantitative study to determine whether the students would gain a practical skill which they could employ to enhance their listening comprehension in academic lectures was conducted. The test performances of the two groups of students were compared. One group had been introduced to particular discourse markers in the form of micro and macro markers in a training programme and the other group had not. To test the effectiveness of such program an experimental and control group of university students and a pretest-training-post-test design was used to test their listening comprehension in an authentic lecture. In the pre-test the existing listening comprehension of both the experimental and control groups was tested before the training. After a five-week training programme in which the experimental group was made aware of discourse markers and their role in structuring academic lectures, both groups’ performance was again tested in a post-test.

The control group of students was not exposed to the training programme and they only attended the regular lectures in the academic program in the English Department at the College of Education of the University of Khartoum.
1.10 Research procedure and instruments

A pre-test - training - post-test design was used for data collection. A copy of the lecture and the test is included as Appendix B. T-tests were used to compare the results of the experimental and control groups in the study. The experimental group participated in a five-week programme consisting of five lectures explaining the role of semantic discourse markers. The main emphasis was on macro-markers. It should be noted that the control group received no specific instruction in discourse markers. A copy of one of the intervention sessions (taken from Smit(2006) is included as Appendix C.

After the training period both groups of students were presented with the same oral lecture for the post-test.

1.11 The process of data analysis

The scores of the pre-test and post-test were statistically compared and analyzed for reliability, correlation and statistical significance using SPSS to detect whether the training programme had a significant effect on the performance of the experimental group.
1.12 Definition of Terms

The following terms have often been used throughout this thesis:

**Achievement test** = a test designed to measure how a student has learned from a particular course or syllabus.

**Anaphora** = the use of a word or phrase which refers back to another word or phrase used earlier in a text or a conversation.

**Acquisition** = the process by which a person learns a language.

**Assessment** = the measurement of the ability of a person or the quality or success of a teaching course.

**Attention** = the ability a person has to concentrate on something, or part of something, while ignoring other things.

**Code** = a term used instead of language speech variety, or dialect.

**Coherence** = the relationships which link the meanings of utterances in a discourse or of the sentences in a text.

**Comprehension** = the process by which a person understands the meaning of a written or spoken language. The measurement of listening and reading comprehension abilities is an important part of the assessment of a person's proficiency in a second and a foreign language.
**Control group** = one of two groups used in certain kind of experimental research, the other being the experimental group. In experiments, the latter is given the new method whereas the control group is taught by the usual teaching method. Students are assigned to both groups randomly.

**Comprehensible input** = input language which contains linguistic items that are slightly beyond the listener's present linguistic competence.

**Correlation** = a measure of the strength of the relationship between two sets of data e.g. students scores in a mathematics test and on language test.

**Decoding** = the process of trying to understand the meaning of a word, phrase or sentence.

**Dependent variable** = a variable which changes or is influenced according to changes in one or more independent variable e.g. comprehension enhancement is a dependent variable whereas discourse markers effects on comprehension is independent variable.

**Feedback** = any information which provides report on the result of a behaviour.

**Fluency** = the feature which give the qualities of being natural and including native-like use of pausing, rhythm, intonation,
stress, rate of speaking, and use of interjections and interruptions.

**Paralinguistic features** = none-vocal phenomena such as facial expressions, head or eye movements, and gestures, which may add support, emphasis, or particular shades of meaning to what people are saying.

**Problem-solving** = a learning strategy which involve selecting from several alternative in order to reach a desired goal.

**Proficiency test** = a test which measures how much of a language someone has learned.

**Proposition** = the basic meaning which a sentence expresses.

**Register** = a speech variety used by a particular group of people sharing the same occupation or same interests.

**Speech rate** = the speed at which a person speaks.

1.13 Summary:

In this chapter, the problem of the study has been highlighted. It provides an account of the rationale and the study purpose. Based on these the research questions are presented.

Accordingly the hypotheses that are to be tested by the study are offered. The research method, procedure of data collection and data analysis are also described. Following these,
the study scope and significance are also displayed. The chapter concludes offering an explanation of basic terms.
CHAPTER 2

LITERATURE REVIEW

2. Introduction:

This chapter presents a review of the state of the art into listening comprehension, particularly the role of discourse markers in improving listening comprehension in academic lectures. It starts by tracing the concept of comprehension in the interrelated disciplines. It also includes the definition of lecture and lecturing styles, listening as a construct and the role of listening, Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) programme models, discourse markers and their types, the concept of discourse markers referring to their location and role, and a review of some studies of relevance to academic discourse comprehension.

2.1 Comprehension and interrelated disciplines:

The research literature on comprehension is voluminous. A number of overlapping areas are distinguished; Cognitive, Psychological, Physiological, Neurological, Social, Academic, Discourse Analysis, and the field of Artificial Intelligence.

The cognitive bases of research on comprehension relate language comprehension to mental and intellectual functions. Cognitive theory defines language learning as the acquisition of
a complex cognitive skill (McLaughlin, 1987). Information-processing models in cognitive theory look at listening comprehension in terms of a cognitive skill. From this perspective the acquisition of language entails the use of information-processing techniques to represent, organize, transform, and integrate information. Information-processing models are used to represent how new information is acquired, stored and retrieved from memory. They also view comprehension as to draw on support from a number of sources available for general intelligence, for e.g. memory lapses reveal lack of comprehension due to lack of contextual support.

Comprehension research in psychology refers language comprehension to all the processes by which the sensory input is transformed, elaborated, stored, recovered and used. It relates comprehension to cognition and memory.

Physiological research on comprehension focuses on the biology of ageing and their physiological correlates in association to memory, concentration, recall, etc, that affect note-taking & note-making skills and reading & writing speed. Based on the assumption that most people for example, experience with age a sharp decline in eyesight.

Neurological research discusses the neurologically based language and cognitive disorder that affect our ability to learn and function, for example studies in dyslexics relate language,
perception, processing, attention and concentration differences to inherited neurological differences.

Comprehension studies in social research examine how for example societies view their older people as readers and audiences. It focuses on how commonly attitudes, views and believes about old people affect the nature, tone and style of the language we use when older people are addressed. These attitudes, views and believes usually result in the use of simplified language and care-taking speech in communication with old people.

Comprehension research on academic listening and reading examines how comprehension is developed in learners by the use of reading & writing as language skills and this is called (learning to comprehend) in which comprehension is a desired and an expected outcome of listening and reading as suggested by the terms listening & reading comprehension. In comprehending to learn, however, learning is an end. Comprehension research on academic listening focuses primarily on the later type, in the frame of which lecture content knowledge is learned and comprehended if micro and macro markers are used as highlighters to signal out the important information of a lecture Chaudron and Richards (1986). These highlighters are viewed to be part of cognitive academic language proficiency.
The discourse analysis research on comprehension associate discourse comprehension to a certain type of cohesive devices (clues or linkers) known as discourse markers. These clues are responsible for signaling out the important part of a text. It divides, for e.g. a text into sections and how they should be interpreted.

Artificial intelligence associates language comprehension to a certain conventional schemata in the form of background knowledge and details.

It should be noted that this study is only of relevance to research on academic listening and discourse analysis, despite the fact that some of the other areas may associate directly to second language (L2) and foreign language (FL) classroom. The literature review sees no point to summarize the main findings of these multi-faceted studies of comprehension and their implications for lecture comprehension enhancement since most of them hoop aside the primary line of research and analysis. A review of studies of relevance to academic discourse comprehension is provided at the end of this chapter.

2.2 Lecture and Lecturing Styles:

A literature review on lecture comprehension enhancement presupposes and entails the necessity to put in focus the concept behind the term lecture discussing some of its styles based on:
(a) Being oral or/ read

(b) The degree of involvement, participation and interaction it allows for the listeners.

A number of different kinds of styles for presenting and delivering lectures have been identified by Flowerdew (1995). Goffman (1981, in Flowerdew, 1995) distinguishes three forms of lectures:

(a) “memorization”.

(b) “loud reading”

(c) “fresh talk”


Marrison (1974) classified lectures into two types:

(a) Formal as close to spoken discourse

(b) Informal with high informational content, but not necessarily in highly formal jargon.

McDonough (1978) explained that the informal, conversational style using notes, sheets and handouts is the most favoured and universal form of lecture presentation.
Dudley-Evans and Johns (1981) named three styles of presentation:

(a) Reading style where the speaker talks as though reading from notes

(b) Conversational style, where the speaker informally addresses the audience using notes or without notes

(c) Rhetorical style, where the speaker is viewed as an actor shaping his speech with intonation and tempo. Frederick (1981) adds “the participatory lecture” which guarantees an extended level of involvement being closer to discussion. Rost (1990) viewed the case in terms of participants' roles. He identifies the roles in terms of the active participation by the listener in the discourse. He summarized the following possible roles for the listener:

(1) A listener may be a participant in the conversation, addressed directly and could respond to the other people involved in the conversation, discussion or a role play.

(2) An addressee with less participation but is spoken to directly. Students may tend to take the role of the addressee at lower level of proficiency or in teacher-centered classroom situations.

(3) An audience member, who is directly addressed, but is not expected to partake in the exchange of speech, although he
may make use of the information received to answer questions. Following direction would give the student the role of the audience member.

(4) An overhearer can listen, but is not being addressed and can not give feedback. Many listening situations place students in the role of an overhearer, where the student comprehension is examined through some type of exercise.

2.3 The Role and Nature of Listening:

At this part of the report a need is felt to introduce the role and nature of listening being thought of as controlling part of the state of the art. Lecture’s comprehension enhancement relates primarily to listening comprehension research. Listening skill development and use are basic to human experience Balzet(2001). "a substantial amount of general life experiences and academic activities involve the processing of information that comes to us through listening", note Vispoel, Wang, and Bleiler(1997) in Balzet(2001). In addition, listening is essential for schooling .in kindergartens and basic schools, children learn most efficiently through listening. In elementary school students listen for 60% of their class time Brown (1980). Listening is even more important at university, where learning is mostly
through lecture (Curi, 1986). In human communication, formal learning and academic study, listening is important Parshall and Balizet (2001), “There is a strong evidence that audio is a special attribute of human communication and cognition.” In Balizet (2001).

2.4 Academic versus conversational Listening:

Richards (1983, in Flowerdew, 1995) was the first to distinguish between listening skills needed for conversation and strategies required for academic listening. Some of the differences between conversational listening and academic listening are differences in degree, whereas others are differences of kind. The first difference of degree is the type of background knowledge required. In a lecture listeners are likely to require knowledge of the specialist subject matter, while in conversation the necessary background knowledge will be more general. Another difference of degree is the ability to distinguish between what is relevant and what is irrelevant while in all comprehension there is a need to be able to understand what is relevant. Flowerdew, 1995, reporting Sperber and Wilson (1988), "the ability to distinguish between what is relevant to the main purpose and what is less relevant (digressions, asides, jokes, etc.) is paramount in lectures, though but less important in conversation". A third difference of degree between academic and conversational listening is in how to apply speech exchange.
In an exchange of speech turn-taking is obviously essential, while in lectures turn-taking conventions will only be required if questions are necessary from the audience or come from the lecturer. A fourth difference of degree between academic and conversational listening is in the amount of implied meaning or degree of speech acts. The emphasis in lectures is generally to be on the information to be delivered, on prepositional or the direct literal meaning, while in conversation interpersonal or illocutionary meaning is more important (Flowerdew, 1995 reporting Brown and Yule, 1983).

The first of the differences of kind is the need to be able to understand and concentrate on a long stretch of talk with no chances to be helped by the facilitating functions of interactive speech, such as asking for repetition, negotiating meaning, using repair strategy…..etc. A second difference of kind is note-taking. Flowerdew, 1995, reporting James (1977) who sees lecture comprehension as a five stages process that is involved in the note-taking process: decode, comprehend, identify main points, decide when to record these, write quickly and clearly. Another skill related to lecture comprehension and not found in conversation is the possibility to integrate the incoming message with information derived from other media in the form of handouts given initially at the beginning of the lecture, the reading course textbook, visually displayed materials presented on a blackboard, overhead projectors, etc. Nattinger & Decarrco
(1992, in Flowerdew, 1995) display at some length the differences in such forms between less and more formal lecture styles, making the further distinction between “global” and “local” macro-organizers. Flowerdew, 1995, reporting Strodte-Lopez (1991) who explains that asides, which have identifiable markers, are important features of lectures that maintain audience-speaker rapport and may in fact clarify the speaker’s orientation to the main points.

2.5 Listening Comprehension and instruction in English medium:

Listening and comprehension skill development are demanding for L2 learners and in FL instruction in English medium. Comprehending a spoken language is a critical requirement since when listeners are obliged to incorporate information from “a range of sources; Phonetic, phonological, prosodic, lexical, syntactic and pragmatic” (Lynch, 1998, p.3, in Balzet, 2001). Balzet (2001) this real time processing in such spontaneous and authentic context reveals that listening is “complex, dynamic, and fragile” Celce-Murcia, cited in Balzet (2001).

This complexity is explained by Smit (2006) "In lecture discourse listeners require knowledge of the specialist subject and must distinguish between what is relevant and what less important to the main purpose. The emphasis in lecture is
generally assumed to be in the content conveyed." Smit (2006) classified the particular skills that are associated with lecture listening as follows:

- The ability to concentrate on and understand long stretches of talk without having the opportunity of engaging in the facilitating functions of interactive discourse, for example asking for repetition

- Negotiate 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.

2.6 Listening comprehension and input from other sources:

What increases the difficulty is 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 become divided between listening to the lecturer and consulting the handout Jordan (1997, cited in Smit (2006).

2.7 Aspects of difficulties of Listening Comprehension in Academic Lectures:
One aspect of difficulty mentioned by Khualleih (1999) taken from students feedback in a discussion is that ESL students described that their lack of academic success resulted more from a lack of understanding of academic lecture than from inability to comprehend the subject content conveyed in them.

Another aspect of difficulty reported by Smit (2006) concerning her experience at UNAM University in Namibia, “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". She summarized the outcome of the process as: "In so doing they miss important semantic cues which could enable them to synthesize 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. To this she provided the reason that: "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". Smit(2006) also described the outcome of learners' comprehension problems in her study as: "The students in the present study appeared to be typically at risk. These are students whose academic progress is endangered because they lack those skills which would ensure successful listening comprehension in academic lectures.”

Smit(2006) mentioned the solution to learners' listening difficulties as: "If comprehensibility of lectures is to be enhanced, it would be crucial that lecturers at university should consciously employ discourse markers or “Chunks” in their lecture text."

2.8 Listening Purposes:

In academic setting, speaking comprehension is viewed a desired and an expected outcome of listening and reading. Giving this due importance, one line of classification in research categorizes language listening by purpose Balzet(2001). In support of scholars (Dunkel, 1996, Nagel & Sanders, 1986, Shih, 1992, and Wrigley, 1993), Murphy (1996, p.109), and Balzet(2001) see a dichotomy between instruction in “learning-to-comprehend” and practice in “comprehending-to-learn academic content material”.
A more detailed taxonomy in the same line used by Bejar, Douglas, Jamieson, Nissan and Turner (2000) mentioned in Balizet(2001), that a listening purpose entails a level of difficulty in the associated task. They propose a classifying reading purpose hierarchy to help organize listening purposes based on the accompanied task difficulty. (Balizet(2001), reporting Enright et al,2000 ). In an increasing order of difficulty these purposes are:

(1) listening for specific information:

For example, noting an appointment time.

(2) listening for basic comprehension:

Understanding main ideas and critical details.

(3) Listening to learn:

This includes the lower two purposes (1+2) in addition to integrating information from different parts of a text, as well as the relationship between these pieces of information.

(4) Listening to integrate information:

This includes all the other purposes, but requires the learner to integrate only the lower half of the hierarchy (listening for specific information and listening for basic comprehension) is encountered in L2 classroom. These listening skills are developed through tasks requiring recall of main ideas.
and basic facts. Listening to learn and listening to integrate information constitute the higher level functions and are used to motivate the native speaking student in content classes Balizet(2001). The first (Listening to learn) is not often required in L2 and FL classrooms, the second (listening to integrate information) is rarely addressed in programs that concentrate on language skill development. However difficult the final higher level function is, based on language skill development, some L2 learners need to go beyond basic language skills. They are in need of language use for study or work Balzet(2001).

2.9 English for Academic Purposes (EAP) program models:

Upon entering university level, many FL learners face the demand of studying in an English medium university and / or medium classes. The study is in English as a university requirement (EUR), or English content based instruction delivered in English for both majoring and non-majoring student.

Reviewing a number of instructional programs at universities in which English is a major or a requirement, Balizet(2001) found that all academic programs of English fell on taxonomy of 5 models :

(a) Skill-based.

(b) Thematic.
(c) Content based instruction program.

(d) Skill based and thematic.

(e) Skill-based and content-based instruction program.

Balizet (2001) states: "Skill based programs typically have separate courses for each language skill (listening, speaking, reading and writing) for general proficiency development. It focuses on learning to comprehend instruction".

A recent survey (Hafernik, Messerschmidt, & Vadrick, 1996, in Snow, 1998, p.245, cited in Balizet, 2001) of many non-native speakers (NNS) immersed in an English speaking country intensive language institute to study ESL (English as a second language), identified the majority of the instructional program as skill based, based on learning to comprehend instruction.

Unlikely, what should be enhanced in these students preparing for English medium university is comprehending -to-learn, where comprehension is a mean and learning is an end.

Thematic instruction exposes the student to a variety of academic disciplines. Murphy (p.110, in Balizet, 2001) states, "virtually every ESL listening course texts [sic] in the market presents a series of separate chapters devoted to diverse topics such as advertising, psychology, biology, archeology, fashion, computer science. Entertainment, interpersonal communication, religion, etc". This broad exposure is meant to be beneficial,
interesting, and motivating for a wide variety of students. This pre-sessional input of such wider range of text types is viewed by Adamson (1993, p.121) as to “ease the students into the standard college curriculum” and it “need not to be a drawback to linguistic progress” (P.120). Murphy (p110) strongly disputes this, striking on the in-authenticity of the context compared to the authentic academic courses. Based on this he asserts “because they are organized around a collection of unrelated topics, the discourse experiences in such material that serve to facilitate in L2 classroom contrast sharply with those representatives of academic courses” . Such material viewed by Balizet (2001) as to Produce language that is unauthentic in the target context.

Another severe drawback of thematic approach is that it doesn’t permit sufficient time in a given subject domain let alone for language. Balizet, 1995 reporting Kasper (2000, p.14) who comments “Learning enhancement appears to result from multiple exposure [sic] to language and content.” . Comprehension enhancement to these students is done by helping them develop a solid base of lexical, discourse, and content knowledge with extensive exposure to a particular subject area. This guarantees surpassing the barrier of low-level decoding and bottom-up cognitive processing resulting in rich content and linguistic memory output. In addition, it ensures top down processing and higher order thinking. Balizet (2001)
The successful substitute to thematic instruction is the content based instruction in which the focus is on comprehending-to-learn with content offered in L2. This instruction has a history of research supports (snow). Kasper (1994, 1995, and 1995/1996, cited in Snow and Balizet(2001)) conducted series of studies based on content instruction at the tertiary level. "Students in these programs performed significantly better on measure of reading than did student in non-content-based programs".

2.10 Top-down and Bottom-up Strategies:

Top-down and Bottom-up processing are specific techniques and activities which contribute positively to the comprehension and recall of the listening input (Rubin, 1987) on the bases of this they are considered listening and also cognitive learning strategies viewed as skills or activities such as listening for the gist, listening for a detail, making an inference, or summarizing. As listening strategies they are classified in terms of how the listener processes the input. Bottom-up processing strategy, as the term indicates, rely on the actual language in the listening input. It is through the understanding of sounds, words, and grammatical features that we can arrive at the meaning. These strategies involve scanning for specific details, recognizing cognates or recognizing word order patterns. Top-down strategies, such as inferring or predicting depends on the
listener’s personal background knowledge and expectations about both language and the world. This knowledge allows the listener to interpret the text on the bases of the context: the preceding linguistic context, and the situation, topic, setting, and participants for e.g. in a formal introduction in a conversation an expected “How do you do” rather than “Hi” is used. All of these are based on the previous knowledge of the setting, the participants, and of greeting and salutations.

Top-down and Bottom-up strategies are not necessarily sequential, but simultaneous and interactive.

Although less proficient listeners have and use a variety of strategies, they tend to use the wrong strategy for their listening purpose; they do not show flexibility by trying different strategies as cited on works (Vann and Abraham, 1999). These listeners tend to become distracted, frustrated, and uninterested, and are not successful in monitoring their comprehension. Less proficient students seem to be more dependent on bottom-up decoding of the listening text, because of the difficulty of the processing speed and accuracy of comprehension (Chamot and Kupper, 1999).

It is clear that discourse markers play a significant role in both top-down and bottom-up strategies as far as listening comprehension is concerned (Field, 2004, Goh, 2002, Jordan, 1997, Noblit, 1995 cited in Smit, 2006). Smit (2006) explains "Macro-
markers indicate major transitions in the lecture structure as well as helping top-down processing by initiating expectations and predictions about the lecture". She also explains: "These expectations are confirmed and supported by the speaker’s use of discourse markers of the relationships between successive unit and moves in the lecture" Smit(2006) reporting Chaudron and Richards, 1986:116). "Micro-markers work with bottom-up processing. They indicate inter-sentential relations and function as pause fillers. Examples include well”, “tight” and “let’s see.” Markers seem to enable listeners to make use of the more relevant text information since they direct the listeners’ cognitive resources in an optimal manner”.

2.11 The status of Academic lecture listening:

In a lecture situation listening seems to be an isolated skill, not interacting with the other language skills (Smit,2006 reporting Oxford 1993).Emphasizing this aspect of difficulty Smit(2006) explains : "Students frequently encounter 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 or foreign language". It should also be noted that relatively little research has been done into ESL listening despite the importance listening skill in academic lecture (Flowerdew, 1994). Therefore it can justifiably be assumed that if academic success is to be achieved ESL and FL
students at university will need all available learning strategies to assist them in understanding as the content information presented in lecture. Research has shown that the introduction of appropriate discourse markers as well as training the students to recognize and interpret them may assist the lecturer in ensuring that his intended meaning is conveyed Chaudron and Richards, 1986, Perez and Macia, 1999 Smit 2006, Eslami, 2007). This is deemed important as there is usually not enough room provided for the negotiation of meaning in the lecture situation (Smit, 2006 reporting Chaudron and Richards, 1986; Young, 1994).

2.12 BICS and CALP:

BICS and CALP is a two-tier model of language proficiency. It explains the special challenges that face the EAP learner Cummins (1981). Learners initially acquire the first tier which is the basic interpersonal communication skill (BICS). BICS is based on formulaic, situation-bound language. Balizet (2001) states: "Fluency in BICS means that speakers in the second language can manage everyday language, where the context provides language support and the cognitive demand is relatively low. The second tier is a different language type, called cognitive academic language proficiency (CALP)." Balizet (2001) further explains "This language, typical of formal instruction, occurs with reduced contextual support and high
cognitive demands. CALP entails academic literacy", Kasper , page 5 in Balzet,2001) explained CALP content as "involves the ability to use the L2 both to understand complex, often decontextualized linguistic structures, and to analyze, explore, and construct the concepts presented in academic texts". According to Cummins(1979, as cited by Garcia-Vaquez, Vazquez, and Lopez, 1997 and phrased by Balzet, 2001, “everyone is able to acquire basic interpersonal communication skills(BICS) in a first language regardless of IQ or academic aptitude. BICS, then, can be described as a language’s surface fluency, which is not cognitively demanding could be acquired in a relatively short time” (p.377). Based on this, BIC were generally required for a none-native speaker to acquire BICS in a second language (Collier, 1987, as cited by Cummins, 1999, Cummins, 2001, in Balizet, 2001) Proficiency levels that meet university admission criteria are no guarantee of full CALP. Ostler (1980), cited in Waters (1996), P.4, and Balizet, 2001, page 11) interviewed 133 L2 university students. According to students’ self-rating of their oral-aural proficiency, they were better able to communicate in non-academic context compared to academic settings Balizet (2001). The non-academic setting required mostly formulaic language, while academic contexts posed greater demands. This indicates that these students had BICS but not CALP.
Advanced-intermediate and higher level proficiency students entering university have BICS but not CALP. Problems arise when students believe that BICS mastering means they are ready for college study or to major in a second or target language. In fact they cannot manage the cognitively demanding and decontextualized language. Studies in L2 and FL clearly need extensive development in CALP before joining the college classroom Balizet(2001).

A literature review found no report of EAP presessional work with intermediate-level students and less proficient students. Balizet(2001) assumed that: "It might be that less proficient student could also benefit from content –based instruction if it is used as an adjunct course in coordination with continuous university content – based instruction program".

2.13 BICS and CALP and content based instruction:

FL learners entering and preparing for university even if endowed with a maximal requirement of basic interpersonal communication skills BICS and a higher rate of fluency in it do not have the guarantee to perform well in university content-based instruction programs. The result is either a poor academic performance, sometimes accompanied by supplementary exam, repeating forms, and external cases, or end up leaving the program, which is a total academic failure. The simple reason for this is lack of CALP. This scene is supported by the fact that
when CALP develops later in the content instruction program at university in semi-final and final semesters, student level of performance relatively exceeds, a fact referred to coincidence, for the development of CALP is not intended, for if meant, this relative increase in performance would be out of limits.

Given the demonstrated relationship between language proficiency and academic success based on comprehension why not then we develop CALP initially in the program? and when?

This question won’t be of value, if answered, if instructional programs limitations are not determined and then to locate it’s whereabouts. The scene in discussion reveals a limitation of one fold:

(a) Flaws in academic program instruction.

And to this I would add:

(b) Limitations in the material.

(c) Less proficiency selected students for content based instruction program, accompanied by the fact that the status of the medium language is English as a foreign language, and for a language to take this status is in itself a problem let alone being an instructional medium.

Limitation of the material is similar to those noted for program models (Balizet, 2001, p.8). By way of summary skill-
based approach concentrate on language skill improvements. These generally employ BICS type language and require only that students learn to comprehend.

The standard alternative. Thematic model materials, has been shown to be of very limited value for CALP development. ESL lecture materials are the third alternative to both skill based approach and thematic materials. ESL materials represent texts with audiotapes and videotapes of EAP lectures that are intended to appeal to university-bound students. This kind of material would seem to be a promising approach in EAP instruction Balizet(2001).

Scholarly examination has consistently revealed the inadequacy of these materials. One line of investigation has addressed the student learning context. Hamp-Lyons ,1983,Cited in Balzet,2001) criticized commercially published materials for lecture listening and note-taking. She observed that the lectures placed unreasonable demands on ESL students. These learners “often have no background knowledge or prior experience of the topics, and they come to each [lecture] absolutely cold which make their listening task many times difficult”, (page 12).Balzet(2001) not only summarized the objection and complaints against commercially produced EAP materials but also pointed out two advantages, that "those instructional material would have a direct parallel to the target
context of university study, if learning opportunities focused on a single subject area for a significant period of time” (12) and that such an approach allows learners “to build relevant background knowledge in incremental stages, specialized vocabulary and concepts become increasingly familiar, and [the students] are able to anticipate and synthesize topic developments more easily” (Balzet, 2001 reporing Murphy, page 12).

ESL lecture materials also suffer from lack of authenticity. MacDonald, Badger and White (2000, in Balzet, 2001) observed “paralinguistic features such as intonation, voice quality and body language, could not be accessed on audiotapes by participants” (p.13). Contemporary EAP materials are a double disadvantage to these students. These materials are profit free compared to the target life-like-learning situation, and of benefits for long-term exposure, therefore learners neither profit from a target life-like-learning situation, nor are they given sufficient time to make use of long-term exposure Balizet (2001).

Linguistically speaking, ESL lecture materials reflect only few features as that of a target situation. MacDonald et al. (2000, p.246, in Balzet, 2001, page, 13) observe that “synthetic [i.e. commercial]………..lectures only partially replicate features of discourse and language found in the target context”.

Another problem with EAP course materials is one of format compared to the format of an authentic lecture. EAP course material follow a format introducing the topic, explaining vocabulary, and then three to four minutes listening to a scripted EAP lecture, accompanied by note-taking and a follow up activity based on note-making information (Balzet, 2001). The authentic lecture is extended, wordy, and has various hesitations and repetition similar to natural spoken language, the spontaneous lecture seems “messy” (p.14). Compared to the EAP lectures, the latter appear to be scripted, written discourse, delivered orally, this proves a charge made by (Lynch 1986, cited in MacDonald et al, p.261, and Balzet, 2001, page14), that EAP lectures seemed to be read a loud from written script. Flowerdew and Miller (1997), in Balzet, page14, described EAP lectures as brief, explicit, and very coherent. "They seem, consequently to be very organized. This is not at all an advantage for the listener. The dense, synthetic lecture actually places heavier demands upon the listener". Flowerdew and Miller therefore, recommend that EAP students be exposed to spontaneous lectures, not scripted/written language delivered orally Balizet(2001).

2.14 Listening comprehension as an authentic discourse:

ESL and EFL Students having problem with comprehension in lectures Balizet(2001) asserts "need
experiences with longer and authentic text to encounter the characteristic of real lecture, such as interpersonal techniques, discourse features integration with other media, and the messiness of authentic lectures. Ideally, these would not be one-shot lecture, but part of a lecture course".

Authentic lectures based on micro and macro markers as developers of CALP (could provide the bases for ‘extensive’ academic and linguistic instruction that follows research-based principles.

2.15 Defining Discourse markers:

Discourse markers are regarded as ‘sequentially dependent elements which bracket units of talk Smit(2006) reporting Schiffrin, 1988). She has developed a list of conditions that identify an expression as a discourse marker. These conditions are listed below:

**Discourse markers have to be:**

- Syntactically detachable from the sentence.

- Be commonly used in initial position of an utterance.

- Have a range of prosodic contours such as tonic stress followed by a pause or Phonological reduction

- Be able to operate at both local and global levels and on different places of discourse.
- They have either no meaning ("well"), a vague meaning ("all in all") or be reflexive (on the language of the speaker).

- Van Niekerk (1996, in Smit, 2006) defined discourse markers as Verbal, independent markers, namely gambits, introductory markers, and concluding markers. According to Richards et al (1997) gambit is sometimes used to describe a word or phrase which signals the function of the speakers next turn in conversation. They also give the indication; of the semantic frame in which the speaker intends his utterance to be interpreted. Van Neikerk (1996) in Smit (2006), 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 indicator ("firstly….." "Secondly…..") and Meta-lingual markers ("as you are aware….."). These markers give an indication of the semantic framework. They all assist the listeners in their orientation regarding the next utterance."

2.16 The Concept of discourse Markers:

Eslami (2007, reporting Schiffrin, 1987) illustrated the concept of discourse markers in a review of the studies concerning the description of academic discourse in English,
that: "Theoretically, discourse markers are a functional class of verbal and non-verbal devices which provide contextual coordination for ongoing talk.

A second definition for discourse markers of Brown and Yule (1989) cited in Eslami (2007), "Discourse markers are “meta-lingual comments” in which the speaker specifically comments on how what he is saying is to be taken”.

This definition stresses the fact that the role of discourse markers is to provide listeners with directions about the type and structure of mental representation they should be constructing Eslami (2007).

Fraser (1993, in Eslami (2007) described discourse markers as one type of commentary pragmatic marker. He further divided discourse markers into:

(a) Discourse topic markers

(2) Discourse activity markers, and

(3) Message relationship markers.

2.17 The role of discourse markers:

Eslami (2007) illustrated the role of discourse markers in his review of the studies concerning the description of academic discourse in English, that: "Some researchers (Long, 1985; Flowerdew, 1994; MacDonald, Badger, and White, 2000) have
investigated the features of lectures (repetitions, paraphrases, rate of speech, authenticity, and syntactic complexity) that might aid L2 learners’ comprehension. However, the role of discourse markers in aiding listening comprehension has not been fully explored yet”.

With respect discourse markers on text It is argued that Spoken text with few discourse markers provide less facilitation to listeners; in dividing up the units of information in the text. Natinger and de Carrio (1992, in Flowerdew and Tauroza (1995).

Chaudron & Richards (1986) found that macro-markers help more than micro-and macro-markers together and more than micro-markers alone in second language learners’ understanding and recall of lectures. On the bases of this they strongly recommended that special attention should be given to macro discourse markers for providing strategic listeners in EAP lecture comprehension.

2.18 Location of discourse Markers:

Discourse markers (in the form of micro or macro markers) occur initially and rarely in a medial position of an utterance (De Bruyn, 1998, in Smit, 2006) if a discourse signal preceded by a pause, it acts as a barrier between two messages. Where no discourse marker is used, the intended meaning
depend on the context or intonation. Smit (2006) reporting De Bruyn (1998) further explains "the detachment of an expression 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". She added, "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 recognize and interpret specific markers in a lecture, they will listen less effectively". Smit (2006), supporting Niekerk (1999) 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 presentation, 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 the other items".

2.19 Studies of relevance to academic discourse comprehension

A considerable amount of research has been conducted and reported concerning the description of academic discourse in English (Eslami, 2007) reporting Flowerdew, 2002,). Academic lecture, as one type of academic discourse, is an
important part of most university fields worldwide. The ability to comprehend academic lectures in English is thus an important need for university students (Flowerdew and Miller, 1992, Cited in Eslami(2007). Some researchers (Long, 1985; Flowerdew, 1994; MacDonald, Badger, and White, 2000) have investigated the features of lectures (repetitions, paraphrases, rate of speech, authenticity, and syntactic complexity) that might aid L2 learners’ comprehension. However, the role of discourse markers in aiding listening comprehension has not been fully explored yet Eslami (2007).

In recent years, applied linguists working in academic contexts have increased our knowledge concerning academic listening tasks and their significance for second language teaching and learning. Eslami(2007) reporting different lines of research onto academic lecture comprehension states: "Some researchers have dealt with the macro structure of lectures (Olsen & Huckin, 1990; Young, 1994, ), others have analyzed the rhetorical function of introductions (Thompson, 1994), others with interactional practices of lecture comprehension (Morell, 2004), and yet others have investigated the use of specific variables in lectures. Flowerdew (1994) is one with the most comprehensive publications on this topic which includes specific papers dealing with cognitive discoursal, ethnographic and pedagogical issues involved in academic listening and lecture comprehension".
Additionally, while several researchers have studied discourse markers from the descriptive and contrastive perspectives, there is a relative lack of experimental work on this topic.

In their study of the role of discourse markers on listening comprehension, Chaudron and Richards (1986) found that modifications that included Macro markers signaling major propositions within the lecture improved listeners’ comprehension of lecture information. However, modification with micro markers signaling intersectional relations, framing of segment and pause fillers, didn’t aid learners retention of information. To this they concluded that macro markers help more than micro-and-macro markers together and more than micro markers alone in second language students’ understanding and recall of lectures Eslami(2007). 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 L2 learners of different ability levels and measures were taken of the comprehension. The researchers were testing three Hypotheses:
**H1**- L2 learners would comprehend the lecture better when macro 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 best comprehend the lecture with both micro and macro-markers.

Particularly inspired by Chaudron and Richards’ research, Perez and Macia (2002) conducted an exploratory study focusing on the effect of meta-discourse on learners’ comprehension of lectures. “By meta-discourse we refer to any means a speaker uses to shape discourse or to express his attitude”. The aim of their research was twofold: to find out to what extent the presence or absence of meta-discourse of such elements affects comprehension, and to assess whether or not students perceive its effects in a lecture, namely, do learners notice the presence or absence of meta-discourse items in a lecture? Do they consider meta-discourse when asked about the quality or difficulty of a lecture? Investigating these, the study had two groups of students listened to two different versions of the same lecture, one contained meta-discourse items whereas the other didn’t. The student notes, together with the result of a questionnaire requiring them to reflect on their comprehension process, were compared. The results suggest that there are two key factors to be considered, namely student proficiency in
English and the different types of meta-discourse items present in the lecture. The study concluded that the effect of meta-discourse items on comprehension is related to the students’ level of proficiency in English. Surprisingly enough, one of the study’s conclusions showed a result of a contradictory nature. Perez and Macia (2002) observed “The fact that more proficient students from group 2 (lecture without) performed better than more proficient students from group one (lecture with) may seem counter-intuitive. However if one looks at less proficient students, it appears that they were helped by the use of meta-discourse, as less proficient students who were exposed to meta-discourse performed better than less proficient students who were not. These results indicate that meta-discourse seems to be redundant to proficient students, while it helps those with a lower level of English”. Accounting for this apparent contradiction they felt a need to get meta-discourse notion examined. “On the one hand, our classification of meta-discourse includes both interpersonal markers (which add shades of meaning) and textual ones (which help to structure discourse). The presence of these two categories makes us wonder whether a general statement can be made, saying that meta-discourse helps student understand the lecture—thus assuming that both types operate similarly—or rather, whether a distinction should be made in which each category is addressed separately. On the other hand, it should also be borne in mind
that the meta-discourse elements identified range from simple markers (e.g. “for example”, “To begin with”, “however”) to more complex linguistic structures (e.g. fronting, bracketing, idiomatic expressions)” they argued. In the same line of thought they paraphrased the point that: “Whereas simpler markers can be expected to help students understand the lecture, these more complex structures, certainly beyond the reach of our foreign language students, will hardly act as an aid—as opposed to what may happen with native speakers.” In an attempt to resolve the contradiction by way of generalization they concluded that “The factor of linguistic complexity suggest that meta-discourse may have distracted proficient students from group 1, whereas proficient student from group 2 may have benefited from the straightforward, and therefore, shorter version of the message. However, in the light of the low scores obtained by less proficient students from group 2, it could also be presumed that less proficient students from group 1 were helped by the simpler markers contained in the lecture. Actually, they might have performed worse without there presence. As for proficient students’ comprehension failure:“ a possible reason for the low scores obtained by proficient students who listened to the lecture containing meta-discourse elements may be a lack of strategies for dealing with meta-discourse which may appear to them redundant or even as noise. The analysis of the notes showed that students do not use meta-discourse elements to interpret the
message. This result seemed to be confirmed by the answers to the questionnaire, where there was only scant mention of the use of meta-discourse elements in the talk, basically of the textual type, which could help students construct their notes. It is worth noting that no mention was made of linguistic devices to perform interpersonal functions.” they added

In the field of second language acquisition CALP brings itself back into the scene to match the research on comprehensible and modified input. Most of the studies on input comprehension have developed from Krashen’ (1985) input Hypothesis which stressed the importance of comprehensible input to second language acquisition. Krashen (1982) claims that in order for L2 acquisition to proceed, learners must be exposed to a comprehensible input in the target language, that is in order for L2 to take place, learners must access comprehensible input which contains language structures that are beyond competence of inter-language (IL) development, which he calls i+1. In moving from stage i to i+1 it is necessary for the acquirer to understand utterances that contain i+1. The main assumptions of the input Hypothesis are summarized as follows:

a. Access to comprehensible input is the characteristic of all cases of successful language acquisition.

b. Better or faster L2 increases with greater comprehensible input.
c. Lack of comprehensible input result in a less or a failure in acquisition (Long, 1982).

Long (1982) suggests four ways to have the input be made comprehensible:

(1) By modifying speech;

(2) By providing linguistic and extra linguistic context;

(3) By orienting the communication to here and now;

(4) By modifying the interactional structure of the conversation.

He asserts that all four aid communication, but he specially emphasizes that the 4th way i.e. modifying the interactional structure of the conversation- is most likely to aid language acquisition. In addition, he argued that the input that hadn’t been comprehended (i.e. the i+1) and the (comprehensible input i+1) may become more comprehensible through the process of negotiation.

Several researches investigated the relative effects of simplified and elaborated texts on comprehension. Yano et al (1994) presented learners with three types of texts: unmodified, simplified and elaborated (Elaboration consists of relating information to things we already know e.g. mnemonic devices for vocabulary learning). Their results showed greater comprehension for the simplified and elaborated version vs. the
unmodified texts. Oh (2001) conducted similar study looking at the comparative Values of the simplified and elaborated texts. Oh(2001) proposed that input should be modified in the direction of elaboration because it reflects more native –like features and is much successful.

A summary of the conclusions of the previous research and studies on lecture comprehension yields a framework of four points:

1. Texts with macro markers enhance comprehension better than texts with macro and micro markers together or with micro markers alone.

2. Macro markers text if elaborated would be redundant to more proficient students and might result in less comprehension, but would be of benefit to less proficient students.

3. Simpler macro markers can be expected to help understand the lecture than more complex structure as opposed to what might happen with native speakers.

4. Comprehension exceeds when textual discourse markers and interpersonal discourse markers are used than when textual discourse markers are used alone.

About academic lecture and the use of discourse markers Eslami (2007) also comments “Academic lecture, as one type of academic discourse, is an important part of most university
fields worldwide. The ability to comprehend academic lectures in English is thus an important need for university students”. Additionally, while several researchers have studied discourse markers from the descriptive and contrastive perspectives, there is a relative lack of experimental work on this topic. In order to fill the gap in research, this study investigates the effect of the use of discourse markers in academic listening comprehension of Sudanese universities students. The research is based on the premise that the knowledge derived from this investigation will provide insights to facilitate the academic listening comprehension”.

The next chapter (chapter 3) will be dedicated to the discussion of research methodology.
3. Introduction:

The general background against which this study has been designed includes two types of studies. Those on basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) which provided the theoretical model a two-tier model for the analysis of learners’ language proficiency. The second, studies on discourse markers which provided to the current study the empirical framework for enhancing learners lecture comprehension through the development of (CALP).

BICS is language proficiency responsible for characterizing Learners' level in interpersonal communication. CALP, as the term suggests, if acquired and raised, would be responsible for learners discourse comprehension in academic context. This study investigates the possibility to increase learners’ cognitive academic language proficiency (CALP) using discourse markers to enhance learners' comprehension in lectures.
This chapter presents information about the main data corpus used in the study. It also describes the population, the sampling method. Instrument design, to extend the research mentality and to assess the normality of scores results, correlation, validity and reliability considerations of research instruments are also discussed.

3.1 Population:

The population of the study is third year English majoring students with about 9 years of English as EFL background. Students whose medium of instruction in other subjects is English (e.g. the case of Juba and Ahfad Universities) are excluded.

3.2 Sample:

The sample of this study is 3rd year University students. They are English Majoring students in the Faculty of Education of the University of Khartoum. They aim to be teachers of English or enter a field where expert use of English is required. Some had at least 10 years of formal Education in English.

The total number of the Subject is 64. Of the 64 student participants 44 were females and 20 were males. At the beginning of the study subjects' age range between 20 to 24, because most of the students discontinued their education for a time before entering university. This element of maturity on the
part of some students, however does not correlate with their language proficiency as indicated by their academic records.

This weakness and academic imbalance was believed to be of research significance, because it would increase the probability that any increase in subject performance would be in the direction and the strength of the new material and by the effect of the discourse markers used in the academic lecture content.

4 of the 64 were rejected. The sample loss came about because of students’ absenteeism.

The group targeted is selected for a number of reasons:

1. They were selected because they received 3 years instruction in English at university. And that understanding instruction in English medium is partly a function of a higher language aptitude required in learners, a language ability which is relatively weak in these learners let alone found in none English majoring students or in foreign language context of no English medium.

2. Higher secondary school learners were not selected because the concept of discourse markers might be very difficult for them to perceive, understand and make use of.

3. The hypotheses in the study requires subjects who are supposed to have good experience with listening- learning strategies where factors like note-taking, listening strategies,
discourse organization, among others are considered in the learning context.

4. Another reason for using subject from this academic discipline was to ensure a certain level of language proficiency (intermediate or above) required for discourse markers to be noticed and to show their facilitating effect (Perez, Macia, 2002).

3.3 Sampling of Participants:

Participants were randomly divided in two groups, the experimental group (subject to training), and the control group (to which no training is offered). Both groups were already selected and enrolled in the department.

3.4 Materials:

Five texts were used for the training of the experimental group. The texts were chosen from the material that the students typically encounter in their academic program. Two versions of the same lectures were used. The two versions differed only in the amount of discourse markers used. They are divided into two types, texts injected with micro and macro markers (lecture with), and the equivalent versions in which no discourse signals were added (lecture without). The version submitted, which included discourse markers served as the baseline. The researcher examined the base line to make sure the text have an
appropriate number and type of discourse marker and added a few more. (Chaudron & Richards, 1986, Flowerdew & Tauroza, 1995). discourse markers in lecture without versions, which were not necessary for the prepositional content of the texts were removed.

3.5 Procedure:

A reading style of lecturing is used to present both texts versions content typically as performed in labs and conferences. The researcher delivered both versions, of the five lectures, reading a loud at normal rate of speech Table (3.1) below. Provide details of the composition of the discourse markers in the five lectures.

Lecture with versions were delivered to group one (the experimental group) and the ones without were delivered to group two (the control group). Before having the lectures delivered an intervention enlightening session about discourse marker facilitating effect on academic lecture comprehension was made.

The five training lectures were delivered in the following order. The first lecture was about the characteristics of academic register from Smit (2006). The second lecture was on the equality of languages from Encyclopedia of language. The third was on Error and Mistakes from the book a Training Course in
TOEFL. The last two are from Forum. The classification, analysis and addition of discourse markers on those text were made on the bases of their function (Hylan 2000). Based on these two Main types of discourse markers, the first is textual and the second is interpersonal discourse markers the text versions were made.

**Table (3.1): A classification of meta-discourse element**

<table>
<thead>
<tr>
<th>Logical connectives express semantic relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between main clauses/sentences</strong></td>
</tr>
<tr>
<td><em>e.g. and, therefore, however, still</em></td>
</tr>
</tbody>
</table>

| Frame markers mark main transitions between      |
| **different stages (e.g. sequence**              |
| *material, indicate topic shift)*                |
| *first, second; now, let's turn to...;*          |
| *before delving into...;*                        |

<table>
<thead>
<tr>
<th>Illocutionary markers naming the act the speaker performs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>or announcing the speaker's intention</strong></td>
</tr>
<tr>
<td><em>I am allowing myself to make sweeping generalizations; I'd like to discuss;</em></td>
</tr>
<tr>
<td><em>I shall highlight; I have attempted to compare;</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reminders refer back to other sections of the lecture</th>
</tr>
</thead>
</table>
As I mentioned before; As I think back over what I have said thus far...Throughout this lecture;

**Attributors provide support for the speaker's arguments, including quotes**

*Because of increasing evidence...*;

**Code Glosses clarify, explain, rephrase, or exemplify propositional meaning**

*for example, that is, such as, in other words,*

**Hedges withhold full commitment to the statement**

*normally, perhaps, for the most part,*

*may, might, in many cases, give or take...*, *it appears that..., I think...*

**Certainty expresses full commitment to the statement**

*of course, plain and simply, there is no such thing as...*

**Emphatics to highlight aspects of propositional content or mark salience**

*do in fact...; most importantly;*

*[fronting]*
### Attitude to express the speaker's attitude towards propositional content

* X might knock you out of your seat, the

* more interesting topic of..., it is my

* opinion that...

### Relational markers to establish and maintain rapport with the audience
(INCLUDING rhetorical questions, direct appeals to the audience, etc.)

* You might be wondering what...;

* To a European student... [refer to a

characteristic of the audience]

* Can we learn from...?

* de buen rollo, discotecas [codeswitching]

* "you", "including-we"

### Person markers to explicitly refer to the speaker "I"

### 3.6 Instruments

#### 3.6.1 Lecture and pre-test:

The pre-test which is an oral read lecture on "Introduction to Linguistics" was administered with a number of test items checking for global and local understanding. The test is of three sections: gap-filling section, multiple-choice questions section, and inference question section was administered by the
researcher. The gap-filling question is composed of a reading passage with 8 gaps to be filled by the subjects. It aims at checking the local understanding of the oral lecture. The multiple-choice questions section consists of 7 leads with 4 options for each to be answered by subjects using a circle. The inference section consists of 3 open-ended questions. It aims at testing the global understanding of the oral lecture.

3.6.2 Treatment:

The experimental group started the training programme after performing the pre-test. The training consisted of 5 lecture sessions the duration of each is 45 minutes. The first lecture aimed at raising the student awareness of listening in academic context and of the facilitating effect of discourse markers to elicit the important information of the content of the academic lecture. The first lecture was taken from (Smit, 2006).

In the following 4 session, the researcher started each by briefly discussing the particular discourse markers used in that specific lecture. The researcher briefed the students to the existence and function of discourse marker in as far as they contribute to the macro-structure of the lecture he also pointed out that macro markers can indicate points of departure from a current point of view as well as focus on important noteworthy information conveyed in lecture. (See appendix c) (smit, 2006).
After the discussion of the role of discourse markers, the lecture is introduced, then students were allowed fifteen minutes to complete the set task.

During the training sessions, physical conditions were kept as similar as possible, same day each week in the same time slot.

3.6.3 Lecture and post-test

To test the study hypotheses, a post-test was designed on the bases of content of the academic lecture on Contrastive Linguistics. The lecture was delivered orally in clear standard academic English at a normal speaking rate of approximately 150 words per minutes. Flowerdew (1994)

The oral lecture enhanced by the discourse markers facilitated the lecture flow and helped to determine the main points in spite of the gaps in word recognition that they might experience (Smit 2006, reporting Field 2003).

In designing the test, since there were no standardized tests to use, the researcher designed the test himself. The test consisted of ten gap-filling questions, seven multiple-choice questions and three inference questions. The gap-filling question is composed of a reading passage with ten gaps to be filled by the subjects. It aims at checking the local understanding of the oral lecture. The multiple-choice questions section consists of 7 leads with 4 options for each to be answered by subjects using a
circle. The inference section consists of 3 open-ended questions. It aims at testing the global understanding of the oral lecture.

3.7 Statistical Analysis:

3.7.1 Analysis of pre-test and post-test scores

Three measurement techniques are used for data analysis. They are used to extend the research mentality and to look at the normality of test scores. The first is standard deviation, a descriptive analysis technique, the purpose of which is to explore hunches that may come up during the course of the research process. It is computed to discover the extent to which the scores differ, cluster or spread from around a measure of central tendency. The second is correlation, a bi-variate analysis technique, the purpose of which is to study the relationship between two variables (hereafter macro and macro markers and scores on a post test). The third, is T-test, it is considered parametric inferential tests for statistical significance. Their purpose is to infer for the whole population not to the people in the sample.

3.8 Reliability Analysis:

Reliability is the consistency of a measuring instrument, when administered more than once, under the same conditions, it gives comparable results. It is estimated by one of four ways:
1) Internal consistency: estimation based on the correlation among variables comprising the set (typically Cronbach's Alpha).

2) Split-half reliability:

Estimation based on the correlation of the two equivalent forms of the scale, (typically The Spearman-Brown coefficient)

3. Test-retest reliability:

Estimation based on the correlation between two or more administration of the same item, scale or instrument for different times location, or populations, when the two administration do not differ on other relevant variables (typically, the Spearman-Brown Coefficient).

4. Inter-rater reliability: Estimation based on the correlation of scores between/among two or more raters who rate the same item, scale or instrument (typically intra-class correlation) It should be noted that all reliability coefficients are correlation coefficient. The researcher for practical purposes chose split-half reliability estimation to account for the reliability of the two tests. Both measurement of reliability of the two tests indicated their high reliability (r=0.82) for the pre-test, and (r=0.74) for the post-test.

3.9 Correlation:
To measure the strength of the relationship between the dependent variable (the use of micro and markers) and the dependent variable (subjects scores on post test), Pearson product-Product Moment correlation is used. The following table (3.2) lists the interpretation for various correlation coefficients.

**Table (3.2): the interpretation for various correlation coefficients.**

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8 to 1.0</td>
<td>Very strong</td>
</tr>
<tr>
<td>0.6 to 0.8</td>
<td>Strong</td>
</tr>
<tr>
<td>0.4 to 0.6</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.2 to 0.4</td>
<td>Weak</td>
</tr>
<tr>
<td>0.0 to 0.2</td>
<td>Very weak</td>
</tr>
</tbody>
</table>

Pearson Product Moment correlation is symbolized by the small letter r, and is fairly easy to compute from raw scores using the following formula:

\[
r = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[N \Sigma X^2 - (\Sigma X)^2][N \Sigma Y^2 - (\Sigma Y)^2]}}
\]

Where:

N = number of pairs of scores

\( \Sigma XY \) = sum of the products of pairs scores

\( \Sigma X \) = sum of X scores
\[ \sum Y = \text{sum of } Y \text{ scores} \]
\[ \sum X^2 = \text{sum of square of } X \text{ scores} \]
\[ \sum Y^2 = \text{sum of square of } Y \text{ scores} \]

3.10 Validity:

3.10.1 Internal validity:

Internal validity refers to the effects the extraneous factors might have on the research findings. The research could be internally invalid if it is affected by factors other than those thought to have caused them Seliger and Shohamy (1989).

These factors relate to the study design and could be summed up as follows:

1. Subject variability.
2. The size to the population.
3. Time allotted to data collection.
5. History, attrition and maturation.

Subjects’ variability relates to the degree to which the subjects are a representative sample of the whole population. In this study, representativeness is achieved by random sampling and random assignment of subjects. By this we can say that any extraneous subject variable are evenly divided by random
chance, or that subjects chosen for the study will have a random chance to being affected by these extraneous variables. It should be noted that the study design adopted the random assignment of subjects to the experimental (training) group and the control group.

It should also be noted that randomization could also be affected by small number of subjects. This leads to the overrepresentation of some subjects’ characteristics made by the fact that each subject exerts a greater influence on the performance of the group as a whole. To guard against the effect of small number of subjects on randomization, the study has a reasonable number of subjects (60), a sample of 30 subjects for each group (experimental and control) to avoid the overrepresentation of subjects’ characteristics. For small population tends to magnify the effects of individual variability, thus presenting a possible distortion to the research findings. Now again the greater the size of the sample population the more representative the sample will be to the population as a whole.

To prove the homogeneity or lack of group variability the standard deviation is calculated. It indicates how close the members of the group are to the mean. (see chapter four (findings)).
The time duration for data collection extended over approximately one month which is a reasonable time for data collection. The reason why the researcher insisted on this attrition is that if the study is conducted over a long period of time, it may lead the subjects to lose interest or be sick when periodical data is collected.

With reference to history and maturation factors affecting internal validity, both the experimental and control groups remained intact (no attrition) throughout the study. It is claimed history and maturation would have minimal influence on the participants' performance in the pre-test and post-test.

As far as instrument or task sensitivity is concerned, the researcher bore in mind that for subjects not to be test wise, content-wise or and be familiar with the content, two different pre and post-test were conducted. The test retest attempt is rejected to avoid any practice effect. Since comprehension is a cognitive or a meta-linguistic ability, students are less likely to benefit from this practice effect even a test-retest measurement is used.

3.10.2 External validity:

External validity refers to the degree of the relationship between the two variables is unambiguous or and explainable by extraneous factors Seliger and Shohamy(1989). It also refers
to the applicability and extension of the findings of the study to a wider population similar to that of the sample of the study.

External validity is affected by the following factors:

a. Generalization of the findings to other context.

b. The effect of the research environment (that subjects are aware that they are part of a study).

c. Researcher effect (e.g. indicating unintentionally the desired response).

d. The time elapsing between treatment and testing will, have important implication for evaluating the external validity.

Since the study is a replication of SL research in our foreign language context, by the research findings, it would be generalizable to foreign language context.

No effect of research environment is expected to have a role on the study findings since the subjects in the experimental group were not told that they are part of an experiment what they are told is just the role of discourse marker play in enhancing their listening comprehension.

Ascertaining that the group wasn't unintentionally led towards a particular response, the researcher himself presented the oral read texts.
It is worth noting that no time elapsing between the treatment or training and testing, for the post-test was provided after the final fifth session.
CHAPTER FOUR

Data Analysis and Discussion of Findings

4. Introduction:

This chapter deals with data analysis and discussion of the study's findings. The hypotheses are presented and explained and the results are discussed and interpreted based on these hypotheses.

4.1 Reliability Analysis:

Reliability is the consistency of a measuring instrument, when administered more than once, under the same conditions, it gives comparable results. Reliability is estimated by one of four ways, internal consistency, Split-half reliability, test-retest reliability, and inter-rater reliability.

It should be noted that all reliability coefficients are correlation coefficients. The researcher for practical purposes chose split-half reliability estimation using The Spearman-Brown Coefficient analysis to account for the reliability of the study. The results of the analysis are (r=0.82) for the pre-test and (r=0.74) for the post-test which is considered strong.
4.2 Correlation: (between the effects of the use of discourse markers and enhancement of lecture comprehension)

To measure the strength of the relationship between the dependent variable (the effects of the use of discourse markers) and the dependent variable (lecture comprehension enhancement in terms of subjects' scores on a post-test), Pearson Product Moment Correlation is used. The result of the computation for \( r \) is 0.74. See table (4.1) below.

**Table 4.1: Ranges, and interpretation for various correlation coefficients**

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8 to 1.0</td>
<td>Very strong</td>
</tr>
<tr>
<td>0.6 to 0.8</td>
<td>Strong</td>
</tr>
<tr>
<td>0.4 to 0.6</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.2 to 0.4</td>
<td>Weak</td>
</tr>
<tr>
<td>0.0 to 0.2</td>
<td>Very weak</td>
</tr>
</tbody>
</table>
Table (4.1) above indicates the range of the relationship of 0.74 as strong, and therefore the correlation between discourse markers effects and enhancement of lecture comprehension is strong.

4.3 Study Questions and Hypotheses:

This section discusses two parts, the first deals with research questions and the second is dedicated to research hypotheses

4.3.1 Study Questions:

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 based on the content information in a lecture?

- Would there be a significant difference in the pre and post-test scores, suggesting that the training 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 and not 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?

4.3.2 Study Hypotheses:

A general hypothesis was formulated:

H1 — A training programme on the role of discourse markers will significantly improve students’ listening comprehension.

This was tested as three specific hypotheses.

H2 — A training programme on the role of discourse markers will significantly improve students’ scores in gap-filling questions.

H3 — A training programme on the role of discourse markers will significantly improve students’ scores on multiple-choice questions.

H4 — A training programme on the role of discourse markers will significantly improve students’ scores on inference question.
4.4 The presentation of the results of the first hypothesis:
(H1: A training programme on the role of discourse markers will significantly improve students' listening comprehension).

The acceptance or rejection of the hypotheses depends on whether there will be a difference resulted from the comparison between the participants' scores in the pre and post-test. When the scores of both groups in the pre-test were compared, no significant difference is found.

To test the hypothesis the researcher used t-test for showing the difference between the means of two independent samples at 0.05 level of significance and to compare between the control group and the experimental group in the test with it's three sections.

Table (4.2) : t-test results of the experimental and control groups' means before the training of the experimental group on discourse markers

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.diviation</th>
<th>t</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>30</td>
<td>58</td>
<td>42.67</td>
<td>14.665</td>
<td>1.049</td>
<td>0.298</td>
<td>No difference</td>
</tr>
<tr>
<td>control</td>
<td>30</td>
<td>58</td>
<td>38.63</td>
<td>15.103</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What could be noticed from Table 4.2 is that there is no significant difference between the group means in the pre-test for both groups. This could lead to the assumption that both groups started from the same level of proficiency. What should be noted at this point is that both groups were attending the same oral read lecture and pre-test.

Table 4.3: The results of t-test analysis of the post-test showing group means after the training of experimental group on discourse markers

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s. deviation</th>
<th>t</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>30</td>
<td>58</td>
<td>60.83</td>
<td>16.973</td>
<td>5.24</td>
<td>0.001</td>
<td>Difference for exp. group</td>
</tr>
<tr>
<td>Control group</td>
<td>30</td>
<td>58</td>
<td>38.00</td>
<td>16.795</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

However, the scores on the post-test revealed a different picture. But to what extent could the difference between the pre and post-test scores be attributed to the intervention programme on discourse markers and not solely to natural maturation (maturation refers to the changes such as physical growth and
mastering developmental skills which may affect experimental results that occur over time within subjects). To test whether or not the general hypothesis- i.e. that the intervention programme constituted the only source of difference in the treatment of the two groups and that the awareness-raising of the role of discourse markers was responsible for the significant improvement of the experimental group's listening comprehension measured by the pre-test ,training and post-test design of the study, t-test was conducted to confirm that it; is unlikely that the improvement of the experimental group was by chances, and could rather be ascribed to extrinsic factors such as attending the intervention programme. (see table 4.2)

Even after a relatively short period of time students seemed to have benefited from the intervention programme directed at improving the listening comprehension in the training program.

The post-test scores showed a considerable improvement in the performance of the experimental group therefore the hypothesis is supported at 0.001 level of significance. It is to be noted that the level of significance stipulated for the study is 0.05. 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 re-
inforcing the assumption 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 of the different sections of the pre- and post-tests for both the experimental and control groups are included as Appendix D.

4.5 The presentation of the results of the second hypothesis: (H2: A training programme on the role of discourse markers will significantly improve students’ scores in gap-filling questions). To test this hypothesis the researcher used t-test for the difference of means between two independent samples at 0.05 level of significance. The results are displayed in the following table (4.4):

**Table 4.4: t-test results showing groups means of the control and experimental group in the gap–filling section of the pre–test before the training of the exp. Group on discourse markers**

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.deviation</th>
<th>T</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>30</td>
<td>58</td>
<td>35.00</td>
<td>16.557</td>
<td>0.858</td>
<td>0.395</td>
<td>No difference</td>
</tr>
<tr>
<td>control</td>
<td>30</td>
<td>58</td>
<td>31.33</td>
<td>16.554</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The figures in the above table (4.4) showed that there is no statistical difference between the two groups at the pre-test level of the gap-filling section, because the level of significance to support the hypothesis is 0.05 whereas the level of significance indicated in the table above is 0.395. Therefore the hypothesis is rejected.

To see whether there is any difference between the post-test scores of the experimental and control group in the post-test section of the gap filling question another t-test for the differences of means was computed the results are provided in the following table:

**Table 4.5: t-test for the differences of means of the experimental and control group for the gap-filling section of the post-test after the training of the experimental group on discourse markers**

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.deviation</th>
<th>T</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>30</td>
<td>58</td>
<td>56.00</td>
<td>21.432</td>
<td>5.215</td>
<td>0.001</td>
<td>Difference for exp. Group</td>
</tr>
<tr>
<td>control</td>
<td>30</td>
<td>58</td>
<td>31.33</td>
<td>14.559</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results indicated a statistical difference showing significance in the direction of the experimental group. Therefore the hypothesis is statistically supported at the level of significance of 0.05 because the level of significance indicated in the table is 0.001.

4.6 The presentation of the results of the 3\textsuperscript{rd} hypothesis: (H\textsubscript{3}: — A training programme on the role of discourse markers will significantly improve students’ scores on multiple-choice questions).

To test this hypothesis the researcher used the t-test for the differences of means of two independent samples of the experimental and control group in the multiple choice section of the pre-test. The result indicated no significant statistical difference between the two group's performances in the pre-test. The following table(4.6) illustrates this:
Table 4.6: t-test for the differences of means of the experimental and control groups for the multiple choice section of the pre-test

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.deviation</th>
<th>t</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre multiple choice</td>
<td>30</td>
<td>58</td>
<td>55.93</td>
<td>23.743</td>
<td>0.605</td>
<td>0.547</td>
<td>No difference</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pre multiple choice</td>
<td>30</td>
<td>58</td>
<td>52.30</td>
<td>22.737</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The figures in the above table (4.6) showed that The means of the experiential and control group are comparatively the same, The level of significance is 0.547 whereas the level of significansce stipulated for accepting the hypothesis is 0.05. To see whether there is any difference between the post-test scores of the experimental and control group in the post-test section of the multiple choice question another t-test for the differences of means was computed the results are provided in table (4.7).
Table 4.7 t-test for the differences of means of the experimental and control groups for the multiple choice section of the post-test after the training of the experimental group on discourse markers

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.deviation</th>
<th>t</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>30</td>
<td>58</td>
<td>72.10</td>
<td>22.812</td>
<td>3.594</td>
<td>0.001</td>
<td>Difference for exp. Group</td>
</tr>
<tr>
<td>Post multiple choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>30</td>
<td>58</td>
<td>50.30</td>
<td>24.159</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post multiple choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statistics in the above table(4.7) support H3 (A training programme on the role of discourse markers will significantly improve students’ scores on multiple-choice question) at 0.05 level of significance. The level of significance indicated in the table(4.7) is 0.001. The mean of the experimental group is 72.10 whilst the mean for the control group.
4.7 The presentation of the results of the 4th hypothesis: (H4: — An training programme on the role of discourse markers will Significantly improve students’ scores on inference questions).

To test this hypothesis the researcher used t-test for the difference of means between two independent samples at 0.05 level of significance. The results are displayed in the following table:

**Table 4.8: t-test for the differences of means of the experimental and control group for the inference section of the pre-test before the training of the exp. Group on discourse markers**

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.deviation</th>
<th>t</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>30</td>
<td>58</td>
<td>34.13</td>
<td>25.568</td>
<td>1.085</td>
<td>0.282</td>
<td>No difference</td>
</tr>
<tr>
<td>control</td>
<td>30</td>
<td>58</td>
<td>26.63</td>
<td>27.932</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The figures in the above table(4.8) showed that there is no statistical difference between the two groups at the pre-test level of the inference section, because the level of significance to support the hypothesis is 0.05 whereas the level of significance indicated in the table(4.8) above is 0.282. Therefore the hypothesis is rejected.
To see whether there is any difference between the post-test scores of the experimental and control group in the post-test section of the inference question another t-test for the differences of means was computed the results are provided in the following table:

**Table 4.9: t-test for the differences of means of the experimental (after the training) and control group for the inference section of the post-test:**

<table>
<thead>
<tr>
<th>groups</th>
<th>n</th>
<th>df</th>
<th>mean</th>
<th>s.deviation</th>
<th>t</th>
<th>sig</th>
<th>conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>30</td>
<td>58</td>
<td>62.20</td>
<td>26.757</td>
<td>5.023</td>
<td>0.001</td>
<td>Difference for exp</td>
</tr>
<tr>
<td>control</td>
<td>30</td>
<td>58</td>
<td>28.23</td>
<td>25.608</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The difference in the post-test scores of the experimental and control group as showed in the table (4.9) above. The results indicated a statistical difference showing significance in the direction of the experimental group. Therefore the hypothesis is statistically supported at the level of significance of 0.05 because the level of significance indicated in the table (4.9) is 0.001.
It could, therefore, be inferred that the subjects in the experimental group were able to derive more information from the lecture post intervention than at pre-test level. The control group of students showed no improvement in the inference section of the post-test. Thus re-inforcing the assumption 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.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5. Introduction:

This chapter consists of three parts; a summary, conclusions, and recommendations. The first part, summary, is an overview of the study concerning the "The Enhancement of Foreign Language Listening Comprehension in Academic lecture Using Discourse Markers". The second, Conclusions, is a contextualized discussion of the results found emphasizing the contribution of the study to SLA and FL research. The third, makes recommendations for further research into foreign language academic listening for different Levels and contexts of learning.

5.1 Summary

The problem addressed by this research is that Foreign language learners' (FLL) level of lecture comprehension in
English medium is relatively low. The researcher observed that these learners have an overall difficulty with comprehending and recalling information from oral content lectures delivered in English. In support of this, research indicated that many L2 learners, even those with adequate English language proficiency, have difficulty comprehending academic lectures and fail to grasp the main points of the lecture (Allison & Tauroza, 1995; De Carreo & Nattinger, 1992; Young, 1994; Thompson, 1994; Hyon, 1997; Lebauer, 1984, cited in Smit, 2006).

A large body of research also demonstrated that L2 learners’ difficulty in understanding lectures stem from difficulties at the discourse level as well as the sentences level. (e.g. pronunciation, grammar and vocabulary) (Olsen & Hukin, 1999; Yuan, 1982; Clerehan, 1995). Olsen and Hukin (1990 in Smit, 2006) found that most L2 learners with proper comprehension of English at the sentence level have difficulty in identifying the main ideas in the lecture. Smit, 2006 reporting Oxford, 1993, Flowerdew, 1994) concerning learners' difficulties in understanding lectures argued that: "It seems that the main problem lies with the students' inability to extract meaningful information from the linguistic input. This input could not be synthesized into intake of the content information and recalled when necessary. In a lecture situation listening seems to be an isolated skill, not interacting with the other language skills."
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 or foreign language". Further more, despite the fact that academic listening skills are necessary for academic achievement, relatively little research has been done into ESL listening (Smit, 2006, reporting Flowerdew, 1994,). Smit (2006) further concludes: "Therefore it can justifiably be assumed that if academic success is to be achieved ESL and FL students at university will need all available strategies to assist them in comprehension as effectively as possible the content information presented in lecture.

Research on lecture comprehension has shown two possible ways to help non-native speakers understand lectures in L2 and FL. One is to improve the knowledge and a skill in the target language until the comprehension is no longer a problem. The other is to somehow modify the form of the lecture, to vary the input so as to make it easier to comprehend. Chaudron and Richards (1986) found that modifications that included macro markers signaling major transition within the lecture improved listeners' comprehension of lecture information. The first approach seems time consuming since the learners are already involved in the program.
Smit (2001), reporting, Young (1986), also asserts that "the introduction of appropriate discourse markers as well as training the students to recognize and interpret them may assist the lecturer in ensuring that his intended meaning is conveyed". She further argues: "This is deemed necessary as there is usually not enough room given for the negotiation of meaning in the lecture situation"

The researcher felt a need to produce strategic listeners, students who, even if they don't have complete control of the grammar or an extensive lexicon, can at least fend for themselves in communicative situations in the academic lecture. Therefore, this study investigates the effects of the use of discourse markers on learners listening comprehension in academic lectures.

Based on this, This study is built on the general hypothesis (H1) that A training programme on the role of discourse markers will significantly enhance learners' listening comprehension. This was tested as three specific hypotheses:

**H2** — A training programme on the role of discourse markers will significantly improve students’ scores in gap-filling questions.
**H3** — A training programme on the role of discourse markers will significantly improve students’ scores on multiple-choice questions.

**H4** — A training programme on the role of discourse markers will significantly improve students’ scores on inference questions.

The sample chosen is third year English language majoring students of the College of Education of the University of Khartoum. The sample was already selected and enrolled in the English Department. The participants were randomly divided into two groups, the experimental group, subject to training, and the control group to which no training is offered.

A pretest- training- post-test experimental design is used to test the effectiveness of the independent variable (discourse markers effect) on the dependent variable (subjects' comprehension of lectures).

In the pre-test, the existing listening comprehension of both the experimental and control group was tested before any awareness-raising, after a five week training programme of five sessions, in which only the experimental group was made aware of discourse markers and their role in structuring academic lectures, both groups' performance was again tested in a post-test. It is worth mentioning that the subjects in the experimental
group were not exposed to the training programme and that they attended only the regular lectures in the academic programme in the English Department at the College of Education of the University of Khartoum.

The study used a pre-test and a post-test for data collection. The scores of the pre-test and post-test were statistically analyzed using Spearman-Brown coefficient for reliability analysis, Pearson Product-Moment coefficient for correlation, and SPSS t-test to detect whether the training Programme on the role of discourse markers had a significant effect on the performance of the experimental group. The reliability of both test was strong, \( r=0.82 \) for the pre-test and \( r=0.74 \) for the post-test. The result of the correlation between the independent variable(discourse markers effect) on the dependent variable(subjects' comprehension of lectures), is strong\( r=0.74 \). The t-test analysis for both the pre-test and post-test scores indicated a significant difference for the experimental group in the three tests' sections.

5.2 Conclusions:

For the pre-test the study concludes that:

(a) Participants lacked global and local listening strategies associated with deriving content information in lectures.
b. Low scores, and means for both groups in the inference question section indicated a lack of global listening strategies which help recognize the major ideas in a lecture.

c. The low means for both groups in the gap-filling section indicated the lack of the local listening strategies responsible for giving discourse meaning at sentence level.

For the post-test results the study concludes that:

d. The positive effect of the training programme on discourse markers on the experimental group is indicated by its significant improvement in all 3 sections of the post –test. Based on this, the study general hypothesis, and consequent hypotheses were all tested.

The study conclusions correspond with those of Chaudron and Richards(1986) of the role played by discourse markers in signaling major transitions and emphases in spoken academic lecture in ESL context. The point of departure of this study is that it focuses on the training of learners on the role of discourse markers effects on lectures comprehension in an EFL setting, a context of language learning that has not been the focus of most academic lecture comprehension studies. However, the conclusions of the study do not agree with Dunkel and Davis
(1994) study which indicated that discourse markers do not assist L2 learners in comprehending English-medium lectures.

The study's conclusions also correspond with those of Perez and Macia (2002) except their conclusion that discourse markers in complex form and structure complicates and hamper the listening process. To paraphrase this point, I would quote Eslami, 2007 reporting Perez and Macia (2002), who stated: "Whereas simpler markers can be expected to help students understand lectures, these more complex structures, certainly, are beyond the reach of our foreign language students, and will hardly act as an aid- as opposed to what may happen with native speakers". However my study's findings showed a conclusion of a different nature. That whatever the structure or form of discourse marker, whether it is in simple or complex form, our foreign language students would benefit from them in understanding lectures if these students were trained on their form, use and function in for example an intervention programme. In Perez and Macia study, a possible reason for the low scores obtained by proficient students who listened to the lecture containing metadiscourse elements may be a lack of strategies for dealing with metadiscourse which may appear to them redundant or even as noisy.

The researcher also disagrees with the assumption made by (Long, 1982) concerning what he calls comprehensible input.
Long (1982) suggests four ways to have the input be made comprehensible:

(1) By modifying speech;

(2) By providing linguistic and extra linguistic context;

(3) By orienting the communication to here and now and

(4) By modifying the interactional structure of the conversation.

Long (1982) asserts that all four ways aid communication, but he specially emphasizes that the 4th way i.e. modifying the interactional structure of the conversation- is most likely to aid language acquisition. Furthermore, he argued that the input that hadn’t been comprehended (i.e. the i+1) and the (comprehensible input i) may become more comprehensible "through the process of negotiation". To this I would add that in a lecture situation there is no time and room for negotiation, Based on this, the study supports the assumption made by Smit (2006) when she stated that "the introduction of appropriate discourse markers as well as training the students to recognize and interpret them may assist the lecturer in ensuring that his intended meaning is conveyed". She further argued: "This is deemed necessary as there is usually not enough room given for the negotiation of meaning in the lecture situation ".

The argument against negotiation also holds true for what is suggested, and described by Oh (2001) as "elaboration". Oh
(2001) conducted similar study looking at the comparative Values of the simplified and elaborated texts. She suggests that input should be modified in the direction of elaboration because it retains more native –like qualities and is equally successful, if not more successful. As for elaborations and modifications to be authentic and native-like is a valued aim in research, but as they are sources of details and negotiation of meaning there is no room given for them in listening comprehensions in academic lectures.

In the same line of the argument against paraphrase, elaboration and negotiation (Long1985; Flowerdew, 1994; MacDonald, Badger, and White, 2000) have investigated the features of lectures (repetitions, pararaphrases, rate of speech, authenticity, and syntactic complexity) that might aid L2 learners’ comprehension. However, the role of discourse markers in aiding listening comprehension has not been fully explored.

The study's conclusions derived from the pre-test results of both group indicated a deficiency in their Cognitive Academic Language Proficiency(CALP) and not in their Basic interpersonal communication skills(BICS). The point is made by Cummins(1979) comparing between the two types of language proficiency that everyone is able to acquire BICS in a first language regardless of IQ or academic aptitude. Given the
demonstrated difference between BICS and CALP, the researcher concluded that proficiency levels that meet university admission are no guarantee of full CALP. FI learners even if endowed with a maximal requirement of a basic interpersonal communication skill (BICS) and a higher rate of fluency in it, don't have the guarantee to possess a higher degree of comprehension, good performance and better success in the program. And that the correlation between learners' proficiency levels and their performance is only something relative, for not all good students perform well. This stresses the need for learners' strategy training to develop CALP in an intervention programme using discourse markers.

5.3 **Recommendations:**

The recommendations made in this section will address a number of topics. Each has its association to listening and lecture comprehension enhancement.

(1) Practical implications of this study suggest that it’s findings may be used to determine instructional actions to be undertaken in different teaching contexts. Students should not only be made aware of the presence, importance and facilitating effects of discourse markers for academic lecture comprehension, but also should be trained to observe and make use of them. Therefore the conclusions of the study suggested that students entering university institutions could benefit from
language training programme, for those who attended the intervention programme showed significant improvement on the post-test (See appendix C for pre-test post-test scores.).

2. Syllabus designers, second and foreign language research on listening and lecture comprehension, lecturers and pedagogic professionals should give attention to the facilitating nature and effect of discourse markers to independent learning being highlighters to the important information of spoken and written texts.

(3) It's crucial that course designers include practice activities to help promote problem-solving skills among students, to overcome or cope with listening comprehension difficulties. This is deemed necessary, because studies on lecture comprehension stress both the benefits of awareness -raising program and the accompanying practice activities focusing on inference and gap- filling practice.

4. Second and foreign language acquisition (SLA, FLA) theory and research should not only see the low rate of academic success at university to students disadvantaged past, but also should have a holistic vision as to comprise of several aspects such as linguistic, socio-cultural, meta-cognitive and cognitive factors Smit(2006). Field (1998, in Smit, 2006) supports the point “spending time on helping with their listening problems is an important part of teaching listening".
6. Lecturers not only at foreign language (FL) context but also internationally, have found that students do not seem to deduce enough subject information from their lectures, this also supported by Smit(2006). Smit(2006) reporting 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, at least at secondary level, if comprehensive university studies are anticipated". Supporting the same point Smit, 2006 further argued that at university Listening comprehension research, needs to be focused on possible supporting and facilitative programmes that will help students to become selective, effective, strategic and active listeners in academic settings. In university language Centers, 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 conclusions of this study it seems clear that listening to academic lectures as a skills area should be addressed at university academic programmes, if the Language Centre intends to support students in becoming independent learners at university level.

7. The research findings call for a need for supplementation in the academic environment or context. The point is supported (Alison and Tauroza, 1995, and Smit(2006). In order to enhance effective listening comprehension in students when they attend academic content lectures, lecturers should supplement their
lecture presentations, either with outlines on the board or overhead projector or in the form of hand-outs and sheets.

8. As for training, 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 repetition by means of discourse markers such as "first", ". Secondly". It seems clear that presented texts and course curricula should be reviewed in order for lecturer of EAP courses to use materials that contain suitable types of discourse markers, this is supported by (Smit, 2006).

10. Discourse markers should also be viewed as a source of appreciation of the intended meaning of a speaker in a different L2 or FL context. Since native speakers of a language appear to listen more to speaker's intent than to raw acoustic input, it is important for the L2 or FL students to be trained to appreciate how the intended meaning is negotiated in another language.

11. In our situation in the college where all the students at an English medium university are English FL 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.
13. Training and intervention studies on the role of discourse markers should give attention to oral read lectures in introducing lecture contents. The rationale behind oral read lectures is that the students should not be influenced by other variables such as gestures and body language. The lecture inevitably conveyed aspect of intonation and emphases prevalent in natural speech. Oral read lectures could also be of benefit because the students could make use from the same lecture content in their own time, this conclusion is also supported by Smit (2006). The use of oral read content lecture had an added advantage as to contribute to the replicability of this study.

12. Further research is necessary to test the present findings and to enhance students’ abilities to recognize and interpret discourse markers in academic content.


Kasper (Ed.), Content-based College ESL instruction (pp.3-25). Mahwah, NJ: Lawrence Erlbaum Associates.


Rost, M., (1990) Listening in Language Listening. London; Longman.

Schiffin, D. 1988." Realities and Ideologies of English and 'Other' English’s" In Journal for Language Teaching . Vol. 31, 1;68-75


Lecture and pre-test:

In today’s session we are going to look at what’s meant by linguistics. Firstly the best way to have a control, a full control over a phenomenon is to have it defined and to have it described. Linguistics can simply be defined as the scientific study of language. This entails and brings about two further questions; what’s meant by scientific and what’s meant by language. The scientificness of the study of language stresses the need to formulate a number of hypotheses about the language. Hypotheses for instance about the structure of the language. The second step is to test these hypotheses against language use. If the hypotheses are not confirmed and are rejected they need to be reformulated on the bases of the examples provided. The following examples illustrate the points.

a. “Adjectives describe nouns and they precede them” this expression resembles the formulated hypotheses.

b. - The black cat
- The clever boy

- Lieutenant general

The terms “black”, “clever”, “general”, are adjective

Black and clever came before their nouns while general came after it. On the bases of these facts we can reformulate the hypothesis that:

(Adjectives describe their nouns and procedure them when they modify them and go after them when they are predicates).

At this point of the lecture, let’s try to define what’s meant by language. Structurally speaking language can be defined as a set of symbols with which we communicate. On the other hand from a cognition point of view, language is defined as an abstraction that’s based on the linguistic behavior of it’s users. Now again linguistics study is based on learning the levels language. These levels could be summarized as follows:

a. Phonetics and phonology (the sound system).
b. Morphology (words and word’s structure).
c. Syntax (the structure of phrases, clauses and sentences).
d. Semantics (the study of words meaning, sentence meaning and cultural meaning).

To go back again these levels could be studied in details.

a. The sound system:
To begin with the study of the sound system could be divided into two:

1. The study of consonants and their articulatory description.
2. The study of vowels and their articulatory description.

b. Morphology:

Now again morphology concerns itself with the study:

1. Of the types of morphemes.
2. Structure of words.
3. Affixes and their types.
4. Inflection and their function.

c. Syntax:

On the other hand syntax is about the structure of phrases, clauses and sentences. In the study of syntax the following points should be considered:

- The grammatical values of words.
- The inflection in English syntax.
- The importance of words position.
- The role of words inflection in English grammar.

d. Semantics:

In semantics study we should include the followings:
- Sense or words’ meaning.
- The role of structure and structural meaning in determining words’ function.
- Cultural meaning e.g. opening a door of a car to a lady as:
  a. A valued practice.
  b. A cheap practice.

These levels of language can be discussed in details next session.

**Comprehension pre-test:**

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 feature that the field of ………………………as well as the definition for……………………and the ………………….aspect of language study.

   The study of language entails the learning of the levels of language these levels are ………………….and………………

   The definition of language “being an abstraction that is based on the linguistic behavior of it’s users is from the viewpoint of cognition not …………………. The study of phonology is of two folds it include …………………and………………
2. Choose the most suitable option for each of the following statement. Please circle the number of your choice.

2.1 Cognition means:

a. What a person says or does.
b. Recognition.
c. A mental ability.
d. Psychological.

2.2 Morphology means:

a. The study of phrase structure.
b. The study of clause structure.
c. The study of sentence structure.
d. The study of word structure.

2.3 The term semantics: can include:

a. Sense (words meaning).
b. Structural meaning.
c. Cultural meaning.
d. All of the above.

2.4 The study of the sound system includes:

a. Consonants.
b. Vowels.
c. Morphemes.
d. a and b.

2.5 The characteristics of hypotheses are that they can be:

a. Formulated.
b. Reformulated.
c. Tested and changed.
d. All of the above.

2.6 The study of language can be made scientific by:

a. Laboratory testing.
b. Testing of the hypothesis in language labs.
c. Testing the hypothesis against language use.
d. a and b.

2.7 A linguistic behavior of language user can be:

a. What he says and does.
b. His physical signs.
c. An eyewink.
d. All of the above.

3. Please answer the following question:

3.1 Why do you think cultural meaning should be included in the study of semantics? …………………………………………

………………………………………………………………………………
3.2 What are the main differences between syntax and morphology?

4. What do we mean when we say language is an abstraction that’s based on the linguistic behavior of its users?
Lecture and post-test:

Good morning ladies and gentlemen. Today we are going to look at two central features of the study of contrastive linguistics. The study is of two folds, contrastive analysis and error analysis. Contrastive analysis concerns itself with the comparison and contrast between two or more languages at the levels of the language e.g. at the levels of syntax, semantics, morphology, phonology …etc. It’s a fact that no effort could be exerted in the field without a direct reference to Robert Lado the designer of the field of contrastive analysis (CA). Contrastive analysis assumes that errors and mistakes are traced back to the differences that exist between the mother tongue (first language) and the new language (second or foreign language). It stresses the transfer to the new language. e.g. “mother tongue interference in the pronunciation of consonants clusters”

Conversely, Error analysis & assumes that not all errors are traced back to the differences between the mother tongue and the new language, for the simple reason that in the new language we can have a number of phenomena that are problematic and can lead to learning errors and mistakes e.g. homophones (words with same sound, different in spelling and
different in meanings e.g. sun and son) and homographs (words with different meanings but with same spelling e.g. date (the time) and date (the appointment).

Now again the contrastive approach analyzes errors on the bases of the differences between the mother tongue and the new language at the levels of language, for instance listing Arabic and English consonants to arrive at the differences that might lead to errors and mistakes which lead to learning difficulty.
<table>
<thead>
<tr>
<th>Type of phoneme</th>
<th>English consonant</th>
<th>Arabic consonants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>6 stops</td>
<td>8 stops</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>9 fricative</td>
<td>13 fricative</td>
</tr>
<tr>
<td></td>
<td>s z , θ t , s Ѳ , f v h</td>
<td>ح ظ ص ث ذ س</td>
</tr>
<tr>
<td>Affricates</td>
<td>2 Affricates</td>
<td>One Affricate</td>
</tr>
<tr>
<td></td>
<td>s Ѳ</td>
<td>ج</td>
</tr>
<tr>
<td>Nasals</td>
<td>3 nasals</td>
<td>2 nasals</td>
</tr>
<tr>
<td></td>
<td>m n η</td>
<td>م ن</td>
</tr>
<tr>
<td>Lateral</td>
<td>2 Lateral</td>
<td>2 Lateral</td>
</tr>
<tr>
<td></td>
<td>/L/ /r/</td>
<td>/ل/ /ر/</td>
</tr>
<tr>
<td>Semi Vowels</td>
<td>2 Semi-vowels</td>
<td>2 Semi-vowels</td>
</tr>
<tr>
<td></td>
<td>/w/ /j/</td>
<td>/و/ /ي/</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>
It should be noted that the difference between the two languages at the level of consonant affect both speaker to commit pronunciation errors made by language transfer or mother tongue interference.

It is more likely for the English learner of Arabic to mispronounce the Arabic [ض] because it’s not found in English; conversely, it is difficult for the Arabic speaker of English to pronounce. /ŋ/ because it’s not found in Arabic.
### Description and transcription of English consonant:

**English consonants described:**

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>allophones</th>
<th>description, occurrence, examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/</td>
<td>[p]</td>
<td>Voiceless un-aspirated bilabial stop. It occurs in complementary distribution with [pʰ], the latter appearing only in the beginning of stressed syllables and released in word final positions. /səpər/ [səpər] ‘supper’.</td>
</tr>
<tr>
<td>/t/</td>
<td>[t]</td>
<td>Voiceless un-aspirated alveolar stop. It occurs in complementary distribution with [tʰ], the latter appearing only in the beginning of stressed syllables and released in word final positions. /putin/ [pʰut ɨ] ‘putting’.</td>
</tr>
<tr>
<td>/k/</td>
<td>[k]</td>
<td>Voiceless un-aspirated velar stop. It occurs in complementary distribution with [kʰ], the latter appearing only in the beginning of</td>
</tr>
<tr>
<td>Symbol</td>
<td>Sound Description</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td><strong>[kʰ]</strong></td>
<td>Voiceless aspirated velar stop. See ([k]) above. (/kuk/ [k^{h}uk^{h}]) ‘cook’.</td>
<td></td>
</tr>
<tr>
<td><strong>/b/</strong></td>
<td>Voiced bilabial stop. It occurs in all positions. (/beyb/ [beyb]) ‘babe’; (/eybəl/ [eybəl]) ‘able’.</td>
<td></td>
</tr>
<tr>
<td><strong>/b/</strong></td>
<td>Voiced alveolar stop. It occurs in all positions. (/did/ [did]) ‘did’; (/raydɨ/[raydɨ]) ‘riding’.</td>
<td></td>
</tr>
<tr>
<td><strong>/g/</strong></td>
<td>Voiced velar stop. It occurs in all positions. (/gow/ [gow]) ‘go’; (/wigəl/ [wigəl]) ‘wiggle’; (/bæg/ [bæg]) ‘bag’.</td>
<td></td>
</tr>
<tr>
<td><strong>/č/</strong></td>
<td>Voiceless affricate made up of a voiceless alveolar stop followed by a voiceless alveopalatal fricative. It may be represented phonemically as (/tʃ/). It occurs in all positions. (/ čorč/ [čorč]) ‘church’; (/wičəz/ [wičəz]) ‘witches’.</td>
<td></td>
</tr>
</tbody>
</table>
| **/j/** | Voiced affricate made up of a voiced alveolar
## CONSONANTS

<table>
<thead>
<tr>
<th>Consonant</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/dʒ/</td>
<td>Stop followed by a voiced alveopalatal fricative. It may be represented phonemically as /dʒ/. It occurs in all positions. /jəj/ [jəj] ‘judge’; /jəjŋ/ [jəjŋ] ‘judging’.</td>
</tr>
<tr>
<td>/s/</td>
<td>Voiceless alveolar fricative. It occurs in all positions. /sey/ [sey] ‘say’; /lesən/ [lesən]</td>
</tr>
<tr>
<td>Symbol</td>
<td>Phonic Value</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
</tr>
<tr>
<td>/ʒ/</td>
<td>[ʒ]</td>
</tr>
<tr>
<td>/ŋ/</td>
<td>[ŋ]</td>
</tr>
<tr>
<td>Symbol</td>
<td>phoneme</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
</tr>
</tbody>
</table>
**Arabic consonants:**

The Arabic consonants are thirty-two in number. Here again the reference is not to the consonants found in the Arabic alphabet, but rather to the consonants as they sound orally.

**Arabic Consonants:**

<table>
<thead>
<tr>
<th>Manner of Articulation</th>
<th>Point of Articulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bifurcal</td>
</tr>
<tr>
<td>Stops</td>
<td>vl.</td>
</tr>
<tr>
<td></td>
<td>vd.</td>
</tr>
<tr>
<td>Affricates</td>
<td>vl.</td>
</tr>
<tr>
<td></td>
<td>vd.</td>
</tr>
<tr>
<td>Fricatives</td>
<td>vl.</td>
</tr>
<tr>
<td></td>
<td>vd.</td>
</tr>
<tr>
<td>Nasals</td>
<td>vd.</td>
</tr>
<tr>
<td>Laterals</td>
<td>vd.</td>
</tr>
<tr>
<td>Vibrants</td>
<td>vd.</td>
</tr>
<tr>
<td>Semi-vowels</td>
<td>vd.</td>
</tr>
</tbody>
</table>
1. b /baab/ ‘door’
2. t /taaž/ ‘crown’
3. d/dIIk/ ‘cock’
4. T /TaaRa/ ‘he flew’
5. D /DaaR/ ‘hall’
6. k /kiis/ ‘bag’
7. q /qalam/ ‘pencil’
8. ? /?ana/ ’I’
9. ċ¹ /čažza9/ ‘be encouraged’
10. ţ² /ţamma9/ ‘it was gathered’
11. f /fiil/ ‘elephant’
12. θ /θumma/ ‘then’
13. ō /ōanab/ ‘tail’
14. s /sinn/ ‘tooth’
15. z /zaala/ ‘it vanished’
16. S /Siin/ ‘China’
17. Đ /Danna/ ‘he thought’
18. ŝ /šams/ ‘sun’
19. ž / žuu9/ ‘hunger’
20. x /xubz/ ‘bread’
21. g /ganam/ ‘sheep’
22. h /hūut/ ‘whale’
23. 9 /9ala/ ‘on’
24. h /huna/ ‘here’
25. m /man/ ‘who’
26. n /naama/ ‘he slept’
27. I /Iaa/ ‘no’
28. L /?aLLaah/ ‘God’
29. r /ranna/ ‘he rang’
30. R /haRR/ ‘heat’
31. w /wažad/ ‘he found’
32. y /ysma9/ ‘he hears’
## Description of Arabic consonants:

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>allophones</th>
<th>description, occurrence, examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/b/</td>
<td>[p]</td>
<td>Voiceless bilabial stop. It occurs in complementary distribution with [b], the former occurring only before voiceless consonants. /habsun/ [hæpsun] ‘prison’.</td>
</tr>
<tr>
<td>/t/</td>
<td>[t]</td>
<td>Voiceless un-aspirated dental stop. It occurs in complementary distribution with [tʰ], the latter appearing only in the beginning of stressed syllables and released in word final positions. /šitaa?un/ [šitææ?un] ‘winter’.</td>
</tr>
<tr>
<td>/T/</td>
<td>[T]</td>
<td>Voiceless dental velarized stop. It</td>
</tr>
<tr>
<td>Sound</td>
<td>IPA</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>/k/</td>
<td>[k]</td>
<td>Voiceless un-aspirated velar stop. It occurs in complementary distribution with [k”], the latter appearing only in the beginning of stressed syllables and released in word final positions. /Šaka/ [Šækæ] ‘he complained’.</td>
</tr>
<tr>
<td>/q/</td>
<td>[q]</td>
<td>Voiceless unaspirated pharyngeal stop. It occurs in all positions. /qaala/ [qæælæ] ‘he said’; /saqa/ [sæqæ] ‘he watered’; /Iam yasuq/ [Iæm ysuq] ‘he did not drive’.</td>
</tr>
</tbody>
</table>

| /j/ | [ɶ] | Voiced affricate made up of a voiced alveolar\(^2\) stop followed by a voiced alveopalatal fricative. It may be represented phonemically as /dʒ/. It occurs only initially and medially. /jamma9/ [jamma9] ‘it was gathered’; /byjamma9/ [byjamma9] ‘it gets gathered’.


| /θ/ | [θ] | Voiceless inter-dental fricative. It occurs in all positions. /θuθ/ [θuθ] ‘one third’;
<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Symbol</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/Ð/</td>
<td>[Ð]</td>
<td>Voiced velarized inter-dental fricative. It occurs in all positions. /Ðanna/ [Ðann] ‘he thought’; /mahÐuuÐ/ [mahÐuuÐ] ‘lucky’.</td>
<td></td>
</tr>
<tr>
<td>Symbol</td>
<td>Sound</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>/g/</td>
<td>[g]</td>
<td>Voiced velar fricative. It occurs in all positions. /ganam/ [gænæm] ‘sheep’; /mašguul/ [mæʃguuI] ‘busy’; /Sabag/ [Səbəg] ‘he dyed’.</td>
<td></td>
</tr>
<tr>
<td>/9/</td>
<td>[9]</td>
<td>Voiced pharyngeal fricative. It occurs in all positions. /9aIa/ [9ælæ] ‘on’; /ma9l/</td>
<td></td>
</tr>
<tr>
<td>Phoneme</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/pʰ/</td>
<td>Producing [pʰ] in the beginning of stressed syllables and in released-word final positions.</td>
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<td>Hearing and producing /g/ as a separate phoneme from /k/.</td>
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<td>Hearing and producing /v/ as a separate phoneme from /f/.</td>
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<td>/θ/</td>
<td>Hearing and producing /θ/ as a separate phoneme from /t/, /s/, and /ð/.</td>
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<td>/ð/</td>
<td>Hearing and producing /ð/ as a separate phoneme from /d/, /z/, and /θ/.</td>
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| /ŋ/     | Hearing and producing /ŋ/ as a separate phoneme from /ŋ/.

[mæ9l] ‘with me’; /ma9/ [mæ9] ‘with’.
| separate phoneme from /n/. |  |
Post-test comprehension question:

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

   In this lecture we looked at the central features of the field of ………..linguistics. The field is of two folds ………..and …………..

   …………..Analysis assumes that all errors are traced back to the …………..that exist between the ……………..and the new language. Homophones and …………..are the examples provided by error analysts against the assumptions made by…………..analysists. Ate Arabic sound ……………

   Is considered difficult for English speakers of Arabic while the English sound ………………is difficult for Arabic speakers to English.

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

2.1 Homophones means:

   a. Words with same meaning.
   b. Words with same writing.
   c. Words with same spelling.
   d. Words with same sound.
2.2 Mother tongue means:

a. First language.

b. Second language.

c. Foreign language.

d. Can mean all of the above.

2.3 Arabic language has just:

a. One affricate.

b. Two affricates.

c. Three affricates.

d. Four affricates.

2.4 The [ض] sound is avelarized form of:

a. /d/

b. /t/

c. /θ/

d. /θ/

2.5 Arabic language has……………….:  

a. 9 stops  

b. 8 stops  

c. 6 stops  

d. 13 stops  

2.6 In Arabic we don’t have:
2.7 In English we have:

   a. Phonemes.
   b. Allophones.
   c. Velarised /t/.
   d. All of the above.

3. Please answer the following questions:

3.1 What is the main difference between contrastive analysis and error analysis?

3.2 What do we mean when we say that /ض/ is avelarized sound?

3.3 Why do you think it is difficult to have glottal stops in human language?
APPENDIX C

EXAMPLE OF AN INTERVENTION SESSION

Today we will look at the use of semantic discourse markers in a college 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 “contrastive”; 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 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 well 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 hand out distributed.

Thank you.
### APPENDIX D

**RAW SCORES OF PRE-AND POST-TESTS**

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B: Experimental Group

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### Raw Scores of test section

#### Section one: Gap-Filling Questions

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### Section two: Multiple Choice Questions

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**B: Experimental Group**

Section three: Inference questions

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