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# DECLARATION

This thesis is my own work and composition.

A. A. Palmer-Leon 7th December, 1981.

#### ABSTRACT

This study attempts to provide a partial description of Classroom Foreigner Register - the language spoken by Teachers of English as a Foreign Language when they address non-native speakers in the classroom. It examines the speech of sixteen teachers interacting with students at four proficiency levels: Elementary, Intermediate, Advanced and Native Speaker, the latter serving as the Control Group.

Three basic research questions were asked in order to determine whether there is any variation in the speech of these teachers: 1) What are the properties of the language addressed to the non-native speakers?; 2) How does the language of the teacher differ at each level and 3) What are the characteristics of the pragmatic behaviour of the teachers when interacting with native and non-native students?.

It was hypothesized  $(H_{O})$  that the speech of the teachers would not be affected by the level of proficiency of the students being addressed.

Analysis revealed that five variables were consistently different in the two registers: Mean T-Unit Length (MTUL), Average Clause Length (ACL), Lexical Variation (LV), Checking for Understanding and Feedback (CUF) and Metalingual Glosses (MLG) all as a function of <u>Lexical Choice</u>. The null hypothesis was therefore rejected in their case.

On the basis of the answers to the research questions, an index was compiled which included these five variables together with four others whose results, although not significantly different from Native Register's, were nevertheless consistently different enough to warrant inclusion in the index. It was concluded that the teachers' speech was affected by the level of proficiency of the students they were addressing with respect to these variables. Also that the features of Foreigner Register could be considered indicators of the use a simplified register.

Although the other twelve variables supported the null hypothesis, it is shown that they are nevertheless <u>qualitatively</u> different in the two registers since Native Register employs vocabulary which is richer in cultural allusions and the use of expressions and collocations than Foreigner Register.

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# CHAPTER I

# AIM OF THE STUDY

#### AIM OF THE STUDY

### 1.1 INTRODUCTION

This thesis attempts to shed some light on a most important variable involved in the process of learning a foreign/ second language: The nature of the input data made available to the learner in the classroom i.e. the language used by the teacher to the learner and which the latter tries to process as s/he<sup>1</sup> endeavours to create an internalized representation of the language being studied. As the learner acquires greater proficiency in the language, this internalized representation will be progressively modified in the direction of the version used by a native speaker. It seems, then, that the teacher's language plays a crucial role in the language-learning process since it is, in part, these data that will serve initially as input for the learner to process and use as a model for the progressive refinement of his interlanguage.

3rd person singular pronouns will be used as follows:

 a) "s/he" for subject with no indication of masculine or feminine to avoid identifying persons or favouring any particular sex. (read either "she or he" or "he or she", as preferred.
 b) The masculine for all other forms e.g. "him, himself etc..., to avoid the use of clumsy formulas such as "him/her, her/himself".

#### 1.2 RATIONALE FOR THE STUDY

Most language teachers would probably have felt, at some time or other, the frustration engendered by the realization that 5-7 years' instruction in a foreign language at school only produces pupils with, at best, a limited knowledge of the foreign language they have so diligently tried to get them to learn; at worst, a total aversion to the subject and an intense desire to get through the final examination and forget the language as quickly as possible. This has certainly been the writer's experience both at High School and University levels during his teaching career in Maracaibo, Venezuela.

Research into the language teaching/learning process has consistently attempted to tackle this problem by observing the main interacting variables: the learner (OUTPUT), the teacher and teaching materials (INPUT). <u>Output studies</u> have been mainly concerned with the learner's difficulties or the strategies s/he employs while learning. <u>Input studies</u> have addressed themselves to either a) the pedagogical aspects of the process i.e. the techniques used by the teacher to communicate with/impart knowledge to his pupils; b) the simplification and gradation of language teaching materials or c) the learner's comprehension of particular grammatical distinctions.

All of these investigations, however, have largely ignored one of the most important variables in the teaching-learning process: The language used by the teacher. Since language classes are by no means conducted in silence and language is the vehicle through which the learner will achieve an understanding of the foreign language, it occurred to the writer that a study of this language in a natural classroom would serve a useful purpose: provide an insight into the characteristics of this language - one that might lead to a greater understanding of the data on which the learner bases his hypotheses while learning the language.

Since it aims to provide a description (with a view to understanding its nature) of the data on which the student bases his learning in the foreign/second language classroom, the present thesis forms part of the theoretical study of second language acquisition - the broader investigation into the learning process and the circumstances under which learning takes place.

#### 1.3 PURPOSE OF THE STUDY

On the basis of the variables to be observed, this study therefore attempts to provide a syntactic, lexical and partially pragmatic description of one type of classroom language - the language used by the teacher of English as a Foreign/Second language when addressing pupils at different levels. The teachers in this case are all native speakers of English who are addressing non-native pupils at three different levels of proficiency: Elementary, Intermediate and Advanced. The study also examines, as control data, the language used by the teacher of English as a Foreign/Second language when addressing pupils who are native speakers of English. All teachers have intelligible, educated English or Scottish accents. The term "partially pragmatic" refers to the fact that only some aspects of the pragmatic behaviour of the teacher are taken into consideration in the analysis since a fully pragmatic analysis is difficult to set up with respect to the behavioural variables (cf. Davy 1980: 279), and is therefore beyond the scope of the limited resources available for the thesis (in terms of time as well as money).

By comparing the syntactic and pragmatic properties present in the teachers' language output at each non-native level with those of the native-level output, the study tries to establish the differences and similarities between each level, with a view to providing an indication of the complexities or otherwise present in the language and in the pragmatic behaviour of the teacher that might lead to a reassessment of the ways in which teachers pitch their talk at different levels in their efforts to communicate with, and be understood by, their pupils.

In an effort to obtain as true a picture as possible, the language analyzed was produced under natural conditions, the only controlled variables being topic and level of proficiency. The teachers were free to express themselves as best they saw fit. Thus it was reasoned that if similar results to those of other studies were obtained under these natural circumstances, they would lend weight to the assumption that accommodation takes place in the speech of

teachers along syntactic and pragmatic lines, as a function of the level of proficiency of the learners/pupils they are addressing at the time.

### 1.4 DEFINITIONS

In the present thesis, use is made of certain terms that other investigators apply, with differing criteria, to the speech addressed by native speakers of a language (usually English) to non-native speakers of that language, the result being a rather confusing picture. Since it is essential that the sense in which they are used here be clearly understood, the following definitions are given as guidelines. (A fuller discussion of the issue between Foreigner Register and Foreigner Talk is postponed until Chapter II, Section 2.5).

#### 1.4.1 Simplification

As used here, the term refers to that action on the part of a native speaker whereby s/he attempts to make his message clearer by modifying the language in which the message is couched in an effort to make himself understood.

### 1.4.2 Accommodation

This refers to the adaptation made by a native speaker - reflected in his use of linguistic forms - in response to the level of knowledge of his interlocutor.

## 1.4.3 Baby Talk

This is used in Ferguson's (1964) sense i.e. "...any special form of language which is regarded by a speech community as

being primarly appropriate for talking to young children and which is generally regarded as <u>not the normal adult</u> use of language." (p.114) (emphasis mine).

## 1.4.4 Motherese

This term is used following Newport's (1976) sense i.e. the language used by mothers when interacting with their children.

## 1.4.5 Adultese

Used to refer to other adults' speech to children (fathers, caretakers) and also to older children's speech (since it exhibits the same characteristics as the adults' (cf. Snow, 1972)).

#### 1.4.6 Foreigner Talk

This term is used in the original sense employed by Ferguson (1971/1975) i.e. to refer to a simplified grammatical system or code in which formal elements, such as copulas and articles, are omitted and others added, e.g. pronouns with imperatives. The point to be borne in mind is that Foreigner Talk is ungrammatical, a feature by no means typical of the foreign/second language classroom. (cf. Corder, 1979).

#### 1.4.7 Foreigner Register

Following Arthur et al. (1980), the term is used to refer to the language addressed by a native speaker to non-native speakers of that language. This register makes use of the standard code of the language i.e. it follows the normal rules of grammar and remains within the bounds of those rules. (cf. also Henzl, 1975/1979).

## 1.4.8 Native Register

The term is used here in a broad sense to refer to the speech addressed by native speakers to one another. (Freed's (1978)"Native Talk"). It will be used mainly when making comparisons between it and Foreigner Register in Chapter V.

#### 1.5 THEORETICAL FRAMEWORK

In the present study, it is assumed that there is an effort on the part of any speaker of any language to accommodate and adjust his speech on a number of linguistic levels in response to either cues from an interlocutor or to the perceived image that the speaker has built up of the interlocutor. The general principle underlying the work has been well documented in the case of First/Second Language Acquisition: whenever proficient speakers of a language attempt to communicate with interlocutors whose knowledge of that language is deficient in any respect, the linguistically proficient partner in the interaction will tend to adjust his language to fit the perceived needs of the interlocutor(s), in an effort to achieve effective communication (cf. Snow, 1972; Cross, 1976; Andersen, 1977; Newport et al., 1975/1977; Henzl, 1974, 1975/1979; Corder, 1979; Ferguson, 1971,1975; Gumperz and Hernandez-Ch.,1972). definition, teachers of English as a Foreign/Second By Language fall within this category, as it is their job to

present the language to their students in both a linguistic and psychologically palatable form so that the latter can easily understand and process the message being transmitted by the teachers. However, the statement is equally true of any linguistic activity in any language, so that a lawyer explaining a case to his client and a doctor an illness to a patient would both do so in totally different terms from the ones they would use when discussing the same case with a colleague. Should either use the "client/patient" register to a colleague, the latter's reaction would most likely be negative since s/he would consider that s/he was being "talked down to".

Since adjustment, as we have seen, is present in any language (cf. also Henzl: 1975, 1979), it is reasonable to expect, <u>mutatis mutandis</u>, that the findings of the present study would be generally useful, as background theoretical knowledge, to any foreign/second language teacher in any teaching/learning situation.

#### 1.6 PEDAGOGICAL AIMS AND IMPLICATIONS

It is well known that the processes by which adjustments are made in natural discourse are not under the <u>conscious</u> control of the speaker. They are, as it were, the result of linguistic negotiation during the interaction, in which these unconscious adjustments are made by the speaker in accordance with his perception of the interlocutor's knowledge of the topic and, if applicable, proficiency in the language.

It was stated in Section 1.2 that this thesis was inspired by the desire to gain some insights into the nature of the input addressed to learners in the English as a Foreign/ Second Language classroom. Sufficient care was taken to ensure that the language to be analyzed in the thesis was produced under natural classroom conditions (see 1.3 and 3.1), and that the subjects should not become aware of the real purpose of the study (see 3.6), so it is not unreasonable to consider the speech as near as possible a representative sample of natural discourse.

As such, it is likely to reflect the unconscious adjustments (referred to above) made by the teachers when addressing the students at the different levels of proficiency, indicating the accommodation effected by, and the pragmatic behaviour of, the teachers during the interaction.

Now, the aim of this study is to provide a description of this speech - input - to the learner; and this description will include the features of the speech that characterize the unconscious adjustments made by the teachers and bring them into <u>conscious</u> focus. In other words, the various linguistic manifestations of the unconscious adjustments reflected in the language samples may now be <u>consciously</u> examined. In teacher training, as part of the study of the learning process that teacher trainees are required to undertake, it is desirable that an idea of the nature of these <u>unconscious</u> processes be brought to the trainee teacher's awareness. They could be told what the features are of the

speech that is believed to be easier for the learner to process (because the speaker would presumably have adjusted his speech in the interests of achieving effective communication i.e. s/he may unconsciously have tried to make processing easier for the learner).

It is conceivable that teachers could be trained to control their language by monitoring, in their speech, the features highlighted in the description of the language of teachers interacting with different types of students.

Experience could perhaps show them how to build in rhetorical features such as redundancy, the use of short utterances and slowing down, for example, when addressing low-proficiency students. It is generally believed that, through training, teachers could eventually consciously control these rhetorical features. There is no doubt, of course, that teachers can be instructed about teacher talk. It does not follow, however, that they will know how to produce this talk. What is being claimed here is not that the unconcious processes can be brought under conscious control but that teachers could be made consciously aware of the syntactic and pragmatic manifestations of these processes in speech. Although it has not been empirically proved that this modified speech is easier to process (cf. 2.2.4) nor that teachers can consciously control their rhetoric, common sense would suggest that knowledge of its features is an asset, rather than a liability, to a teacher's performance in the foreign/second language classroom.

#### 1.7 THE STUDY AND RELATED RESEARCH

The present study deliberately set out to observe those variables which other researchers have found to be significant in First and Second Language Acquisition - on the measurement of which there is high inter-researcher unanimity. (See 2.2.2, 2.3 and 3.2). A total of 21 variables were observed: 1 phonological, 4 pragmatic, 5 lexical, 11 syntactic. This was done with a view to providing as full a description of Foreigner Register as possible. The study is inevitably similar to its predecessors in some respects since it is observing variables that other researchers have already studied, albeit from a different perspective. It may serve, however, to confirm the results of previous investigations, thus adding to their validity.

A confirmation of results in this respect is even more important from the point of view of the present thesis since it differs from its predecessors in the following four significant aspects:

a) The language analyzed is that produced by professionally trained <u>teachers</u> of English always talking to <u>students</u> at whatever level was being observed. In other studies, the native speakers addressed were either peers (Gaies, 1977); in different situations (Henzl, 1974, 1975); or not teachers (Arthur et al., 1980; Long, 1980). It may therefore be legitimately claimed that the language analyzed here is that branch of Foreigner Register which has been called "teacher talk".

- b) The topic under discussion in all classes at all levels was the same at all times.
- c) The discussions took place under normal classroom conditions, during a normal period in the students' own classroom i.e. in familiar surroundings.
- d) The teachers and students all knew each other as they had been in contact for over two months.
  - This important factor would have contributed to making both students and teachers feel at home and thus produce "normal" language from the start.

Points <u>b</u>, <u>c</u> and <u>d</u> serve to highlight the fact that, besides being a representative sample of Foreigner Register (see Point <u>a</u>), the language analyzed was also as near as possible a spontaneous product of classroom interaction between teachers and students. Perusal of the texts shows that some teachers were drawing on a certain amount of shared knowledge between them and their students, building on previous discussions in class and lessons taught on other occasions. Teacher 8 (ADV), for example, referred to a previous occasion on which s/he had talked about the Union of the Scottish and English Parliaments. Teacher 4 (ADV) referred to a previous discussion on political parties, specifically to the Scottish National Party (SNP).

This section has shown the relationship existing between the present study and other research in the field, pointing out differences and similarities between them. Like all research, the study will review previous work (Chapter II), highlight the trends observed in the present (Chapters IV and V) and attempt to look forward to future work in the field in the light of the (present) findings (Chapter VI).

#### 1.8 STRUCTURE AND PLAN OF THE THESIS

Chapter II presents a review of the literature on related research. As stated previously, there are inevitable repetitions since there are relatively few studies dealing with Foreigner Register. However, the focus here is on the development of thought in the field up to the present.

Chapter III presents the design of the experiment, the variables to be observed and the material to be analyzed (collection and segmentation). Excluded material is also indicated, with reasons for its exclusion.

In the light of the hypotheses, the results of the analysis

are presented in detail in Chapter IV. They are divided into four categories, in order of importance. The behaviour of all variables is analyzed in detail.

Chapter V discusses the implications of these results, comparing them to the work of other investigators in the field.

Finally, Chapter VI presents a set of conclusions arrived at as a result of the analysis and discussion. After looking at the implications for the teaching of English as a Foreign/Second language, it then indicates areas in which future research could lead to a greater understanding of some of the issues raised in the present study.

## CHAPTER II

# A LOOK AT RELATED RESEARCH

#### CHAPTER II

#### A LOOK AT RELATED RESEARCH

#### 2.1 INTRODUCTION

Researchers have in recent years increasingly turned their attention away from the study of the mechanisms whereby children initially acquire language to the language activity in which adults and children are engaged. The scope has been gradually widened to encompass any language activity in which one of the participants is not equipped with the full linguistic skills that would enable him to hold his own in the interaction. The different types of language (e.g. Motherese, Adultese, Baby Talk, Foreigner Talk and Foreigner Register) therefore began to be studied for their specific linguistic properties, and investigators began to try to establish and identify differences and similarities among these types. Through all of these linguistic activities, there runs a common assumption: each type of language is deemed to exhibit variation from ordinary usage i.e. the language used in these interactions is considered different from the one used when the participants are fully proficient native/adult/ adult-like speakers, the argument being that such situations invariably elicit simplification from the native/adult/adult-like speaker.

This Chapter will only look at research that bears relevance to the present thesis. Baby Talk and Foreigner Talk will

therefore not concern us further here (see 2.5, however). There also exists a body of literature concerned with Teacher Talk as a classroom management or socialization language within the setting of native English-Speaking classrooms, such as Bellack, Kliebard, Hyman and Smith Jr. (1966); Flanders, 1970; Sinclair and Coulthard, 1975 and Coulthard, (1977). Since these studies are not concerned with the learning of English as a Foreign/Second Language, they will not be taken into consideration either.

The relevant concerns of this Chapter, then, will be: a) Studies dealing with the language spoken by adults to children, since developmental parallels exist between them and second language acquisition, and they served as the springboard for research into child/adult second language acquisition (cf. Burt and Dulay, 1974 a,b; 1975 a, b; Cook, 1976).

b) Studies dealing with the language addressed by native speakers to learners of a foreign language, either in an experimental, naturalistic or classroom setting.

#### 2.2 ADULT-CHILD LANGUAGE STUDIES

#### 2.2.1 Introduction

The spate of studies aimed at investigating the properties of the speech addressed to children learning language was started by what Bard (1979:3) terms "the signal for battle"

embodied in Chomsky's (1965) claim that children learn a first or second language even though no special care is taken to teach them or to monitor their progress; this, too, in spite of the "deviant" and "degenerate" linguistic enviroment that surrounds the child. Language behaviour, Chomsky concluded, was therefore innate and attention should be directed at its structure (as generated by the language acquisition device (LAD)) rather than at its provenance.

This conclusion ran counter to the empiricist view and these studies therefore set out to question Chomsky's claim and to try to show: a) that the speech addressed to young children <u>does</u> exert an influence on their acquisition of language and, b) that this language is by no means ungrammatical and degenerate.

In the review that follows, the assumptions underlying the study of the variables is that their presence/absence in adult-child speech contributes in greater/lesser degree to the psycholinguistic complexity of the utterances; and, consequently, that short, complete sentences are psychologically simpler input to the child, who would therefore find it easier to process and understand these utterances. (The classification follows Bard (1979)).

## 2.2.2 Motherese

Even before Chomsky's pronouncement, Brown and Bellugi (1964)

found that, in the interactions of a mother-child dyad, the mother's utterances were, on the whole, short and grammatically simple and came

"... in the form of a simplified, repetitive and idealized dialect." (p.136)

Certain characteristics of Motherese stand out when compared to mother-adult speech:

#### 2.2.2.1 Pitch

This was found to be higher and more variable in motherchild speech than in mother-adult (Garnica, 1974, 1977; Remick, 1971).

### 2.2.2.2 Rate of Speech

This was found to be significantly slower to child than to adult (Remick, 1971; Broen, 1972; Ringler, 1973; Cross, 1977; Garnica, 1977). Maternal speech rate seems to vary with the task being performed. Garnica found that mothers pronounced more slowly for ten-year-olds than for adults in the puzzle task she set them. The changes are typical of those used when an adult is speaking emphatically.

#### 2.2.2.3 Pauses

These are carefully inserted, almost always at utterance boundaries (Broen, 1972; Dale, 1974) and not within utterances.
Mothers do not appear to hesitate within sentences when speaking to their young children. Both studies found significant differences between mother-child and adultadult utterances.

# 2.2.2.4 Amount of Speech

Snow (1972) found that the average amount of speech was significantly more for two-year-olds than for ten-year-olds. In this study, the speech to the latter is very similar to adult-adult. Snow found that the mothers' performance was affected not so much by task difficulty as by the child's indication to her of his problems with language, thus eliciting a greater amount of repetition. In this connection, Gleason (1977) suggests that the repetitions are triggered by the child's failure to produce the paralinguistic gestures which indicate to the mother that the child is following, and understanding, the explanations.

# 2.2.2.5 Syntactic Complexity

Most researchers found it was greater in adult-adult than in adult-child speech as expressed by:

### 2.2.2.5.1 Mean Length of Utterance (MLU)

This was found to be significantly shorter (Snow, 1972; Ringler, 1973; Phillips, 1973; Newport et al., 1975, 1977; Cross, 1975, 1977). Snow found a difference in MLU for the set task. For two-year-olds: 9.84 when the child was absent and 6.60 when the child was present. For the ten-year-olds: 11.25 (absent) and 9.63 (present), both significantly higher than for the two-year olds.

## 2.2.2.5.2 Compound and Complex Utterances

These were found twice as much in adult-adult as in adultchild utterances, the ratio being lower in the latter (Drach, 1969; Phillips, 1971, 1973; Remick, 1971; Snow,1972; Ringler, 1973; Cross, 1975, 1977; Newport, 1976). Ringler, Remick and Snow found that there is less embedding in Motherese. In general, there seems to be an overall reduction of constituent length.

# 2.2.2.6 Sentence Type

The relative frequency of the sentence type varies, but the interrogative is reported as the most common (Ervin-Tripp, 1971; Blount, 1972; Newport, 1976, 1977; Sachs, Brown and Salerno, 1976). These are followed by imperatives and, lastly by declaratives. However, Snow (1971) reports half of all utterances as declarations and Broen(1972) finds an equal distribution of questions and declaratives.

## 2.2.2.7 Redundancy

Mothers use a more restricted vocabulary to their children (Broen, 1972; Phillips, 1973; Ringler, 1973). They also paraphrase and repeat their utterances as well as those of the child, which they also expand (Snow, 1972; Ringler, 1973; Newport et al., 1977; Cross, 1975; Harkness, 1977).

# 2.2.3 Adultese

The speech of other adults to children (fathers, caretakers, older children) was also found generally to exhibit the same properties as Motherese (Gleason, 1973, 1977; Brown, Salerno and Sachs 1972, 1976; Shatz and Gelman, 1973; Andersen, 1977). Gleason and Andersen found that as early as age four and certainly by age eight, children themselves modify their speech when addressing younger children. This lends weight to the argument that, in speech situations in which one of the interlocutors is a young child, linguistic simplification will invariably be elicited from the adult or adult-like speaker; also that the nature of these adjustments is perceived and learnt at a relatively early age.

# 2.2.4 General Overview and Conclusion

Most adult-child language studies then, suggest that adjustments in Motherese and Adultese reflect the syntactic complexity of the child's speech (Pfuderer, 1969; Phillips, 1970; Remick, 1971; Cross, 1975; Gleason, 1975; Moerk,1976; Bynon, 1977; Snow, 1977). However, others point out that several other factors are at work, viz.: the child's age, cognitive ability and social status and the situational meaning of the utterances (Blount, 1972; Gelman and Shatz, 1975; Newport, 1976; Newport, Gleitman and Gleitman, 1977). They indicate that it seems more likely that adult speakers respond to all of these perceived listener attributes. The general picture that emerges is that of the existence of a register that, broadly speaking, has the following characteristic variables when compared to adult-adult speech:

LEXICO-SYNTACTIC VARIABLES: Fewer grammatical (function) words, more lexical (content) words, deliberate choice and use of nouns, less use of pronouns, a greater amount of redundancy features (such as reduced vocabulary, repetition, paraphrases and expansions).

<u>PHONOLOGICAL VARIABLES</u>: Higher pitch, slower rate of speech, exaggerated intonation, careful distribution of pauses, generally at constituent boundaries.

Among others, Gleason (1975) and Snow (1977) claim that this is an ideal teaching language. However, studies (Harkness, 1977; Newport, 1977) have shown contradictions in that some mothers do not always use simple language to their children and sometimes invert the canonical order of utterances. Further, some features correlate <u>negatively</u> with the child's linguistic progress (Harkness, 1977) and do not seem to be systematically graded or geared to the child's development (Newport et al., 1977, Newport, 1976).

While it may not serve as a <u>syntax teaching</u> language, it contains certain types that seem to serve the function of language instruction. The large number of deictic forms

provide (just as they do for beginning language students) a conventional label for the referents of English words. It also undoubtedly provides the child with the opportunity to practise and rehearse the language s/he is learning at all stages of development. The studies by Ervin-Tripp (1971) and Sachs and Johnson (1976) provide evidence that without this register the child would not produce or understand any language (Ervin-Tripp, 1971); or, with very little input, would be able to understand and answer questions but not process all the characteristics of normal speech (Jim, the hearing child of deaf parents in Sachs and Johnson, 1976). Furthermore, institutional children (who do not get the normal, devoted parental attention) have been found to lag behind their peers in speech and motor development (Granowsky and Krossner, 1970). These children usually catch up with their peers after three or four years' interaction with these peers. Verbal interaction, then, is crucial to language development, at least in the early stages of language acquisition (Landes, 1975).

The existence of this simple register having been established, researchers then began to look to that other interaction in which linguistic unequals take part: native to non-native speaker interaction. It is to these studies that we now turn.

# 2.3 SPEECH OF NATIVE TO NON-NATIVE SPEAKERS

# 2.3.1 Classification

Studies on linguistic input to non-active speakers fall into four broad categories:

- a) <u>Elicited or Indirect-Studies</u> The ones that produce Foreigner Talk (see 1.4 for definitions of the term as used in the present thesis).
- b) <u>Experimental Studies</u> Those that have attempted to control variables in such a way as to produce speech that could reasonably unequivocally be said to be elicited by the variable or variables being manipulated.
- c) <u>Naturalistic Studies</u> Those in which free-ranging speech is produced in natural settings such as the office, workshop or street, either in symmetric or asymmetric social situations.
- d) <u>Classroom Studies</u> Those carried out in a classroom where instruction is being given in the foreign/second language.

# 2.3.2 Elicitation Studies

(These will be reviewed only briefly to make the picture of the field complete).

Meisel (1977: German, French and Finnish) and McCurdy (1980: English, reported by Long, 1980) both used Ferguson's (1975) elicitation procedures. In Meisel, the subjects were told that the addressee was a Turkish immigrant worker (i.e. of inferior status to the native speaker) but no such mention was made in McCurdy in order to see whether there would be any difference in the written output. No such difference was found. The resulting language was formally similar to the ungrammatical Foreigner Talk reported by Ferguson. In addition, Meisel reported avoidance of passivization and greater use of topicalization and extraposition (p.16).

Andersen (1977) also found these properties when she asked the children to imagine that the puppets were foreigners, and that thay were playing the role of teacher/student. The children observed the same behaviour <u>for both roles</u>, using a slower rate of delivery and speaking more loudly, with a higher pitch, "approaching a yell".

This speech is not actually addressed to foreigners except in asymmetrical situations (see 2.3.4.8).

#### 2.3.3. Experimental Studies

These generally take the form of meetings of dyads or triads arranged between previously unacquainted native and non-native speakers (adult or child) who would then engage in conversation or perform a task involving instructions on

how it is to be carried out. Like the studies on adultchild language, most findings have indicated shorter utterances with predominance of guestions, due, no doubt, to the strangeness of the situation for the participants. <u>Note</u>: It is to be remembered that what the source articles call "Foreigner Talk" is being termed "Foreigner Register" in this and subsequent sections.

### 2.3.3.1 Campbell, Gaskill and Vander Brook (1977)

These investigators analyzed the speech of six natives and three non-native speakers (6 dyads). Subjects were asked to choose one out of three topics provided, and conversation was limited to five minutes. Campbell et al, found slower speech, clear articulation, restatements and repetition but no Foreigner Talk.

### 2.3.3.2 Scarcella and Higa (1980)

Scarcella and Higa had their subjects work on a block-building task. There were 21 dyads: 7 adult native-speakers (NSS) to a) 7 child non-native speakers (NNSS); and b) 7 adolescent NNS.

The control group: 7 adult NSS to 7 adult NSS. Scarcella and Higa found that the speech addressed to both the children and adolescent NNSS contained significant differences: more questions and imperatives, fewer statements, relative clauses and disfluencies and a shorter mean length of utterance (MLU).

# 2.3.3.3 Arthur, Weiner, Culver, Lee and Thomas (1980)

In a very tightly controlled experiment, Arthur, Weiner, Culver, Lee and Thomas (1980) asked NSS and NNSS (6 each) to call twelve airline ticket agents. The subjects were given a scripted dialogue. Each made ten calls, making a total of 120 conversations. Instruction No.6 in the script asked the subjects to remain completely silent while the ticket agent answered: (No.7) to wait until the agent asked the subject a question. If none was forthcoming, then the subject was to end the conversation politely. In general, similar results to the two preceding studies were obtained, in spite of the absence of visual feedback. Speech to the NNSS was simpler as measured by response length, mean length of T-Unit (see 3.2.2.1 for definition) type-token ratio (TTR) and schwa fillers (filled pauses), all of which were significantly lower. These results also bear out Hatch et al.'s (1975) findings (see 2.3.4.1).

There was a non-significant tendency for agents to use more subordinate clauses, give more information bits and produce more false starts when addressing native speakers, whereas they used more appositives with the non-natives. This is presumably to avoid the added complexity of subordination since appositives are simply a juxtaposition of noun phrases. Contrary to their expectations, speech tempo (words per minute (WPM)) was found to be non-significant, since

"...virtually all the native speakers we questioned thought they spoke more slowly when addressing non-native speakers". (p.119)

### 2.3.3.4 Long 1980, 1981a, 1981b.

By far the most extensive work in these experimental studies has been done by Long (1980, 1981, 1981) He has looked not only at input but at interaction and its effect on native speakers' output. Again, Long's findings are in agreement with previous ones as to the nature of input. The basic line of his research is in the 1980 study and it is this which will occupy most of our attention here.

Long (1980) randomly selected 32 adult NSS controlled for sex and prior experience with talking to foreigners. With 16 adult NNSS, he then formed 32 dyads (16 NS-NS and 16 NS-NNS). Each dyad was asked to perform the same six tasks in the same order. Three demanded mutual exchange of information for successful completion: <u>Group 1</u>: viz: <u>Task 1</u>: Informal conversation; <u>Task 4</u>: Playing game No.1; <u>Task 5</u>: Playing game No.2. The other three in <u>Group 2</u> could also, but not obligatorily, be done in that way: <u>Task 2</u>: Vicarious narrative; <u>Task 3</u>: Giving instructions for two communication games (i.e. Tasks 4 and 5); <u>Task 6</u>: Discussing the supposed nature of the research. Long found that 10 out of 11 <u>interaction variables</u> attained significance in contrast to only 1 out of 5 <u>input variables</u>. In order to assess whether the type of task affected the modification of input and interaction features, the results of the two sets of taks were contrasted (Group 1 ws. Group 2).

On interaction features, the differences between NS-NS and NS-NNS were greater in Group 1 than in Group 2 in 7 out of 9 cases. Differences in the same direction were found for the two input variables (average length of T-Units and number of S-Nodes per T-Unit). As previously stated, these are in agreement with other studies.

In most studies, the NS-NS baseline data is usually produced under different circumstances from the actual NS-NNS interaction. As such, comparisons are being made of data that are not, strictly speaking, comparable. In Long's case, since he controlled for the NS-NS baseline data, he claims that his findings may be considered to strengthen claims that differences between NS-NS and NS-NNS conversation are due more to interaction rather than to *in*put. In other words, Long is claiming that interaction is more instrumental than input in second language acquisition.

It must be remembered, however, that interaction and input are inseparable, concomitant parts of any process of two-way communication - in the present instance, between the NS-NS and NS-NNS dyads. As such, interaction cannot exist without

input in conversation. Basically, the utterance is input the phonic substance that is transmitted during the interaction. Without it, there would not <u>be</u> any interaction and hence, communication.

Take the following exchange from Long (1981a).

NS	:	Do you wanna hamburger?
NNS	:	Uh?
NS	:	What do you wanna eat?
NNS	:	Oh! yeah, hamburger (p.15)

The fact that the NNS did not understand made the NS modify his original question. Contrary to expectations, the simplification in this case involved the use of a WH question the type usually considered more difficult to process. However, the use of the more frequent 'eat', as opposed to 'hamburger' triggered the NNS's understanding or recall of 'hamburger'. Input then, was modified by the interaction, but it can plainly be seen that without the input there would have been no interaction. What Long is really saying is that modifications in speech are triggered by the feedback from the interlocutor in the interaction.

It might perhaps be more accurate to claim, therefore, that interaction is instrumental in shaping both the form and type as well as the understanding of the input. In all studies, utterances (i.e. input) are measured by mean length: either of utterance (MLU) or T-Unit. It is significant that all studies (Arthur et al., 1980; Scarcella and Higa 1980; Freed, 1978; and the many adult-child studies reviewed in section 2.2.) have found this to be the only variable that is consistently significantly different. In Long's own words:

> "In this study, only one difference, the average length of t-Units in words, was statistically significantly different in the two kinds of interaction, T-Units to NNSS being shorter". (p.167)

# 2.3.3.5 CONCLUSION

Care must be exercised in the interpretation of results from experimental studies since the artificial controls (time, topic, setting, conditions) they exercise on variables may affect the language produced on such occasions. As Scarcella and Higa put it:

> "....confronted with the task of obtaining comparable samples of data, we were forced to use a task which, in addition to eliciting only semi-naturalistic data, also constrained the language used". (p.21)

Several findings emerge forcibly from these studies. First, there is never any instance of Foreigner Talk, in spite of time constraints (cf. 2.3.4.1). The native speaker's utterances are always well-formed.

Second, utterances to non-native speakers are consistently

shorter throughout all the studies. Third, most studies have reported a preponderance of questions in the native speaker's utterances in these interactions.

Bearing in mind the above-mentioned caveats, the following ideas could be entertained with respect to these three findings: The first could be interpreted as a possible indication that, at least under experimental conditions, native speakers will tend to use grammatically correct speech (i.e. Foreigner Register) perhaps in deference to their non-native interlocutor or the investigator, or simply as one of the by-products of the experimental situation. Exceptions will be seen in 2.3.4.1 but, as will be argued later, these situations are totally different from the experimental ones now under consideration.

In conjunction with the known trend in Adult-Child speech, the second general finding could be interpreted as a strong indication that native speakers control the length of their utterances and modify their output as a result of the interaction with the non-native interlocutor.

With respect to the third finding, it would seem that perhaps too much stress is being laid by investigators on questions being the predominant form of verbal behaviour in the NS-NNS interaction. Questions are the normal way of eliciting information from any interlocutor (cf. Goody, 1975), especially in a situation in which none of the participants

is known to the other(s), as is the case in these studies. It is, therefore, expected behaviour. The type of question is usually WH, again expected, since they are the type that elicit information from the NNS interlocutor, and serve to keep the conversation going. Their lesser frequency of occurrence in NS-NS speech is to some extent explained by the fact that both are linguistic peers and there is therefore no need for probing or "keeping the conversation going", but simply of stating facts and opinions once the topic has been established. It would be interesting to see whether the preponderance of questions would persist if the members of the dyads were known to each other beforehand. One would hazard a guess that the proportion would drop to the NS-NS level.

In spite of their limitations, then, experimental studies serve the useful purpose of providing a description of the characteristic language behaviour of native speakers addressing non-native speakers they have met for the first time. Though their scope is limited, these descriptions provide a useful basis for comparison with language produced under more natural circumstances. Attention will now be turned to these studies in the following section.

# 2.3.4 NATURALISTIC STUDIES

### 2.3.4.1 Hatch, Shapira and Gough (1975)

Hatch, Shapira and Gough (1975) analyzed the speech of Rina

(Shapira) to her friend Zoila, an untutored learner, and then compared it with Ferguson's Foreigner Talk data (1975). They found, unlike Ferguson, many cases of "it" deletion. Although some copulas <u>were</u> deleted, most were correctly supplied, as were progressive -<u>ing</u> and possessives. Like Ferguson, tense marking was absent and negation was characteristically affected by the use of <u>no + verb</u>. Rina's Foreigner Talk reflected errors in Zoila's speech but she also used much morphology that was absent from Zoila's output i.e. though she was influenced by Zoila, she was not copying her speech. Interestingly enough, the reverse was not the case - Rina's speech did not seem to influence Zoila's in the production of correct forms.

In another part of this same study, Hatch et al. studied the speech of George, a teacher, when conversing with, rather than teaching, a group of beginners, the majority of which were Spanish speakers. (This part is reviewed here, rather than under classroom studies, because George's is not strictly classroom talk).

George used Foreigner Register when doing drill practice but lapsed into Foreigner Talk for the talk session. Basically, his speech was similar to Rina's except for copula deletion when it was not auxiliary for the progressive. He also did not mark verbs for tense, although there were several uses of "will" for the future. Unlike Rina, he did not mark plurals. The question that comes immediately to mind is: Why do these native speakers use Foreigner Talk rather than Foreigner Register? Before attempting to answer it, however, it will perhaps be better to look at other naturalistic studies and get a fuller picture of the phenomenon. The answer will then be attempted at the end of this section.

# 2.3.4.2 Clyne (1977, 1978)

In a study of the speech of seven Australian factory foremen to workers of differing language backgrounds, Clyne (1977, 1978) found that their Foreigner Register contained formal features of Foreigner Talk. He found ellipsis, deletion (auxiliary, copula, article, subject and object pronoun) and a profusion in the use of infinitival forms. The latter occured in by far the greatest number in context (23.07%), followed by subject-pronoun deletion (18.92%), ellipsis (17.57%) and copula deletion. There were relatively fewer auxiliary and article deletions (9.46% and 8.11%, respectively). In addition, Clyne found that two of the foremen had recourse to phonological patterns of the worker's mother tongue in their efforts to make themselves understood.

# 2.3.4.3 Heidelberger Forschungsprojekt (1978)

This research project on Pidgin German reports that native speakers of German used phonologically distorted speech (hypercorrections) i.e. speakers ignored obligatory

phonological rules and followed the underlying forms when addressing the foreign workers (gastarbeiter). This same phenomenon is reported by <u>Kazazis (1969</u>) in his study of the language used by visiting Greek lecturers in a Modern Greek class. He refers to it as "spelling pronunciation" (p.199). <u>Henzl (1974</u>) also refers to it as the "pedantic differentiation of phonologically relevant features" (p.218) made by the teachers of Czech in their efforts to produce clear speech to their students.

### 2.3.4.4 The Dutch Workgroup on Foreign Worker's Language (1978)

This group found a greater incidence of Foreigner Talk features in the speech of municipal workers when they were engaged in long conversation with foreigners than in the brief exchanges on the street when the foreigner requested directions to the post office.

### 2.3.4.5 Ramamurti (1977)

The same tendency was noticed by <u>Ramamurti (1977</u>), herself a foreigner. She approached native speakers in different situations (department stores, offices, buses). She reports that when she pretended not to understand the native speakers' directions, they would slow down their delivery and produce shorter utterances, sometimes deleting articles and plurals. They also omitted the auxiliary when framing yes-no questions.

## 2.3.4.6 Freed (1978)

<u>Freed (1978)</u> analyzed the speech of 11 NS-NNS dyads in free conversations. The non-native speakers were of differing language backgrounds. She compared this native speaker output with the one she obtained from the same native speakers in spontaneous conversation with herself; she also compared it to the speech of 15 mothers to children obtained by another investigator (Newport, 1976). Each of the conversation dyads was recorded at least twice and 8 of them three to five times over a period of 10 weeks, in settings of their own choosing. Internal comparisons were made of the speech addressed at early and late meetings to the "high" and "low" non-native speakers (Freed's terms for their proficiency levels).

Freed is among the first to apply statistical analysis to her results (in 1979). Unlike the studies reviewed so far, she found no Foreigner Talk in her corpus. What she did find, though, was a similarity between Motherese (the Newport data) and Foreigner Register. Both shared many properties: utterances were shorter and less complex, articulation clear, with more questions in the NS-NNS than in the NS-NS interaction. There was no significant difference between the speech of the early meeting and that of the late one. However, Freed found it differed as a function of NNS proficiency: utterances to the "high" NNS were more complex, both propositionally and lexically.

## 2.3.4.7 Fillmore (1976) and Katz (1977)

Two studies have examined child NS speech to child NNS: Fillmore (1976) and Katz (1977). Fillmore found very little Foreigner Talk. The child NS used short and less complex structures to the NNS than to the adult observer. The ungrammatical output seemed to be triggered when the NS child felt that understanding was of overriding importance in the situation e.g. in competitive play. Likewise, Katz found that Lisa's speech to Tamar, the Hebrew child, also contained a low proportion of Foreigner Talk which was marked by morphosyntactic features such as deletion of constituents, articles, prepositions and copulas. Lisa also used simplified negation and accusative pronouns as subjects. These morphosyntactic features decreased over time, as Tamar's proficiency increased. Somo phonological features persisted in Lisa's speech, attributed by Katz to their continued presence in Tamar's speech.

### 2.3.4.8 AN ANSWER AND CONCLUSION

An attempt will now be made to answer the questions posed in 2.3.4.1 viz.: Why do native speakers use Foreigner Talk rather than Foreigner Register? A second question could be: When is the one preferred over the other? A global look at all the naturalistic studies reveals the presence and use of Foreigner Talk in all but the study by Freed (1978). One is immediately struck by the fundamental difference between it and the others: the participants in the Freed study were social peers at their leisure, free to engage in normal conversation. On the other hand, the other studies were constrained by the situation.

A message had to be transmitted in the quickest and most efficient way in the case of the workers (Clyne 1977, 1978; of Ramamurti (1977) and Fillmore (1976). In these cases there is lack (or pretended lack) of proficiency and therefore the native speakers fell back on Foreigner Talk for expediency. In the case of George and Rina (Hatch et al., 1975) and Lisa (Katz, 1977) empathy with the non-native speakers triggered off the Foreigner Talk, the native speakers perhaps feeling that they were moving closer to expressing solidarity with their interlocutors by using speech that would not show up the linguistic gap that existed between them. Rina's and George's "errors" were the typical ones made by Spanish speakers when using English. When a Spanish speaker says "is good" for "it is good", it is not that s/he is deleting "it", s/he is simply traslating "es bueno" into English and that expression uses no subject in Spanish.

From the data, then, the following answer to the two questions may reasonably be proposed: There are two possible situations (both created by the non-native speaker's lack of proficiency)when Foreigner Talk is likely to be triggered:

- To transmit an urgent message (workshop, street, directions, office),
- To express solidarity with the non-native speakers and move linguistically closer to him.

Situation 1 would seem to be the most common. The literature shows that when the NS-NNS conversation is task-oriented there is generally **4**n incidence of Foreigner Talk (for a discussion, see Long, 1980: 44ff.). In this type of conversation, it is essential to get the task done and therefore the necessary modifications will take place, ranging from simplification to Foreigner Talk in accordance with the urgency of the situation. Nowhere is this greater than on the shop floor, so the foreman therefore even avails himself of the foreigner's phonology in order to achieve efficient transmission of the message (Clyne 1977: Dutch WFWL, 1978; Heidelberger F. 1978).

# 2.4 CLASSROOM STUDIES

## 2.4.1 INTRODUCTION

This category is the most directly relevant to the present thesis as it falls within the area of language instruction within a classroom, as opposed to the untutored naturalistic ones reviewed in the last section. Very little work has been done in this area because the very nature of the activity seems to militate against research. There is, understandably, a characteristic reluctance on the part of the teachers to expose themselves to public view, as it were, especially when the groups concerned are at the low proficiency level. In the present case, the original design of the experiment had to be abandoned because it proved impossible to obtain the cooperation of everyone concerned at all the proposed levels. (See 3.4)

# 2.4.2 Henzl (1974, 1975/1979)

To the writer's knowledge, Henzl was the first investigator to carry out an analysis of the classroom speech of EFL/ESL teachers to students. <u>In the 1974 study</u>, Henzl asked native speakers of Czech to retell stories to American students and then to other native speakers of Czech. Comparison of the two versions showed that words per minute (WPM), pauses, pitch and phonological differentiation were all more marked in the version to the non-native speakers. Utterances were also shorter and contained less subordination; verbs were used with fewer tenses, moods and voices than in the native speaker version. The latter, as well, contained colloquial Czech, whereas the non-native version contained only standard Czech.

<u>In the 1975/1979 Study</u>, Henzl used 11 professional teachers: 5 Czech, 3 German, 3 English - all native speakers. They were asked to tell two stories based on pictures (a political

anecdote and a street event) three times each: to beginners, to advanced students and, informally, to other native speakers outside the classroom.

Again, <u>Henzl</u> found the same characteristics as in the 1974 study. In addition, she found that low frequency lexical items "stylistically coloured" (p.162) in the NS-NS version were replaced by more general ones; compound words were replaced (Czech demonstrative "tendleten" was reduced to "ten"); idiomatic expressions were avoided, a paraphrase being preferred (German "<u>eine fratze schneiden</u>" became "lachen" to laugh); speakers used neutral vocabulary to the non-native speakers whereas to the native speakers they used

"...expressions that were either socially, regionally or emotionally marked." (p.162)

In describing the opening scene in Story I, for example, the NS-NS version used 55 words. These were reduced to 16 in the NS-NN5version, of the latter, two ("little girl") are repeated. From elaborate and indeterminate to the NS, the same speech became succint and concrete. The teachers created an atmosphere around the incident for the NS but simply gave the NNS the bare facts, words being used with heavy semantic loads.

Henzl found no instances of Foreigner Talk since the social rules of the classroom allow the teacher to reduce complexity

"...only to the point where simplification was still admissible by the native speaker grammar." (p.165)

Henzl's (1975/1979) contribution is significant. Her study shows that simplification is not culture-dependent but, rather, seems to follow basically similar patterns across the three cultures: Language to <u>non-native speakers</u> contains only the basic facts essential to communication of the message while that addressed to <u>native speakers</u> is more elaborate and both socially and culturally referenced. More needs to be done, of course, but there is no <u>logical</u> reason to suppose that similar results would not be forthcoming from studies on other cultures.

Henzl did not carry out any statistical analysis but later studies confirmed her findings, as will be seen below.

# 2.4.3 Gaies (1977b)

Gaies compared the speech of eight teacher trainees obtained during their verbal interactions with linguistic peers (8 recordings of weekly practicum meetings) with the same trainees' classroom speech while teaching students at four levels: Beginners, Upper Beginner, Intermediate and Advanced. The recordings were done at the beginning, middle and end of a 10-week course. In all, there were 24 recordings: 3 from each subject. There were 2 subjects at each level. Gaies does not seem to have controlled topic.

Six variables were under examination: Clauses per T-Unit,

word per clause, words per T-Unit, together with nominal, relative and adverbial clauses. For all six variables, Gaies found that the NS-NS speech was significantly more complex than the NS-NMS. In addition, he found that complexity was a function of proficiency level, the speech of each of the two teachers at one level being more/less complex than the one immediately below/above. This statistical analysis broadly confirms Henzl's findings i.e. that native speakers use simpler speech when addressing non-native speakers than when they address fellow native speakers. Like Henzl, Gaies found no instances of Foreigner Talk.

## 2.4.4. Steyaert (1977)

Steyaert used Gaies' six variables to analyze the output of ESL teachers retelling stories to ESL students and to native speakers (a sort of cross between Henzl and Gaies). Although she found that NS-NNS speech was slower and contained more repetitions, unlike Gaies, she failed to find any statistically significant difference in complexity between the two types of discourse. This is probably due to the fact that the native speakers in Gaies' study had verbal interaction with the students whereas Steyaert's did not, so the process of modification was not stimulated. (cf. Long 1980, 1981: Snow 1972). However, there were no instances of Foreigner Talk in the study.

### 2.4.5 Chaudron (1978, 1979, 1980)

In a study that comes closest in design to the present one, <u>Chaudron (1978, 1979</u>) recorded seven teachers' classes in various subjects at three different levels of instruction: reception, high school and University. Chaudron attempted, wherever possible, to obtain recordings of the same teacher teaching different subjects and teaching both ESL and non-ESL students in order to compare the degree of the syntactic and lexical complexity in their speech. Like Steyaert, Chaudron used Gaies' measures and compared his results with Gaies'.

Though he noticed fluctuations even across subject matter for the same teacher/teachers at the same level, Chaudron nevertheless found a similar trend to Gaies': increase of syntactic complexity for more advanced learners and for native speakers.

Chaudron's practicing teachers did not seem to simplify so much as Gaies', nor did their noun clauses reflect Gaies' finding of increase in complexity with increase in level. Chaudron however, did not apply statistical tests.

With respect to vocabulary, Chaudron found that implicit or explicit elaboration was effected by means of apposition, parallelism, topicalization, paraphrase and reiteration, this last being particularly marked at the lower levels and in the ESL classes. Like all the other investigators of classroom interaction, Chaudron reported no instances of Foreigner Talk either.

# 2.4.6 Schinke (1981)

The final study to be reported here is in the ESL (English as a Second Language) category. <u>Schinke</u> (1981) designed the study to characterize the interactional linguistic enviroment experienced by limited-English proficient (LEP) students (non-native speakers who have varying degrees from zero to fluency - in English) in all English content classes. She also wanted to identify features of Foreigner Register peculiar to an instructional context i.e. where English is the medium but not the target. The study covered a six-week period at the end of the academic year in four public schools in the Chicago area. The subjects were 12 monolingual English-speaking classroom teachers: 4 in 5th grade; 4 in 6th grade and 4 in 5th and 6th grade combination classes. All LEP students were Spanish speaking.

Schinke found that the teachers generally exhibited differential treatment of LEP students by virtue of their perceived inability to function in the content classroom a perception which a subsequent part of her study suggests is most probably mistaken. The adjustment of speech in such situations was indicative of Foreign Register - Schinke makes no mention of Foreigner Talk features (i.e. of ungrammaticality) in her data. Schinke found significant differences in the teacher's treatment of LEP and non-LEP students (p = 0.005). Two types of interaction (managerial and instructional) were significantly shorter for LEP students (p = 0.001). Schinke noticed a trend: Any teacher-LEP student interaction was generally managerial; if instructional, it was briefer i.e. overall Teacher-LEP student interaction was less than that of Teacher-non-LEP. This lack of interaction, she suggests, could retard acquisition and affect mastery of the subjects. Moreover, the erroneous assessment of the LEP student's proficiency suggested by the other part of Schinke's study could have serious consequences for the student. As she quite rightly points out, this misjudgement may not be serious in a conversation, but would be detrimental in an instructional situation.

With all its social implications, this last seems to be the most important issue raised by the on-going study. It implies that a more objective assessment of linguistic proficiency is called for (Schinke states that the level system was changed with the 1980 census in Illinois) and that teachers do not seem to be using their perceptive powers to full capacity when it comes to dealing with LEP students.

#### 2.4.7 CONCLUSION

The classroom studies reviewed here, like those in the naturalistic and experimental studies again present evidence

that native speakers modify their speech when addressing non-native speakers of their language - always in the interest of achieving effective communication. Some modifications become Foreigner Talk when there is an urgency to communicate and time is essential (e.g. Clyne 1977, 1978; Fillmore, 1976) but Foreigner Register seems to prevail when phatic communion is the goal (Freed, 1978) or when the native speaker is a teacher, (George in Hatch et al. excepted). Even George, though, stuck to Foreigner Register when teaching, only lapsing into Foreigner Talk during the talk session.

The main point to emerge here, as well as from all the other studies, is that while other modifications behave irregularly from study to study, <u>length of utterance</u> or <u>T-Unit Length</u> observes a consistently uniform behaviour throughout them all and always in one direction: from short to longer (or simple to more complex) as non-native speaker proficiency increases - a finding not unlike the one for the speech of adults to children as they become more linguistically sophisticated.

### 2.5 FOREIGNER REGISTER vs. FOREIGNER TALK

It is now time to take up the issue of the indiscriminate use of the term "foreigner Talk" by investigators to refer to the version of language a native speaker <u>imagines</u> a foreigner would use (such as Ferguson's, 1975) or that the same native speaker would use to mock the foreigner <u>as well</u> as

to the formally correct version addressed to the majority of non-native speakers. The prevalent idea among investigators would seem to be that "Foreigner Talk" is the equivalent of "Talk to Foreigners".

What Ferguson describes, however, is very far removed from the speech that native speakers use to foreigners, and it is obvious from the article that his subjects' idea was equally far removed. Asked how they <u>thought</u> speakers would communicate with a foreigner, many expressed disapproval of the language they submitted and claimed that they themselves <u>would not use it</u>. From this we must gather that Foreigner Talk is not normally addressed to foreigners by native speakers, who disapprove of its use, as Arthur et al. also point out.

Essentially, Ferguson's Foreigner Talk is <u>imagined</u>, produced by the same faculty that makes a writer use it for effect or entertainment, written not spoken (except for mimicking or "talking down"). Its use in circumstances other than those described in 2.3.4.8 would almost certainly offend a non-native speaker of the language in question. In Ferguson's own words,

> "The general attitude seemed to be that Foreigner Talk was not a good thing it sounds too condescending or would hinder learning good English - but could be used if necessary." (pp 10-11)

It is surprising, then, that in spite of this, and of Ferguson's warning as to the limitations of his data ("...ten sentences elicited under highly artificial conditions...from a total of 36 University students..."), that such wide currency should have been given to the term as to have it embrace two totally different aspects of language.

Some investigators have intuitively felt this difference. Long (1980), for example, refers to teachers' classroom speech as not being

> "FT in Ferguson's sense of ungrammatical input to NNSs." (p.36)

Elsewhere (p.42) he refers to

"...two qualitatively different kinds of speech to NNSS."

Likewise Freed (1978) felt that

"The indirectly obtained results of Ferguson's sentence rewriting study display <u>another level</u> of speaker potential, quite different from those revealed in this study...In some sense, then <u>comparisons</u> between these two sources of Foreigner Talk data are not applicable, for they address themselves to different questions and access different levels of speakers' potential." (p.246) (emphasis mine)

Gaies (1977b) seems to feel that another name could be used when he says

"In other words, Foreigner Talk...<u>or however</u> one wishes to label this simplified form of <u>speech...is a linguistic means chosen for use</u> not only on a single, finite occasion for the transmission of information from a fluent speaker of a language to a non-fluent interlocutor..." (p.128) The quotations show quite clearly that the writers feel there is a different type of language besides Foreigher Talk, but they do not make the distinction. To the writer's knowledge, the only study to do so is Arthur et al.'s (1980). Most have simply used the term ambiguously to refer to all speech addressed to foreigners, regardless of the obvious differences that can be seen between them (see Arthur et al. p.112).

It is essential then, that a theoretical distinction be made between Foreigner Register and Foreigner Talk. The two phenomena serve different purposes:

Foreigner Talk is used to give an idea of how the native speaker imagines a foreigner would express himself in the language. As Freed says, it is at another level of speaker potential (p.246). In this case, it is the <u>formal</u> properties that are under inspection. It is a simplified code, Widdowson's "text" (1978) or Beaugrande et al.'s (1980) "virtual language".

When Foreigner Talk is used, language is not activated in any communicative sense but simply constitutes a text manifestation. In some ways, one could liken its use to going through a grammar or a dictionary, selecting items from it and then proceeding to distort them. What the speaker who uses infinitival forms exclusively is really doing is taking the dictionary (text) form of, for example, "go" and, instead of realizing it in the required form, for example, "went" or "going", uses "go" in all instances. This is what is meant here by "distort".

<u>Foreigner Register</u>, on the contrary, is used in actual communication with the non-native speaker, in which case it is the <u>functional</u> aspects of the language that are under inspection, since the register uses the standard code and follows the normal rules of grammar. It is Widdowson's "discourse" or Beaugrande et al's "actual language".

It should now be quite clear that Foreigner Talk is not discourse or actual language. As such, the continued use of the term, when really referring to discourse, 4.e. to Foreigner Register, would seem to put the study of the language spoken to foreigners on an unsound theoretical basis since an important point is being missed, namely, that there exist two completely different phenomena, both of which are being treated as one and the same.

It is to be hoped that the theoretical distinction being made in the present thesis will be instrumental in clearing up the ambiguity that at present exists in the literature with respect to Foreigner Register and Foreigner Talk and that a difference will be firmly established between them. Finally, the two varieties of Foreigner Register that have surfaced in the foregoing review of the literature would suggest that it could be subdivided into:

 <u>Classroom Foreigner Register</u> - generally grammatical in character (cf. Henzl, 1974, 1975; Gaies, 1977); Steyaert, 1977; Chaudron, 1978, 1979).

2) <u>Conversational Foreigner Register</u>. This can be either grammatical (Freed, 1978) or ungrammatical (Clyne, 1977, 1978; Ramamurti, 1977), according to the situation. When it is the latter, it generally exhibits <u>formal</u> properties of Foreigner Talk.

### 2.6 SUMMARY

This chapter has presented a review of the work done in adult-child language studies and in the study of the speech of native to non-native speakers under experimental, naturalistic and classroom conditions. A common finding emerged from both fields: the speech to linguistically inferior interlocutors (native child or non-native speaker) is generally simple, well formed and clearly articulated. In addition, when the interlocutor is a non-native speaker of very low proficiency, s/he elicits from the native speaker modifications that, according to the urgency of the situation, incorporate properties of Foreigner Talk into the Foreigner Register being used. No such manifestations appear in the classroom situation. A theoretical distinction was made between Foreigner Register and Foreigner Talk, evidence being presented that the two are completly different phenomena and, as such, should be kept apart. Finally, a subdivision of Foreigner Register is suggested into 1) Classroom and 2) Conversational, Foreigner Register. It was seen in the review that most of the studies on

naturalistic, experimental or classroom data used control data that was collected from a totally different situation from the one in which the conversation/experiment/class took place. Indeed, Long (1980) was the only one to avoid this shortcoming. It was this point that was uppermost in the present investigator's mind when the experiment for this study was designed, as will now be explained in the following chapter.
# CHAPTER III

# DESIGN OF THE STUDY

#### CHAPTER III

#### DESIGN OF THE STUDY

#### 3.1 INTRODUCTION

The present study was undertaken especially to analyse and provide a descriptive statement about the language used by teachers of English as a Second or Foreign Language to nonnative students at Elementary, Intermediate and Advanced levels on a pre-determined topic entitled "Devolution for Scotland". A topic, rather than, say, a grammar lesson, was chosen as the basis of discussion as being the most likely to provide teachers as well as students with a wider range of opportunities for the spontaneous expression of ideas. "Devolution for Scotland" was chosen because a referendum was going to be (and subsequently was) held to see whether the people of Scotland were in favour of having a form of self-government or not. Moreover, the controversial nature of the topic was expected to generate lively and animated discussion at all times, as it was a subject with which most students were familiar through the media, and would thus be able to take a reasonably active part in the discussion following the teacher's exposition.

The topic was held constant at all levels. By so doing, it was expected that the main theme (devolution) would manifest itself in different forms at the different levels. However, although the topic was controlled, no rules were laid down at to what the teacher should say or how s/he should say it. Total freedom of expression was essential as it was "real" classroom conditions that the writer was trying to obtain and therefore any constraint would have distorted the language in some way.

In an effort to maintain the speech event, setting and task as similar in each instance as a natural situation would ever allow (and in order to avoid Gumperz's (1972) and Long's (1980) criticism with respect to the data analyzed for NS-NS interaction being from different speech situations and events, (see 2.3.3.4)), all teachers were asked to perform their task under normal circumstances during normal class periods in their usual classroom, with whatever level of students they were supposed to be teaching at the time. In this way, the incidence of distorting factors such as unfamiliar surroundings or unknown interlocutors would be reduced to a minimum. The argument behind it all was that if the analysis revealed a pattern emerging in spite of the wide variety of treatment of the topic, it would be some form of evidence that accommodation of rhetoric or register was taking place and that it occurs regardless of the approach taken by the teachers.

Audio recordings were made of the teachers addressing the three levels of non-native speakers. In addition, audio recordings were made of teachers of English addressing native speakers on the same topic. The same set of measures was applied to the output at all four levels in

order to ascertain whether there were any differences in the language used at each level and, if so, wherein lay the difference. In all, a set of six comparisons were made: 1) Elementary with Intermediate; 2) Elementary with Advanced; 3) Elementary with Native Speakers; 4) Intermediate with Advanced; 5) Intermediate with Native Speakers and 6) Advanced with Native Speakers.

It must be pointed out here that the study has of necessity ruled out a phonological analysis of the phonic substance. From the logistics point of view, it was impossible to analyze everything in a restricted amount of time unless ateam of workers was involved. Even if that had been possible, since the recordings were made under normal classroom conditions and not in a laboratory, the background noises would not have allowed any precise instrumental measures without distortion being introduced into the results, arrived at after much time-consuming effort. Under the circumstances, it was decided to measure only words per minute (WPM) as its application did not require the use of any delicate laboratory equipment.

The measures to be applied will now be enumerated so that, when the research questions and hypotheses are enunciated, the reader will have become familiar with both the measures and the criteria governing their selection.

#### 3.2 ANALYTIC MEASURES

# 3.2.1 Rationale for Choice of Measures

The measures outlined in this section were chosen for application to the corpora because their use in research on writing, teacherstalk and second language acquisition has to date demonstrated their efficacy as indicators of the syntactic complexity of speech or writing (Hunt, 1966, 1970; Gaies, 1977b; Chaudron, 1978, 1979; Arthur et al., 1980; Long, 1980). Moreover, setting up and computing the measures is a straightforward process on which most researchers appear to have reached a consensus. Since the aim of this thesis is to provide a descriptive statement of the linguistic complexity or otherwise of Foreigner Register, special care has been taken to select only those measures on which a reasonably high degree of inter-researcher unanimity has been attained with respect to their computation and application. In this way, the measures could quite reliably be applied to any other corpus in the event of any replication of, or comparison with, the present experiment.

Since the teacher is not acting in a vacuum but <u>interacting</u> with a set of students, if we are to get a true picture of his behaviour in the classroom, it is necessary to examine it from two different angles: Firstly, we must analyze his linguistic output in order to determine its syntactic complexity. Secondly, and perhaps even more importantly, we must observe his pragmatic behaviour during the interaction

in order to identify any salient features of that behaviour and try to find out what their role is in the interactive process. To that end, the following two sets of measures were applied to the corpora: 1) <u>Syntactic, lexical and</u> <u>phonological measures</u> to determine the complexity of the speech. 2) <u>Measures of pragmatic behaviour</u> to determine how the teacher reacts to the on-going situation in the classroom.

# 3.2.2 Syntactic, Lexical and Phonological Measures

# 3.2.2.1 <u>Mean T-Unit Length (MTUL) (Average Number of Words</u> per T-Unit)

Calculated by dividing the total number of words in the texts selected in each corpus by the total number of T-Units contained in the texts.

As defined by Kellog Hunt (1966:189) a T-Unit is "...one main clause plus whatever subordinate clauses are attached to that main clause." Hunt devised the T-Unit in order to measure the syntactic maturity of the writing of schoolchildren (grades 4,8, 12). He found that coordination gave way to subordination as the children progressed to the higher grades, where they produced more succinct sentences that were in essence similar to those produced by professional writers in magazines such as Harper's or Atlantic weekly. T-Units have subsequently been used successfully to measure the syntactic complexity of teachers' speech to foreigners (Gaies 1977b.) (Chaudron 1978, 1979; Long 1980).<sup>1</sup>

The aim of this study is to look at the adaptation or modification of the input to the learner which may be triggered as a function of the level of proficiency of the students being addressed by the teachers. In other words, do the simpler and shorter T-Units occur consistently in the speech of the teachers addressing the Elementary levels and the longer and more complex at the Advanced and Native Speaker levels? By comparing MTUL at each level, it should be possible to get a picture of the syntactic properties present in them.

# 3.2.2.2. Subordinate Clause Index (SCI)

The ratio for this index is calculated by dividing the total number of clauses (both main and subordinate) by the total number of T-Units in the texts. It is also known as the ratio of clauses to T-Units.

# SCI = Total number of Clauses Total number of T-Units

Since the minimum ratio of clauses to T-Units is 1:00, a higher ratio per T-Unit indicates that a more complex and

In 1974, Scott and Tucker introduced the concept of "error" free T-Unit for analyzing learner language. It was later used by Larsen-Freeman (1975, 1977, 1978) to gauge the proficiency of non-native speakers/writers: the higher the percentage of error-free T-Units, the better the command of English.

sophisticated system is being used. Conversely, a lower ratio indicates the use of simpler syntax.

# 3.2.2.3 Average Clause Length (ACL)

ACL is calculated by dividing the total number of words by the total number of clauses in the text. Like SCI, it reveals grammatical power in the language user's system.

# 3.2.2.4 Words Per Minute (WPM)

Calculated only from stretches of thirty seconds' or more duration. Computed from the total number of words in stretches divided by the total number of minutes.

	Total	numb	er of	wore	ls i	in 30	)"	+ 5	stret	tches	5	MDM
			Tota	l nu	nbei	c of	mi	inu	tes		_	WEPI
For	example:	5	stret	ches	of	30"	=	2'	30"	300	wds	
		2	stret	ches	of	1'	=	2		200	"	
	8	1	stret	ches	of	2'	-	2		<u>150</u>	н (	
				TOTA	Ľ.		=	6'	30"	650	wds	

 $\frac{650}{6.5} = WPM(100)$ 

This is not a wholly reliable indicator, as rate of delivery can vary widely from speaker to speaker. Nevertheless, it could serve to indicate whether teachers slow down their rate of delivery when addressing different interlocutors.

#### 3.2.2.5 Lexical Density (LD)

This is a measure used by Ure (1971) in order to find out the relative proportion of lexical words to the number of words in the whole corpus. A high lexical density does not necessarily indicate a wide vocabulary, but could be due to excessive repetition of a limited vocabulary. As such lexical density should not be taken as a true reflection of a large vocabulary.

LD = Total number of lexical words (i.e. exclude grammatical) Total number of orthographic words (i.e. include grammatical) X 100 3.2.2.6 Lexical Variation (LV)

Linnarud (1976) developed this measure to act as a check on Lexical Density. In other words, if a text has a high LD, LV will indicate whether LD is a true measure of a wide ranging vocabulary or of a multiple repetition of a restricted vocabulary.

# $LV = \frac{Total number of lexical types}{Total number of lexical tokens} \times 100$

This is a more reliable indicator of a rich vocabulary. In the present thesis a high/low lexical variation will indicate whether the teacher is placing less/more semantic load on lexical items as a function of the level s/he is addressing at the time. In other words, is s/he using less specific and more general terms or vice versa in accordance with the level being addressed?

#### 3.2.2.7 Modifier Variation (MV)

This is a measure devised by the writer along the lines of Lexical Variation in order to measure the amount of modifiers (adjectives and adverbs) used by the teachers at each of the levels.

 $MV = \frac{\text{Total number of modifier types}}{\text{Total number of lexical tokens}}$ (i.e. exclude repetitions) X 100

The measure would show whether there is any tendency for the teachers to use, or avoid the use of, modifiers at any given level.

# 3.2.2.8 Pre-Verb Length (PVL)

The number of words placed before the main verb in any clause. Expressed as a proportion of the total number of clauses.

# PVL = Number of pre-main verb words Total number of clauses

It is reasoned that, since less words before the main verb in a clause indicate less self-embedding and left-branching, the load on the students' short-term memory would be considerably lightened (cf. Kuno 1974, Snow 1972). This in turn promotes ease of processing and comprehension, especially at the lower levels (where the students may not have completely mastered the subject-verb-object rules).

# 3.2.2.9 Type/Token Ratio (TTR)

This measure is used to indicate the size of the speakers'/ writer's active vocabulary. The minimum ratio, in theory, would be 1 but this, of course, is never the case as some words, especially function words, will always tend to be repeated. The closer the ratio is to 1, however, the more active the vocabulary of the speaker.

# TTR = Total number of types Total number of tokens

# 3.2.2.10 Hapax Legomena (HAP)

This is a simple and straightforward count of all the words

that appear in the text once and once only. The measure is expressed as a percentage of the total number of words in the text. Both HAPAX and TTR express basically the same phenomenon. TTR, however, uses words of all frequencies while HAPAX uses only words of frequency 1.

$$HAP = \frac{Total HAP}{Total Tokens} \times 100$$

Note: The criteria outlined in Quirk et al. (1972) (henceforth GCE) have been followed for measures 3.2.2.11 - 16.

3.2.2.11 <u>Simple Sentences (SS) (G.C.E. 7.1</u>) Sentences consisting of one clause only. Calculated as a percentage of the total number of sentences.

3.2.2.12 Complex Sentences (CX) (G.C.E. 11.1-3)

Sentences consisting of a main clause with subordinate clauses attached to it. Calculated as a percentage of the total number of sentences.

# $CX = \frac{\text{Total number of Complex Sentences}}{\text{Total number of sentences}} \times 100$

# 3.2.2.13 Compound Sentences (CD) (G.C.E. 9.39)

Sentences consisting of two or more main clauses joined by "OR", "AND", or "BUT". Calculated as a percentage of the total number of sentences.

# 3.2.2.14 Nominal Clauses (NOM) (G.C.E. 11.14, 16.25)

Calculated as a percentage by dividing the total number of nominal clauses by the total number of T-Units in the text

and multiplying by 100.

3.2.2.15 <u>Relative Clauses (REL) (G.C.E. 13.8-15</u>) Calculated as a percentage by dividing the total number of relative clauses by the total number of T-Units in the text and multiplying by 100.

# REL = Total number of relative clauses X 100 Total number of T-Units

# 3.2.2.16 Adverbial Clauses (TIME, REA) (G.C.E. 11.5, 26-51) Two main types were looked at: Time and Reason, these being the only two that seemed to appear with any regularity in the speech of the teachers. As with the two preceding measures (NOM and REL), they were calculated as percentages by dividing the total number of each type by the total number of T-Units in the text and multiplying by 100.

$$TIME = \frac{Total number of Time clauses}{Total number of T-Units} \times 100$$
$$REA = \frac{Total number of Reason clauses}{Total number of T-Units} \times 100$$

Measures 3.2.2.14-16 are more precise in that they identify exactly the type of embedding occurring in the texts. As such, they could serve as possible indicators of the syntactic preferences of teachers at different levels.

<u>NOTE</u>: In the case of clauses introduced by WHEN, WHERE, WHY, HOW, it is the <u>function</u> rather than the <u>form</u> that determines its classification, as seen in the following examples (clauses underlined).

- a) T-8(A)-11: James the Sixth of Scotland...became King of Scotland when Queen Elizabeth the First <u>died</u> (Adverbial-Time)
- b) T-4(A)-75: ...you remember, that was when the SNP were very successful (Nominal-Subject complement)
- c) T-4(A)-125: ...at the moment you have a situation where one man...has a lot of power (Relative)
- d) T-15(NS)-24A: ...it could be argued that you should have an assembly where there are = far more people (adverbial - Place)

#### 3.2.3 MEASURES OF PRAGMATIC BEHAVIOUR

In general, these measures are concerned with the concomitant, activity of the teacher during interaction. As stated in the introduction, these four measures are considered the least controversial and ones on which intersubjective unanimity is most likely to be reached, given their ease of identification. Because of the difficulties involved in formulating behavioural variables in a precise way (cf. Davy 1980:279), it is not intended to measure <u>behaviour</u> per se, but those linguistic manifestations in the output which can unequivocally be ascribed to one of the four categories outlined below:

3.2.3.1 Checking for Understanding and Feedback (CUF)

This typically manifests itself when the teacher introduces a new vocabulary item or has given an explanation or sees blank faces. CUF subsumes confirmation and comprehension checks as well as clarification requests (cf. Long, 1980). Typical Expressions: a) (Do)you understand?; b) OK?;

c) All right?; d) Right? and e) Do you see what I mean?

# 3.2.3.2 Metalingual Glosses (MLG)

As the name indicates, these are glosses of vocabulary items the teacher considers the students do not know. MLG subsumes repetition and expansion/elaboration (cf. Long, 1980; Chaudron, 1978, 1979).

### Example: T-13(E): The landlord tells the tenants, the people who lived on the land, to get off the land (MLG underlined)

#### 3.2.3.3 Teacher Supplies/Corrects Word (TSW)

Occurs chiefly when a student is "stuck" for a word s/he can not remember or simply does not know.

# 3.2.3.4 Change of "Tack" (COT)

Indicated by a percentage sign (%) in the texts. Refers chiefly to when the teacher restructures or rephrases part of his utterance, couching it in different terms, possibly because the teacher has either used the "wrong" word (slip of the tongue) or decided to use an altogether different word or expression (false start), maybe because s/he feels it could be difficult for the students.

#### Example:

a)  $\underline{T-5(E)-31}$ : If that % if you think that = Why do you think Scottish people obviously didn't think that?

b) <u>T-14(NS)-42</u>: ...and the programmes are going to be issued in the national effort, that at the moment there two % there are two per year.

#### 3.3 RESEARCH QUESTIONS AND HYPOTHESES

#### 3.3.1 Research Questions

As was stated in Section 1.5, whenever adult speakers of a language engage in any verbal interaction, a process of adjustment or accommodation is initiated during which each participant assesses the other(s), generally with respect to knowledge of the topic and amount of shared knowledge, until the level is found at which they can successfully carry on the interaction. In Sociolinguistics, Giles (1977) refers to the dynamic element embodied in social psychological phenomena such as attitudes, motives and intentions which shape our linguistic behaviour. Giles developed the Accommodation Theory, which is concerned with determining why people shift their speech towards or away from others (convergence or divergence) in varying degrees and how their interlocutors interpret these speech modifications and act accordingly.

Referring to the modification of rhetoric, Corder (1979) regards this ability of adult speakers to accommodate their language as inherent in their linguistic competence, something to which they have recourse especially when the interlocutors are either infants or foreigners. This accommodation of rhetoric or register could be viewed as a process during which the adult (native speaker) "tunes in" to the child/foreigner until s/he obtains the "best reception" and both are on the same "wave length" i.e. the child/foreigner is able to understand and hold up his end of the linguistic activity that is being carried out.

In the specific case of interaction with infants or foreigners, Corder (ibid) sees certain similarities in the two registers and says the registers arise because

"...of an overriding necessity in their speakers to communicate successfully with interlocutors who are defective in their knowledge of the language system."

In other words, their main objective is to make the listener's task, while processing the input, as simple as possible and thus facilitate comprehension of the message being transmitted. This was seen to a large extent in the results of the studies reviewed in Chapter II.

It is to this accommodation of rhetoric or register in the case of teachers' speech to foreign learners that the research questions in the present thesis are addressed:

- What are the syntactic properties of Foreigner Register as encountered in the corpus to be analyzed?
- How does the language used by the teachers

a) to the native speakers and,

b) to the non-native speakers, differ in syntactic complexity when compared

each to the other?

- (i) What are the characteristics of the pragmatic behaviour of the teachers when addressing,
  - a) native speakers,
  - b) non-native speakers?

(ii) Are these characteristics present at all levels?

#### 3.3.2 HYPOTHESES

The following hypotheses were set up in an attempt to find the answer to the preceding questions:

- H<sub>0</sub>1: As measured by Words per Minute (WPM), Pre-Verb Length (PVL), Modifier Variation (MV), Lexical Density (LD), Lexical Variation (LV), Type-Token Ratio (TTR), Mean T-Unit Length (MTUL), Subordinate Clause Index (SCI), Average Clause Length (ACL), Hapax Legomena (HAP), Simple Sentences (SS), Complex Sentences (CX), Compound Sentences (CD), Nominal Clauses (NOM), Relative Clauses (REL), Time Clauses (TIME) and Reason Clauses (REA), the level of proficiency of the students has no effect on the speech of the teachers addressing them.
- H<sub>0</sub>2: As measured by Checking for Understanding and Feedback (CUF), Metalingual Glosses (MLG), Teacher Supplies/Corrects Word (TSW) and Change of Tack (COT), the level of proficiency of the students has no effect on the pragmatic behaviour of the teachers addressing them. Significance level = 0.01

Since the probability of getting "chance" significance increases in inverse proportion to the sample number, this most stringent level of significance was chosen as the most appropriate in the present study, given the relatively small size of the samples (4 cases per level).

#### 3.4 DESIGN

As already observed, the overriding concern in designing the experiment was that the collection of data should not suffer the same shortcomings of other studies with respect to the collection of the native speaker baseline data (See 2.3.3.4 and 3.1).

A total of sixteen (16) teachers were recorded addressing three groups of non-native speakers and one of native speakers on a pre-determined topic: "Devolution for Scotland". The four groups of students were addressed by the teachers as follows:

- Elementary 4 different teachers
- 2) Intermediate 4 different teachers
- Advanced 4 different teachers
- 4) Native Speakers 4 different teachers

None of the teachers addressed more than one group nor more than one level. This design meant that inter-group comparisons could be made without running the risk of obtaining skewed results because one teacher may have been being compared with himself.

Each teacher was asked to give an introduction of the topic and then to throw the subject open to discussion with the class. They were told to endeavour to draw out all the students as the main aim of the study was to observe the classroom processes and to see in what way the information given by the teacher was grasped by the students. As already mentioned (2.4.1), a more ambitious design the same five teachers addressing all four different levels - had to be abandoned for practical, administrative and logistic reasons. This design would no doubt have produced more interesting results but "laboratory" designs do not work well in natural situations where real-world problems are usually impossible to solve. In the case of the present thesis, it was the "Winter of Discontent" of 1978/79 with its many strikes, lockouts and snowbound roads (due to the gritters' strike) that helped in part accelerate the demise of the five-teacher design.

The final blow was dealt by some teachers choosing not to participate. A similar experience was reported by Chaudron (personal communication) who was essentially trying to do the same for his (1978, 1979) studies. As he put it, "it was rather difficult to obtain the right teacher and conditions, especially when several teachers chose not to participate." It would seem that for "real" classrooms one is to be forever destined to take what comes and make the best of it ..... or do without!

#### 3.5 LOCATION

The search for subjects entailed visiting four different language schools in Edinburgh: The Edinburgh Language Foundation, Basil Paterson College, The Edinburgh School of English and Stevenson College of Further Education.

After due consideration, Stevenson College (henceforth Stevenson) was chosen as the one most suited to the purpose of the study. Whereas the other institutes visited are dedicated exclusively to EFL, Stevenson not only offers a wide range of EFL classes at Elementary, Intermediate and Advanced levels but also classes for native students who receive instruction in subjects ranging from History and Geography to Mathematics and Computer Science, leading to the award of a certificate such as the Scottish Certificate of Education (SCE) at Ordinary ("O") or Advanced ("A") level. This wide diversity of academic activities made Stevenson ideal for collecting data from teachers addressing native as well as non-native speakers - in keeping with the stated purpose of this study - all "under one roof". There also exists a close link of cooperation between Stevenson and the Department of Linguistics at Edinburgh University. At the time of data collection (February and March 1979), students were allocated to levels on the basis of their results in the English Language Battery Test (ELBA). This test consists of two parts: Part I, Listening Comprehension (on tape) and Part II, Structure and Reading Comprehension. Maximum number of points: 270. The students' raw scores in both parts were then averaged and ranked. Then students were assigned to levels as follows:

> Elementary - 0 to 80 Intermediate - 81 to 120 Advanced - 121 and over.

ELBA was originally designed for testing non-native speakers at postgraduate level in order to predict whether they would encounter language difficulties. It has its weak points, among which feature prominently:

1) Its inability to discriminate at the lower end,

- 2) It does not test production and
- The Listening Comprehension is limited to minimal pairs and is not meaning-related.

The students at Stevenson receive English classes for a whole academic year. At the start of the year, the inevitable problems of misplacement were solved by means of interviews with question naires and production tests. By the time the data was collected, however, all these small problems had already been solved and the groups had settled in and become more homogeneous.

(<u>Note</u>: Stevenson stopped using ELBA one year later. They now use exclusively: the interview with questionnaire, reading and writing).

### 3.6 SUBJECTS

The subjects who took part in the experiment were sixteen native speakers of English who had all had teacher training. Although not all had received training in Teaching English as a Foreign Language (TEFL), their experience in TEFL/TESL ranged from two years to twenty-five and among them they had accumulated an average of twelve years\* experience in TEFL. No specific choice was made of any teacher in particular, they were simply the ones who agreed to participate. Some flatly refused to discuss the topic with elementary classes as they argued that it was beyond the grasp of the students and that language production at that level would be a very laboured and trying affair. Although this was the ideal sort of data for the study, since it would show the greatest amount of simplification, the investigator did not insist, so as to avoid awkward questions that might have arisen about the true nature of the **experiment**.

In the non-native groups, the students were young adults (ranging in age from 18 to 25) of varying language backgrounds: Arabic, French, German, Greek, Chinese, Italian, Polish, Portuguese and Spanish (Latin American and Peninsular). They were learning English in order to be able to enter either University or one of the Colleges of Further Education. It was the second term of a full year they spend at Stevenson College of Further Education, so the teachers knew them all by name. As already stated in 1.7, it is in this aspect that the present study differs from others in the field. In Long (1980), Arthur et al. (1980), Henzl (1975/1979) the interlocutors were unacquainted - a factor which may have accounted for the great amount of variation present in these studies.

In the native speaker groups, the ages ranged from 17 to 30. Two of the groups were training for Nursery Nurses (caretakers); the other two were studying for the Scottish Certificate of Education 'O' Levels.

As is the custom in studies like the present one, the true nature of the study was not disclosed to the subjects. In the introductory talk, it was explained to them that the object of the exercise was to observe classroom processes and interaction and to measure the extent to which a topic was learnt by the students after it had been introduced by the teacher. To that end, each teacher was asked to:

 Give a short, five-minute talk to the students on "Devolution for Scotland" and

2) Throw the subject open to discussion with the class, answering any questions the students might ask for clarification.

With these instructions, a reasonably long sample of teacher language was likely to be produced, with modifications (if any) being made whenever necessary.

# 3.7 DATA COLLECTION

A National 686 D portable stereo cassette recorder with two Canon lapel microphones was used to record the data. One microphone was placed near the teacher, the other facing the students. Although made under classroom conditions, there are very few instances of total incomprehensibility in the recordings. These were mostly due to spontaneous participation by several students all talking simulteneously. The ESL staff at Stevenson are not unaccustomed to being observed, but in order to minimize the observer paradox (Labov, 1969), and in an effort to reduce the effect of extraneous factors to a minimum, the investigator opted to stay away from the classroom altogether. The teachers would then feel less constrained and - most important for language production - address themselves to the students and not to the observer (as so often happens). An impartial evaluation of the language used, and of the opinions expressed in the class, have led the investigator to conclude that the presence of the tape recorder had little or no effect on either the teachers' or the students' performance. On the whole, it could be said that his absence, rather, served to set the teachers completely at their ease. One actually confessed to the investigator that s/he had an "observer hangover" from teacher training days and that s/he would take part only if he were absent from the classroom.

#### Recordings

The data were recorded on BASF C-90 cassettes. There were no special seating arrangements. No "dry" runs were made because the nature of the experiment demanded spontaneous speech, and it was therefore essential to get the first outputany other would have been "rehearsed". Under the circumstances prevailing at the time (See 3.4), the writer considered himself lucky when he was able to do a recording at all.

It may be argued that the writer's absence from the scene would not allow for a correct interpretation of the events in the class and the exact identification of each and every participant. Had the objective pursued been an analysis

of the total teacher-student output, the argument would doubtless be valid. However, it will be agreed that in foreign language classes it would be rather unusual to confuse the teacher's voice with any other. Since it is the teacher's language that was the object of the investigation, the question does not arise.

#### 3.8 TRANSCRIPTION OF THE DATA

Before going into the details of the transcription of the data, it is first necessary to establish the criteria whereby the units comprising the corpus were arrived at.

### 3.8.1 The Spoken Sentence: Criteria

The basic unit used in the present study is the <u>spoken sentence</u> (henceforth <u>Sentence</u>), synonymous with what Lyons (1977) terms 'spoken text sentence'. Sentence here is defined, under the following criteria, as:

"A string of words in which grammatical (syntactic and semantic) structure simultaneously combines with prosodic features (stress and intonation) in speech to produce an entity which, in the great majority of cases, native speakers would non-arbitrarily recognise as a sentence in English." (p.624)

The difficulties are greater in segmenting a spoken, rather than a written, text into sentences. In the latter, as Lyons points out, authors can, within certain limits, insert their own sentence boundaries. The fact that there exists intersubjective unanimity as to where these boundaries may be set, "....shows that it is far from being a matter of arbitrary decision how a written text is segmented into sentences" (ibid)

For a spoken text, on the other hand, segmenting is less straightforward because "there is no single prosodic feature that serves as a sentence boundary marker in the phonic medium in guite the same way that a full stop, a guestion mark or an exclamation mark serves to mark the end of a text sentence in the graphic medium ... but, up, to a point, it can be done non-arbitrarily by native speakers" (ibid). In the present study, a sentence boundary was inserted whereever grammatical structure (syntactic and semantic) combined with prosodic features (stress and intonation) to produce a string that a native speaker might generally agree could be called a sentence. In order to obtain an objective idea of the agreement between this segmentation and that of a native speaker, random samples of the recordings were presented to ten randomly selected native speakers - all postgraduate students at Edinburgh - with deliberately vague instructions as to the punctuation of the selections (See Appendix II). Each was played three times, but subjects were told they were at liberty to repeat the selections as many times as necessary. Table 3-1 shows the agreement between the punctuation of the native speakers and that of the investigator (Raw Scores. See Appendix II for Spearman-Rank Correlation results). A T-Test was run on individual and pooled results in order to see whether there was any significant difference between the judges' punctuation and that of the investigator. No significant difference. was found.

1	í										1	
INV	5	e	ĸ	7	4	9	ĸ	e	г	7	1	I
10	7	e	e	2	e	4	е	e	I	2	.9663	100.
6	m	7	4	2	4	9	e	e	г	ю	.7698	600.
8	7	m	e	m	4	Ŋ	ю	Ŋ	г	2	.8684	100.
7	2	e	2	г	m	2	e	2	г	2	.6396	.046
9	5	m	4	I	4	ß	e	7	J.	Ч	.9129	100.
5	2	m	e	7	4	5	e	e	ı	2	1.000	.001
4	2	2	m	7	4	e	2	2	7	2	.7165	.020
1.1												8
Э	3	4	e	2	4	7	e	4	г	e	.8742	.001
2	ĸ	4	ε	ę	4	7	e	4	ı	e	.8567	.002
-	2	4	4	7	4	5	e	e	ı	7	.9513	100.
S/J	н	7	'n	4	5	9	7	8	6	10	rho	sig

(S = Selection; J = Judge INV = Investigator)

TABLE 3-1 RESULTS OF PUNCTUATION EXPERIMENT (S = S

#### 3.8.2 TRANSCRIPTION OF THE DATA AND CONVENTIONS

Both teacher and student utterances were transcribed, as the latter were considered essential for the analysis of teacherstudent interaction. The recordings were transcribed in ordinary script with suprasegmentals not shown. However, as explained in the preceding section, they were taken into account when establishing the presence of a sentence boundary.

- a) <u>Teachers</u> were identified by numbers thus: X T-1(I)-5 where "X" is used to avoid problems with the computer; T=teacher; the numeral after the "T" is the teacher number; the letter in brackets indicates the level (in this case "Intermediate"); the final numeral is the utterance number.
- b) <u>Students</u> were identified either as "MS"/ "FS" (male/female student) or "MSID/FSID" (Id=Idem) if the same M/F student continued speaking at the next turn. All student utterances are enclosed in square brackets.
- c) <u>Hesitation Phenomena (filled pauses</u>) all hesitation phenomena ("UHM, UH, ER, ERM") were included in the transcription.
- d) <u>Lexical Pauses</u> (thinking pauses before a lexical item) and "<u>unscheduled pauses</u>" i.e. those that do not occur at constituent boundaries, are both signalled by an equals sign (=) each sign representing approximately a one-second pause. So " = = " would indicate a twosecond pause, and so on.

- e) "<u>Scheduled" pauses</u> are indicated by the usual comma (,) or a colon (:) in the case of direct speech.
- f) A <u>hash</u> (#) is used to indicate a sentence boundary and a <u>double hash</u> (##) a turn boundary (i.e. where there is a change of speaker).
- g) A turn that continues accross speakers (i.e. even though another speaker intervenes) is signalled by "... " at the end of the current speaker's turn and at the beginning of that speaker's next. The number of the previous turn is repeated, but with A,B,C etc..... post-scripted thus: X T-8(A)-17 / X T-8(A)-17A.
- h) Whenever a speaker breaks off and starts <u>rephrasing</u> or <u>restructuring</u>, the exact place is signalled by a percentage sign (%) (COT) (See 3.2.3.4).
- A series of initials were used, in brackets,
   to signal interactive functions (See Appendix
   I for the whole list of abbreviations).

# 3.9 DATA EXCLUDED FROM THE ANALYSIS

#### 3.9.1 INTRODUCTION

Although it may be highly desirable to include the total volume of a corpus in an analysis, it is not usually a practical proposition, chiefly because of the amount of

time and energy it would consume. In the present case, for logistic and administrative reasons, it was decided to exclude that part of the output that in no way affected the aim of the study: the analysis of the syntactic properties of the teachers' language. The decision was taken on the grounds that the excluded material in no way upset the syntactic balance of the samples selected for analysis.

In order to provide a verifiable basis for a quantitative analysis, and for any subsequent replication, it was therefore decided to exclude any material that would also be unlikely to produce intersubjective unanimity when submitted to a previously defined set of criteria (cf. 3.2.1). The following material, for some of which Quirk et al.'s(1972) nomenclature has been followed, was therefore not included in the syntactic analysis:

#### 3.9.1.1. Dialogues and Monologues

At the very outset, the teacher output was divided into two parts - Dialogues and Monologues - in accordance with the following criterion: A <u>Monologue</u> was classified as that stretch of speech which has a duration of thirty seconds or more. Stretches of less than thirty seconds were considered part of a <u>dialogue</u> and were therefore excluded from the analysis. This division into monologues and dialogues was made for logistic and administrative reasons. By confining the analysis to stretches of thirty seconds' or more duration, a reasonable basis for comparison was established that would not have been practicable had all stretches been taken - of no matter what duration. In

that case, a team would have been needed to carry out the analysis, as the time needed by one investigator would have been far more than resources (time and money) could ever allow.

Within the monologues, the following material was excluded:

# 3.9.2 Comment Clauses

These are parenthetical in nature and their exclusion in no way detracts from the meaning of the sentence. Examples: I think, I believe, in fact, you know, you see.

#### 3.9.3. Reaction Signals and Initiators

These are the expressions that often preface a teacher utterance.

Examples: Right, well, mhm, uhuh, OK.

#### 3.9.4 Repeated Items

Wherever the teacher repeats exactly the same preceding words, the subsequent repetition is omitted.

Note: The omitted material is bracketed in the examples

given in this and all the following sections.

#### Examples:

X T-13(E)-46 But you could-(you could) apply to stay longer. X T-5(E)-87 But they want-(they want) independence?

#### 3.9.5 Partial Repetition of Student Utterances

(cf. Bowman's (1966) Class A and Class B minor dependent sentences pp.38-62).

These are of several types:

a) Those intended to elicit the correct response or further elaboration from the student on what the latter has said.

### Example 1:

< MS > [good enough % not - not good enough for the country] < X T-6(E)-69 > Not good enough?

# Example 2:

< MS> [I don't know = point er all of the propaganda, you know] < X T-6(E)-73> Propaganda?

In both cases, the teacher seems to be asking the student to explain or expand what the student himself has just said.

b) Those offering encouragement (reassuring the student).

#### Examples:

< FS > [if he bought the land = er the land?] < X T-13(E)-35> if the buyer buys the land, yes. (reassures student that "land" is correct)

#### Example 2:

< FS >[er so now they say it's er belong him - belong? er < T-13(E)-38B > belongs to them, mhm. (confirms that "belongs" is correct)

c) Those intended to supply the correct response or to correct an error or errors in the student's previous utterance.

#### Example 1:

- < MS > [...because the people Basque eh = they don't want eh = the politic Spanish]
- < X T-13(E)-18C >Spanish politics (correcting an error)

#### Example 2:

< FS > [I think the - the Conservative Party is for capitalist and er and not for - for people that is poor .... ]
< T-13(E)-36 > That are poor (correcting an error)

#### 3.9.6 Unrelated Material

Within this category are included the following:

- a) Material not related to the topic (devolution) T-8(A), for example, was side-tracked into religion.
- b) Utterances not addressed to the students but to others,
   e.g. to the investigator (before leaving the room or when returning at end of class)
- c) Material from lesson tapes or read from a textbook or other source.

#### 3.9.7 Restructuring (Rephrasing or False Starts)

(cf. Bowman (1966), Gaies (1977b)).

This usually occurs when the teacher stops in mid-sentence and changes tack. The final structure is counted only if it complies with the requisites for a T-Unit. As stated in 3.9.4., the material in brackets is omitted. The percentage sign (%) indicates the place at which the change of tack (COT) is made.

#### Examples:

#### 3.9.8 Expansions (Underlined in the Examples)

These are usually found in apposition to the constituent to which they refer. As such, they occupy the same position

in the constituent structures as the modified constituent - which is their raison d'être.

#### Examples:

- < X T-13(E)-46 >(I mean) you look at a map of Scotland and you see about three or four = cities, (big cit % Edinburgh, Glasgow, Aberdeen) and - (and) then = there's nothing!
- < X T-13(E)-1 > Last weekend (last Saturday and Sunday) I went to stay with some cousins.
- 3.9.9 Fragments
- 3.9.9.1 Unfinished Sentences
- a) Interrupted by Student(s):

#### Examples:

- < X T-5(E)-17> (well, it's not quite ...)
- < X T-5(E)-32> (yes, they did have a peaceful way of ...)

#### b) Idea not completed by teachers:

#### Examples:

- < X T-13(E)-24> (Do you know what the name of the = government in = it
   was going to be Edinburgh %) === Do you know what it
   was going to be called?
- < X T-5(E)-79 > (Do you think we should have a % as if % = you know, people looking in at us = Scots from the outside =) Do you think we should have a devolved government?

#### 3.9.9.2 Verbless Sentences (cf. Bowman 1966, pp.38-62)

Within the context, these are perfectly logical sentences that tie in with the rest of the discourse, generally, but not always depending on the previous utterance for message clarification. However, their formal (surface) structure (absence of subject and/or predicate) does not meet the requirements for a T-Unit (i.e. they do not contain a main verb) and therefore disqualifies them for inclusion in the analysis.

#### Examples:

<	Х	T-13(E) - 64A	>	(Ruben, now about you?)	
<	X	T-33(E)-66	>	(Esther? Oh! Always so-so!)	
<	X	T-2(A)-12	>	(Not an independent government = no) you said you'd talked about this?	I thought

Their dependence on previous utterances for a full clarification of the message typically confines these verbless sentences to utterance-initial or final position. Bowman (1966) too, found that examination of the monologues in her corpus revealed that

> "...nearly half of the minor sentences (sc. verbless sentences) are dependent on major ones and many of the latter are uttered by another speaker." (p.64)

In the present study, their occurence, if any, in a monologue is generally confined to initial or final position i.e. when the teacher is reacting to a student's previous utterance or is about to initiate a teacher-student exchange. A great similarity may be observed between these verbless sentences and partial repetitions (See 3.9.5). It is somewhat difficult to draw an unequivocally distinguishing line between the two. However, partial repetitions may range from one word to a full subordinate clause (i.e. containing a verb) - all depending on the previous utterance for their meaning. They are also bounded by a terminal juncture because the teacher has no intention of holding the turn, only of supplying the repeated item as encouragement or correction or eliciting a fuller response (See 3.9.5). Verbless sentences, on the other hand, generally either have self-contained meaning or need only the insertion of the missing verb and/or subject in order to acquire full sentence status.

In order to highlight the differences between them, two examples of each type now follow. The full context is given, with the structure in question underlined. In the case of verbless sentences, the possible item(s) needed for completion are given in brackets at the end, with a query (?).

(i) Verbless Sentences

a) < MS> [....it will not be a Scottish government, really]

< X T-4(A)-63> Not completely, no. That's right. (?) (it will....be)

b) < X T-11(A)-23>But = the housing situation down there - ...the rates in England are going up just as they are in Scotland. (?) (take or let's take)

(ii) Partial Repetitions

< X T-8(A)-22>Bureaucrats, yes (Teacher confirms student query). b)< MS > [Yes or no England] < FS > [They want to be something separate from the = mm] < X T-2(A)-7> Something separated from England, yes (Synthesized both student utterances)

3.9.10 Student Output

The student output was not taken into consideration except where it serves the teacher output.

After all the extraneous material had been excluded, the corpus was ready for segmentation into T-Units prior to the application of the analytic measures.
#### 3.10 SEGMENTATION PROCEDURES

The extraneous material having been removed, the corpus was then subjected to T-Unit segmentation. As stated in 3.8.1., the corpus had been transcribed using sentences. These were now identified as: <u>Simple</u> (SS) if they consisted of one clause only; <u>Complex</u> (CX) if they consisted of a main clause with subordinate clauses attached to it; <u>Compound</u> (CD) if they consisted of two or more main clauses joined by "OR", "AND" or "BUT".

For T-Unit segmentation, a simple or complex sentence counted as one T-Unit, since it will be remembered that a T-Unit ("minimal terminable unit, as Hunt called it) is defined as a main clause together with all subordinate clauses attached to it (See 3.2.2.1). A compound sentence, on the other hand, counted as two T-Units or more if two or more main clauses were conjoined. The conjunction was counted as the first word of the following clause, in accordance with previous research (Hunt, 1965; O'Donnell et al, 1967; Gaies, 1977b, Loban, 1976).

Gaies (1977b) reports that some investigators interpolated one word (Mellon, 1967; O'Hare, 1973) or words (Perron, 1974) in order to convert fragments into T-Units. Gaies himself follows Mellon and O'Hare. In the present study, no words are interpolated.

For the purposes of T-Unit word counts, the following criteria were applied in view of the fact that the study deals with spoken, not written samples:

a) <u>Acronyms</u> counted as one word if they were so pronounced; otherwise they were counted as as many as letters were pronounced. E.g. "SCE" was taken as three words, ASLEF as one.

b) Contractions counted as one word.

c) Hyphenated Nouns counted as two words.

In addition to these Gaies' (1977b) procedure was followed in counting tag questions as part of the same T-Unit. The alternative - regarding them as fragments - was rejected on the grounds, as Gaies puts it

> "....that question tags are generated by a transformational rule operating on a particular underlying structure" (p.75)

(the sentence to which it is attached) and must therefore form part of it.

In conformity with other segmentation procedures, <u>one-word</u> imperatives were classified as fragments; those of more than one word were counted as a T-Unit.

During segmentation, the following subordinate clauses were identified: Nominal, Relative and Adverbial. The Adverbial clauses were further subdivided into Reason, Time and Place. However, the only ones appearing consistently in the corpora were reason and time, in that order.

When all the segmentation had been done, all of the measures outlined in 3.2.2 and 3.2.3 were applied and the results of each measure for each teacher tabulated. These raw data

were then prepared for analysis by the SPSS ONEWAY and T-TEST computer program, brief details of which will be given in Chapter 4.

#### 3.11 SUMMARY

This Chapter has presented the design for the analysis of the linguistic properties of the language used by teachers of English to Foreign students at Elementary, Intermediate and Advanced levels and also to Native students.

Easily definable and applicable measures with high interresearcher reliability were used to try and determine the syntactic complexity of the language samples obtained at Stevenson College of Further Education, Edinburgh, after these samples had been duly segmented in accordance with a strict set of criteria. In addition, measures were applied to the linguistic manifestations of the teacher's pragmatic behaviour.

Full details of the method and results of the analysis will be presented in Chapter IV, also a sample analysis of two passages that will permit the reader to verify the accuracy of the present investigator's results.

# CHAPTER IV

## ANALYSIS AND RESULTS

## ANALYSIS AND RESULTS

### 4.1 INTRODUCTION

This chapter first gives a brief description of the computer programs used in the analysis of the sixteen texts obtained from the teachers. It then describes how the analysis was done and includes a sample analysis of two passages in order to allow the reader to verify the procedure. Finally, it presents the results, commenting on each of the variables measured.

## 4.2 Computer Programs Used in the Analysis

Edinburgh University has access to the facilities of the Edinburgh Regional Computing Centre (ERCC), by means of the Edinburgh Multiple Access System (EMAS). The computers are the 2980 and 2972. A number of programs and packages are available which perform swift and accurate analyses as requested, of which the following were used:

#### 4.2.1 Concord

Devised originally by Neil Hamilton-Smith (1969) to assist in the compilation of the dictionary of The Older Scottish Tongue at Edinburgh University, CONCORD is a program that accepts ordinary written text as input and, according to the OPTION chosen - CONTEXT or FREQUENCY - will either:

 a) Count every word in the text as well as print it in context in the centre of the page (CONTEXT) (See Appendix III). b) List every word in the text with its frequency in alphabetical as well as descending order of frequency (FREQUENCY) (See Appendix III). It also produces a frequency profile of all the words with percentages of types and tokens.

4.2.2. SPSS (Statistical Package for the Social Sciences)

#### 4.2.2.1 Subprogram NONPACORR (Non-Parametric Correlations)

This program was used to establish the correlation between the judges' and the investigator's results on sentence boundary insertion (punctuation exercise).

## 4.2.2.2 Subprogram ONEWAY (Analysis of Variance)

The program carries out a one-way Analysis of Variance - used because there was only one criterion or dependent variable: the group of teachers addressing the different levels of students. It will be referred to as VARIANCE in the analysis and discussion.

The program also provides facilities for testing for trends between groups. By using the keyword POLYNOMIAL = 1, SPSS partitions the between-group sum of squares into linear components. This involves a polynomial regression of group means on the category values of the independent variable. The procedure thus treats the independent variable as if it were measured on an interval scale. In conjunction with the DEVIATION FROM LINEAR (DEVLIN), the resulting LINEAR TERM (LINTERM) serves to indicate whether there is any trend between groups. Finally, the program uses the <u>t</u> statistic to test <u>a priori</u> contrasts between groups, to see whether the results are in accordance with the investigator's idea of the trends and differences between groups. In the following specification of the ten group contrasts, a <u>dash</u> (-) between groups is to be read as "CONTRASTED WITH"; a <u>slash</u> or <u>stroke</u> (/) is to be read as "AND". E.g. ELEM/INT-NS = Elementary <u>and</u> Intermediate contrasted with Native Speakers (See Appendix IV).

## CONTRASTS:

1)	ELEM	-	INT	2)	ELEM	-	ADV
3)	ELEM	-	NS	4)	INT		ADV
5)	INT	-	NS	6)	ADV	-	NS
7)	ELEM/INT	-	NS	8)	INT/ADV	-	NS
9)	ELEM/INT	_	ADV	10)	ELEM/ADV	-	NS

The output for each CONTRAST list includes: the difference between means, the Standard Error (SE) of the difference, and the two-tailed probability. In the results, reference will be made only to this probability as significant or non-significant with respect to the groups contrasted.

## 4.2.2.3 Subprogram T-Test

This was used to establish which variables were significantly different between groups - after ONEWAY was run. <u>NOTE</u>: The statistical tests outlined above were chosen carefully after duly consulting with the Statistics and Computer Staff at Edinburgh University. It will be remembered that the main aim of this thesis is to try to establish

whether or not the language of teachers changes as a function of the level at which they are performing. It is therefore essential to be able to establish whether there are any differences between the output at one level and that at a different level. The statistical tests chosen are designed to do precisely that: ONEWAY indicates whether VARIANCE is significant between groups; LINEAR TERM whether there is a trend, the direction of which, if any, will be indicated by the GROUP MEANS; and DEVIATION FROM LINEAR whether the points are close to the line or widely divergent. (By definition, if LINTERM is significant, DEVLIN will not be and vice versa). T-TEST shows which groups are different, this difference being confirmed by CONTRAST. References will be made to the results in this order: VARIANCE, LINEAR TERM, DEVIATION FROM LINEAR, T-TEST and CONTRAST. It is hoped that this short explanation will help to make interpretation clearer and easier to follow.

## 4.3 ANALYSIS PROCEDURES

All sixteen files (texts) were run through with FREQUENCY and CONTEXT. The output was then used jointly for calculating Type/Token Ratio (TTR), Lexical Variation (LV), Lexical Density (LD), Modifier Variation (MV) and Hapax Legomena (HAP) as follows:

 a) For Lexical Variation (LV) only lexical items are used, excluding all function (grammatical) words (See Bolinger 1975:117-22 for criteria used). CONTEXT therefore indicated the sense in which a word was used in the text. Thus the word "deal" was excluded as grammatical if the context was "a great <u>deal</u> of" but included in the count if the context was e.g. "a body that would <u>deal</u> with Scottish affairs."

- b) For Lexical Density (LD) function words were also omitted when counting the lexical items. However, they were then included in the total orthographic word count which is used as divisor (Lexical items ÷ total number of orthographic words (tokens) X 100).
- c) For Modifier Variation (MV), as the name implies, only modifiers were counted (cf. Bolinger, 1975, loc. cit.).
- d) For Type/Token Ratio (TTR) all words in FREQUENCY.
- e) For Hapax Legomena (HAP) only words used <u>ONCE</u> in the text.

The remaining measures were then applied manually.

4.3.1 Sample Analysis of Two Short Passages

There now follow two samples, duly analyzed, so that the reader may get an idea of how the measures were applied. Both passages contain problem sentences. Sample 1 is from Intermediate, Sample 2 from Elementary. All measures

are indicated by different sets of brackets, abbreviations or numbers, as indicated in the following key:

(	)	Nominal Clauses	SS	Simple Sentence
ŧ	¥	Relative Clauses	СХ	Complex Sentence
ť	<del>}</del>	Reason Clauses	CD	Compound Sentence
<	>	Conditional Clauses	CUF	Checking for
=		Pause (roughly 1 second per symbol)		Feedback
#		Utterance boundary	MLG	Metalingual Gloss
##		End of turn	TSW	Teacher Supplies/corrects
[]	15	T-Units (15 = No. of words	9	Change of Tack (COT)
		in preceding unic.	0	charge of fack (col)
{· ]	}	Enclosed words excluded	3,	Pre-verb Length (PVL)

## FIGURE 4.1 Key to Symbols used in Sample Analyses I and II

<u>NOTE</u>: For PVL (Pre-Verb Length), "I'm, there's (Sample II, lines 1, 10, 11) were taken as <u>two</u> units (Example 2) but counted as <u>one</u> for T-Unit length. A similar procedure was adopted throughout the 16 texts i.e. when "be" is the only verb. "\_\_\_'s" = <u>is</u> or <u>has</u> was counted as <u>one</u> when used as auxiliary. (Example 1)

#### Example:

1) T15(NS)-3 (Line 9) ... Everyone's been talking about it

2) T14(NS)-42(Line 21)...that's exactly what they did 1 2

## Sample Analysis 1

<X T-12(I)-2A>{ I've been asked to speak to you for a few minutes 1
about Devolution which is a long and rather complicated word - which 2
= (WBB) which = % many people in this country = don't really under- 3
stand what it means either}  $\frac{\#}{25 \text{ secs}}$ ./

<X T-12(I)-3> { (almost whispered) hardly any = good! } # 5  $<X T-12(I)-3A> \{Uhm\} = (CX) [Scotland has always <sup>3</sup>/liked = (to$ 6 think (that it's = a little different from England)) $\int_{a}^{20} \# (s)$  [And = for 7 = many hundreds of years Scotland has  $\frac{8}{7}$  had the same Parliament as 8 England =  $\begin{bmatrix} 14 \\ \# \end{bmatrix}$  (CX) [But it's  $\frac{2}{7}$  had a separate system of law, a 9 separate system of education = and for the last = /30 secs./[I think] 10 = about fifty years = a separate = lot of government servants + known 11 as "Civil Servants" =  $\neq$  who work here in Edinburgh  $\neq$   $\neq$  ]<sup>40</sup> # (CX) 12 [And the idea was recently  $\frac{5}{7}$  = brought forward = (that = Scotland 13 should have a small Parliament = or Assembly of its own ) ] 19 # 14 / 1 min./ { Now Scotland } % (SS) [ with this = Scotland would 15 not  $\frac{5}{2}$  be completely separate = ]<sup>8</sup> # (CX) [ It would simply  $\frac{3}{2}$  have = 16 an Assembly = in Edinburgh = + that would deal with some Scottish 17 affairs  $\neq$  ]<sup>15</sup> = #(SS) [ and = What did we  $\frac{4}{7}$  have on March the 18 first?]<sup>9</sup> ## /1 min. 22 secs./ 19

## FIGURE 4.2 Sample Analysis I

<u>Note</u>: Lines 1-4 are included only to show what is <u>excluded</u> in the study and <u>why</u>. The first three lines would not be analyzed as the sense is not complete, thereby not satisfying the criteria for T-Units. The whole turn would not be counted as elapsed time is under 30 seconds and the passage therefore, falls into the "dialogue" category (See 3.9.1.1).

 $< X T-5(E)-2X > (SS) [I)^{1/m} Scottish]^{2} { Yes, yes # uhm} (SS) [I]$ 1 didn't  $\frac{2}{3}$  want to vote ]<sup>5</sup> # (laughter) (SS) [ I  $\frac{1}{3}$  voted "No" ]<sup>3</sup> # {ahm} 2 (CX) [I didn't  $\frac{2}{3}$  want it  $\frac{1}{3}$  because = I thought (it would cost too 3 much money ) +  $]^{19}$  # {and I don't believe = that = by = having what 4 was called a "devolved government" that = means = like a deputy = as 5 it were (MLG) = a small unit of people who could make decisions on = 6 certain aspects of Scottish life mhm # }/ 30 secs./ (CX) [ I didn't 2 7 believe = {really} = (that those decisions would honestly help 8 us to have a better Scotland 1  $1^{5} # (CX) [I^{1} believe (that in a)]$ 9 small = country like = the United Kingdom we ought to be = (what it's 10 called) = a United Kingdom)  $]^{24} #$  (CX) [ and I really do  $\frac{4}{7}$  think 11 (we {we } should be = all one)  $\int_{10}^{10} \# \{ \text{Imean } \}(CX) \ [ there /'s a$ 12 lot of countries in Europe  $\neq$  that have a devolved government  $\neq$  ]<sup>12</sup> = # 13 (CX) [ but then there  $\frac{3}{5}$ 's a lot of struggles too  $\neq$  that we can see 14 going on at the moment  $\neq$  for example in Iran / 1 min./ = { with } . 15 with the Kurds #  $]^{24}$  { I mean I } (CX) [ I  $\frac{1}{2}$  think = (we should be 16 avoiding all sorts of = wars and so on) # ]<sup>13</sup> (CX) [ and I  $\frac{2}{7}$  think 17 (often we can = make a war come about < if we say = { you know } 18 { we're } (we're up here and the English down there))> ]# (CX) [ I 19 don't <sup>2</sup> know (what you think ) ## ]<sup>6</sup> / 1 min. 15 secs. / 20

## FIGURE 4.3 Sample Analysis II

- <u>Note</u>: 1) Lines 4-7 excluded because the sense is not complete. The teacher lost the thread because of Metalingual Gloss (MLG). "Really" in line 8 excluded -Comment Clause (See also lines 12 and 16 (I mean) 18 (you know). "Really" in line 11 included - part of emphasis.
  - 2) In line 1, "I'm" was taken as two for PVL, one for words in T-Unit. Idem "there's" (lines 12 and 14).

# RESULTS OF THE SAMPLE ANALYSIS

MEASURE	SAMPLE 1	SAMPLE 2
Total Number of Words	128	177
Total Number of T-Units	7	12
Mean T-Unit Length (MTUL)	18.29	14.75
Subordinate Clauses	6	13
Average Clause Length (ACL)	9.85	7.08
Subordinate Clause Index (SCI)	1.86	2.08
Pre-Verb Length (PVL)	4.29	1.83
Simple Sentences (SS)	3	3
Complex Sentences (CX)	3	9
Compound Sentences (CD)	0	0
Nominal Clauses (NOM)	3	9
Relative (Adjective) Clauses (REL)	3	2
Reason Clauses (REA)	0	1
Conditional Clauses	0	1
Words per Minute	86	83
Lexical Density (LD)	46.79	37.19
Modifier Variation (MV)	14.10	5.53
Lexical Variation (LV)	73.00	67.89
Hapax Legomena (HAP)	44.23	33.17
Checking for Understanding (CUF) and Feedback	0	0
Metalingual Gloss (MLG)	0	1
Teacher Supplies/Corrects Word (TSW)	0	0
Change of Tack (COT)	0	0
Type/Token Ratio (TT)	43.40	33.17
FIGURE 4.4. Results of all the measures applied	d to Samples	I and II

Sample 1 is Intermediate; Sample 2 Elementary

#### 4.3.2 Problem and Ungrammatical Sentences

A striking feature of the data in the corpus is the almost total absence of problem sentences. (5 in all, a very small percentage (0.4%), out of 1,239 analyzed, but even smaller because we are dealing here with the whole corpus i.e. taking excluded material into account as well). The problems were referred to two native speaker colleagues. Two of the problems had arisen because a change of tack had gone unnoticed by the investigator, thereby producing a seemingly ungrammatical sequence (Sample I, line 1 - 4); one was excluded because the idea had not been completed by the teacher (Sample II, lines 3 - 7); the other two fell within the category of <u>dialogue</u> (cf. 3.9.1.1), and were thus automatically excluded.

Another feature is the absence of ungrammatical sentences (cf. Freed, 1978; Chaudron, 1978, 1979). There are only performance lapses which resulted in:

1) T14(NS)-45 (Line 4) ...they are giving more money to English <u>qualifications</u> which are = inferior to ours which <u>has</u> been superior

where there is lack of subject - verb agreement (<u>qualifications - has</u>)
2) T11(A)-23 (Line 2) ...many of the small towns and villages...had
 <u>its</u> squalor (lack of agreement of possessive)
 Strictly speaking, these cannot be termed ungrammatical as
 the teacher <u>knows</u> what the correct word should be, but has
 only had a performance lapse.

Both of the phenomena referred to above are most probably due to the fact that we are not dealing here with ordinary conversations - with all the variations they entail - among linguistic and social equals. Rather, we have here a set of professionals, in full command of the situation, addressing a group of their students. In the foreign/second language classroom, there is an <u>ipso facto</u> linguistic inequality, the teacher being in the "dominant" role (cf. Henzl, 1974). Therefore, since s/he can give or take away the turn and there is no one vying to take it away (as would be the case in normal interaction among linguistic peers), the teacher's full command of the situation is reflected in a more uniform output.

## 4.3.3 Application of Statistical Measures

Once all the measures had been applied, the raw scores were tallied and some converted to percentages for compatibility. Two files were then set up to serve as the raw input for ONEWAY. Since ANOVA does not indicate <u>which</u> groups are different but only that there <u>is</u> a different between groups, T-TEST was also run to ascertain where the differences lay between the groups. CONTRAST results were also studied for significance. The analysis was then complete.

## 4.4 RESULTS

The results are presented in the light of the hypotheses enumerated in 3.3.2, repeated here for convenience: н\_1:

As measured by Words Per Minute (WPM), Pre-Verb Length (PVL), Modifier Variation (MV), Lexical Density (LD), Lexical Variation (LV), Type-Token Ratio (TTR), Mean T-Unit Length (MTUL), Subordinate Clause Index (SCI), Average Clause Length (ACL), Hapax Legomena (HAP), Simple Sentences (SS), Complex Sentences (CX), Compound Sentences (CD), Nominal Clauses (NOM), Relative Clauses (REL), Time Clauses (TIME) and Reason Clauses (REA), the level of proficiency of the student has no effect on the speech of the teachers addressing them.

H<sub>0</sub>2:

As measured by Checking for Understanding and Feedback (CUF), Metalingual Glosses (MLG), Teacher Supplies/Corrects Word (TSW) and Change of Tack (COT), the level of proficiency of the students has no effect on the pragmatic behaviour of the teachers addressing them.

Significance Level = 0.01

In order to set up a convenient framework for presentation the results were grouped into four categories, using level of significance as criterion. In this way, an overall picture is seen of the behaviour of the variables. In the description that follows, each category is defined in order of importance. The variables that fall within that category are then presented - singly or jointly - according to whether they fall within the same significance level or not. Statistical evidence is then presented to test the relevant hypothesis with each variable in turn and a decision made as to its acceptance or rejection on the basis of that evidence, using the Native Speaker group as control.

## 4.4.1 Category 1

Includes those variables whose VARIANCE and LINEAR TERM are significant at the prescribed level. There is only one variable in this category: MTUL (Mean T-Unit Length). MTUL - ANOVA

(<u>NOTE</u>: Because of the marked overall significance evinced by MTUL at all levels, all the relevant results of the statistical measures have been presented here with a view to giving the reader as complete a picture as possible of the behaviour of the variable from level to level).

	VARIANCE	LINEAR T	DEVIATION FROM L	GRO	OUP MEANS
F. Ratio	8.959	23.283	1.797	ELEM	11.4450
F.Prob	0.0002	0.0004	0.2076	INT	11.3375
р.	.01	.01	n.s	ADV	12.7250
				NS	14.1700

#### TABLE 4.1 Analysis of Variance results for VARIABLE MIUL (Category 1.)

MIUL

1

CONTRASTS

G	ROUPS	T-VALUE	T-PROB		T-VALUE	T-PROB
1.	E-I	0.19	0.854		0.172	0.867
2.	E-A	-2.06	0.085	n.s.	-2.042	0.064
3.	E-NS	-4.51	0.004		-4.348	0.001
4.	I-A	-2.14	0.076	n.s.	-2.214	0.047
5	I-NS	-4.49	0.004		-4.520	0.001
6.	A-NS	-2.11	0.080	n.s.	-2.306	0.040
7.	E/I-A				-2.458	0.030
8.	E/I-NS				-5.120	0.000
9.	I/A-NS				-3.941	0.002
10.	E/A-NS				-3.842	0.002

T-TEST

## 4.4.1.1 Interpretation and Comments

a)

VARIANCE is highly significant between groups (p=0.11), indicating heterogeneous groups. The also highly significant probability (p=0.01) for the LINEAR TERM points to the existence of a marked trend, the direction of which is shown by the group means to be from low to high (ELEM: 11.4450; INT: 11.3375: ADV: 12.7250; NS: 14.1700). In other words,

TABLE 4.2 Results of T-TEST and CONTRAST for variable MTUL. Read <u>a dash between groups as "contrasted with", a slash (/)</u> as "and". (See 4.2.2.2 and AppendixIV).

MTUL gets longer as it progresses through the levels. DEVLIN is non-significant i.e. the points all lie somewhere near the line. The histogram shows their position.



# FIGURE 4.5 <u>Histogram showing trend of MTUL group means</u>: low to high from Elementary to Native Speakers.

Analysis of the T-TEST results shows quite clearly that both ELEM and INT differ significantly from NS (p.=0.01) and that there exists a difference between ADV and NS, even though it does not attain the prescribed level (p.=0.080). Again, a non-significant difference can be seen between ELEM/INT and ADV (p.=0.085 and 0.076, respectively). Such a difference, however, is absent from the ELEM-INT results (p.=0.854).

b)

Finally, a look at CONTRASTS confirms all the differences indicated by ANOVA and T-TEST. It would be redundant to analyze in detail here again, but it is important to point out that the clearest confirmation of the differences can be obtained from contrasts 7 to 10 where every NS-NNS contrast is significant (E/I-NS p=0.000; E/A-NS p=0.002; I/A-N p=0.002) and the ELEM/INT-ADV does not attain significance (p.=0.030) at the prescribed level. These contrasts show, in the present thesis, that there is a clear dividing line between the NS and NNS levels.

In sum, then, the statistical analysis of the results for Mean T-Unit Length (MTUL) shows quite clearly that, for this variable, there exist significant differences between the language used by the teachers at Elementary and Intermediate levels and that used at Native Speaker level. It has also shown that, although they are non-significant, there also exist differences between the MTUL used at Elementary levels and that used at Advanced, as well as between the latter and Native Speaker levels.

## 4.4.1.3 Testing the Hypothesis

How do the above results affect the hypothesis? The evidence has shown that, jointly and singly, both Elementary and Intermediate differ markedly from Native Speakers. On the basis of this evidence, then, we must reject the null hypothesis and accept the alternative i.e.: As measured by Mean T-Unit Length (MTUL) the level of proficiency of the students at Elementary and Intermediate level has an effect on the speech on the teachers addressing them.

As far as the Advanced level is concerned, since the results were not significant at the prescribed level, the null hypothesis cannot be rejected.

## 4.4.2 Category 2

This category is subdivided into two: a) This includes those variables whose VARIANCE (VAR) does not attain the level prescribed but whose LINEAR TERM does. This indicates that a difference is present and that there is a significant trend between groups.

The variables in Category 2a are:

CUF	(Checking for Understanding	and Feedback)	(VAR = 0.02)
LV	(Lexical Variation)		(VAR = 0.04)
ACL	(Average Clause Length)		(VAR = 0.04)
MLG	(Metalingual Gloss)		(VAR = 0.04)
PVL	(Pre-Verb Length)		(VAR = 0.06)

b) This includes those variables whose VARIANCE does not attain the level prescribed but whose LINEAR TERM reaches the 0.05 level.

There is only one variable in Category 2b:

HAP (Hapax Legomena) (VAR = 0.1 ; LINTERM = 0.02)

δ	ARIABLE	VARI	ANCE	LINEAR	TERM	DEV LJ	LNEAR		GROUP M	IEANS	
		F-Ratio	F-Prob	F-Ratio	F-Prob	F-Ratio	F-Prob	EL	INT	ADV	NS
a)	CUF	4.610	0.0228	8.773	0.0119	2.529	0.1212	13.75	0.75	2.25	00.00
	MLG	3.843	0.0387	11.388	0.0055	0.071	0.9322	3.25	2.00	0.75	0.00
	LV	3.810	0.0396	11.261	0.0057	0.084	0.9197	33.65	36,31	41.67	45.31
	ACL	3.764	0.0409	11.125	0.0059	0.083	0.9209	6.79	7.27	7.66	8.35
	PVL	3.322	0.0567	8.070	0.0149	0.948	0.4147	2.40	2.56	2.52	2.79
6	HAP	2.662	0.0955	7.825	0.0161	0.080	0.9232	9.13	10.34	12.60	13.65

ONEWAY Analysis of Variance results for VARIABLES CUF, MLG, LV ACL, PVL, HAP (Category 2 (a + b) Table 4.3:

## 4.4.2.1 Interpretation and Comments

Table 4.3 shows that although VARIANCE in this category has not attained the prescribed level of significance of any of the variables, it has nevertheless reached the 5% level for all but <u>Pre-Verb Length (PVL)</u>, which has reached the 10% level. The fact that the variables have attained these levels, therefore, is enough to indicate that there is undoubtedly <u>some</u> difference between the groups even though it is not highly significant.

Again, the highly significant LINTERM points to the existence of a marked trend, the direction of which is indicated by the group means. It is interesting to note the reverse trend, in the case of the pragmatic variables, from ELEM to NS, where the mean is 0.00. This is, of course, the expected trend since both variables are concerned with those aspects of the teachers' pragmatic behaviour which would produce an unfavourable reaction in a native speaker who would feel that s/he is being "talked down to" or considered ignorant. DEVLIN shows that there is no significant deviation from the line, as can be seem quite clearly from the histograms on the following page.



FIGURE 4.6 Histograms showing group means for CUF, MLG, ACL, PVL, HAP and LV

LV

HAP

-	/ARIABLE/ TESTS	I I	0 U P 3	m M	4	ع	9	7	8	6	10
		E-I	E-A	E-NS	I-A	I-NS	A-NS	E/I-A	E/I-NS	I/A-NS	E/A-NS
a)	CUF T-Test	0.01	0.02	0.01	0.15	0.21	0.02				
	Contrast	0.01	0.02	0.01	0.73	0.22	0.06	0.20	60.0	0.02	0.08
	MLG T-Test	0.40	0.02	10.01	0.40	0.20	0.17				
	Contrast	0.42	0.02	0.01	0.40	0.20	0.22	0.06	0.02	0.11	00.00
	LV T-Test	0.55	0.12	0.02	0.28	0.07	0.37				
	Contrast	0.55	0.12	0.02	0.28	0.07	0.37	0.15	0.00	0.03	0.01
	ACL T-Test	0.39	0.16	0.01	0.52	0.06	0.20				
	Contrast	0.39	0.16	0.02	0.52	0.06	0.20	0.25	0.00	0.03	0.01
83	PVL T-Test	0.10	0.25	0.06	0.78	0.94	0.72			÷.	
	Contrast	0.20	0.31	0.07	0.60	0.20	0.15	0.54	0.10	0.18	0.09
(q	HAP T-Test	0.38	0.09	0.16	0.43	0.35	0.60			12	
	Contrast	0.51	0.11	0.03	0.31	0.11	0.59	0.15	0.03	0.18	0.09
	Table 4.4	Result	s of T-	-TEST an	d CONTF	LAST for	variabl	es CUF,	MLG, LV,	ACL, PVL	and HAP.
		(For r MLG, becau	the cor	of spac itrasts the zero	e, only and T-T values	the sidest were at NS	gnifican e taken level).	ice level from the	s are giv pooled v	ren. For rariance e	CUF and stimate

Having seen that (albeit non-significant) there is a difference between the groups, a look at Table 4.4 will show how this difference can be more precisely determined. The first thing that strikes one quite forcibly is the consistent difference exhibited by all variables (excepting HAP T-TEST) in the ELEM-NS comparison (Column 3). This difference is significant at the prescribed level for CUF (Checking Understanding/Feedback) and MLG (Metalingual Gloss) in both tests but only so in T-TEST for ACL (Average Clause Length), CONTRAST reaching only the 5% level. This same level is reached in both tests by LV (Lexical Variation) while PVL (Pre-Verb Length) reaches 10%. Another striking feature is that, with the exception of CUF (which is highly significant) all ELEM-INT comparisons are non-significant. It will be remembered that this was also the pattern for ELEM-INT comparisons with MTUL (Mean T-Unit Length) (4.4.1.2). However, while the INT-ADV comparison reached the 5% level for MTUL, it fails to do so for any of the variables under consideration here. Indeed, the INT-NS and ADV-NS comparisons fail in this respect as well, whereas the first was highly significant for MTUL, the second attaining the 5% level.

Finally, as with MTUL (Mean T-Unit Length), there also seems to be a marked difference in the behaviour of the variables according to whether they are in the NS or NNS contrasts, though the line is not so clearly defined here because some results fail to achieve significance. None of the E/I-A comparisons is significant, showing that the three NNS groups are reasonably homogeneous with respect to the variables being considered. The NS-NNS contrasts on the other hand, reveal the following:

> LV (Lexical Variation) and ACL (Average Clause Length) are significant at the prescribed level for E/I-NS and E/A-NS. MLG (Metalingual Gloss) significant for E/A-NS.

CUF (Checking Understanding/Feedback), LV (Lexical Variation) and ACL (Average Clause Length) attain the 5% level for I/A-NS while MLG (Metalingual Glosses) does the same for E/I-NS.

The other contrasts are non-significant.

Summing up the results of the statistical analysis, it can be seen, but not quite so clearly as with MTUL, that there exist some significant differences between the language used by teachers at Elementary and Intermediate level and that used at Native Speaker level; the same being applicable to that between Advanced and Native Speaker levels. However, the tangible differences that we found for MTUL between Elementary, Intermediate and Advanced levels would seem to have disappeared for CUF, MLG, LV, ACL, PVL and HAP, the NNS groups now showing a certain degree of homogeneity.

## 4.4.2.2 Testing the Hypothesis

a)

b)

The statistical analysis has thrown up the following evidence:

CUF (Checking for Understanding and Feedback) is significantly different between ELEM and INT and between ELEM and NS. Most importantly, although the ELEM-ADV and ADV-NS results did not reach the prescribed level, they nevertheless show a marked difference (p = 0.02). On the basis of this evidence, the null hypothesis must be rejected and the alternative accepted i.e. As measured by CUF, the level of proficiency of the students at all levels has an effect on the pragmatic behaviour of the teachers addressing them.

MLG (Metalingual Glosses) is significantly different between ELEM and NS and between ELEM/ADV-NS. As was the case with CUF, MLG does not attain significance between ELEM and ADV, but the result shows a marked difference (p = 0.02). No difference is shown for ELEM-INT, which, as stated before, seem to be homogeneous. If this is the case and the difference between ELEM and NS is significant, we can dispense with the statistic in this case and reject the null hypothesis, accepting the alternative i.e. As measured by MLG, the level of proficiency of the students at all levels has an effect on the pragmatic behaviour of the teachers addressing them.

LV (Lexical Variation) and ACL (Average Clause Length) are significantly different between EL/INT/ADV-NS (table 4.4, cols. 8 and 10) but not between ELEM-INT, ELEM-ADV or INT-ADV. The null hypothesis must therefore be accepted. However, one could argue that, since the Native Speaker group is the control, if all the non-native speaker groups differ significantly from it, the teachers' speech <u>must</u> have been affected.

d) PVL (Pre-Verb Length) and HAP (Hapax
 Legomena) have not attained significance.
 The null hypothesis is therefore accepted.

## 4.4.3 Category 3

C)

Includes those variables whose VARIANCE and LINEAR TERM are not significant but whose DEVIATION FROM LINEAR is significant at the 0.05 level. There is only one variable in this category: SS (Simple Sentences).

VARIANCELINEAR TDEV LINGROUP MEANSF-RatioF-ProbF-RatioF-ProbELINTADVNS2.760.090.010.944.130.0438.5051.0037.0042.712.760.090.010.944.130.0438.5051.0037.0042.71TABLE 4.5Results of Analysis of Variance for Variable SSS678910SSGroups 12345678910SSGroups 12345678910SSGroups 12345678910T-Test0.050.820.470.010.130.400.230.670.800.35Contrast0.050.820.470.070.130.400.230.670.800.35							and the second se				
F-Ratio         F-Prob         F-Prob         EL         INT         ADV         NS           2.76         0.09         0.01         0.94         4.13         0.04         38.50         51.00         37.00         42.75           2.76         0.09         0.01         0.94         4.13         0.04         38.50         51.00         37.00         42.75           TABLE         4.5         Results of Analysis of Variance for Variable SS         9         10           SS         Groups 1         2         3         4         5         6         7         8         9         10           Fs1         E-A         E-NS         I-A         NS         E/I-A         E/I-NS         I/A-NS         E/A-NS           T-Test         0.05         0.82         0.47         0.01         0.13         0.40         0.33         0.50         0.35	VARIA	NCE	LIN	VEAR	Ŧ	DEV I	NI		GROUP	MEANS	
2.76       0.09       0.01       0.94       4.13       0.04       38.50       51.00       37.00       42.75         TABLE       4.5       Results of Analysis of Variance for Variable SS       5       6       7       8       9       10         SS       Groups 1       2       3       4       5       6       7       8       9       10         F-I       E-A       E-NS       I-NS       A-NS       E/I-A       E/I-NS       I/A-NS       E/A-NS         T-Test       0.05       0.82       0.47       0.013       0.40       0.23       0.67       0.80       0.35         Contrast       0.05       0.82       0.47       0.013       0.40       0.23       0.67       0.80       0.35	F-Ratio	F-Prob	F-Rati	0	F-Prob	F-Ratio	F-Prol	o EI	TNI	ADV	NS
TABLE 4.5 Results of Analysis of Variance for Variable SSSSGroups 12345678910B-IE-AE-NSI-AI-NSA-NSE/I-AE/I-NSI/A-NSE/A-NST-Test0.050.820.470.070.130.400.230.670.800.35Contrast0.050.820.470.070.130.400.230.670.800.35	2.76	0.09	0.01		0.94	4.13	0.04	38.5	0 51.0	0 37.00	42.75
SS       Groups 1       2       3       4       5       6       7       8       9       10         E-I       E-A       E-NS       I-A       I-NS       A-NS       E/I-A       E/I-NS       I/A-NS       E/A-NS         T-Test       0.05       0.82       0.47       0.07       0.13       0.40         Contrast       0.05       0.82       0.47       0.013       0.40       0.23       0.67       0.80       0.35		TABLE	4.5 R	lesul	ts of A	nalysis o	f Varia	ice for	Variable	SS	
SS       Groups 1       2       3       4       5       6       7       8       9       10         E-I       E-A       E-NS       I-A       I-NS       A-NS       E/I-A       E/I-NS       I/A-NS       E/A-NS         T-Test       0.05       0.82       0.47       0.07       0.13       0.40         Contrast       0.05       0.82       0.47       0.07       0.13       0.40											
E-I     E-A     E-NS     I-NS     A-NS     E/I-A     E/I-NS     I/A-NS     E/A-NS       T-Test     0.05     0.82     0.47     0.07     0.13     0.40       Contrast     0.05     0.82     0.47     0.07     0.13     0.40	SS Gr	oups 1	2	e	4	5	9	7	8	6	10
T-Test 0.05 0.82 0.47 0.07 0.13 0.40 Contrast 0.05 0.82 0.47 0.07 0.13 0.40 0.23 0.67 0.80 0.35		E-I	Е-А	E-NS	I-A	SN-I	A-NS	E/I-A	E/I-NS	I/A-NS	E/A-NS
Contrast 0.05 0.82 0.47 0.07 0.13 0.40 0.23 0.67 0.80 0.35	T-Test	0.05	0.82	0.47	0.07	0.13	0.40		- 		
	Contrast	0.05	0.82	0.47	0.07	0.13	0.40	0.23	0.67	0.80	0.35
		x		ſ		E		:			

TABLE 4.6 Results of T-Test and Contrast for Variable SS

SS

## 4.4.3.1 Interpretation and Comments

60

In Table 4.5, VARIANCE shows that there may be a slight suggestion of a difference between groups, but only just. However, the LINEAR TERM is not significant and DEVLIN evinces the existence of a wide deviation from linear (i.e. a total absence of a trend) as the group means duly show. From 38.50 for ELEM there is a jump upwards to 51.00 for INT. The mean then plunges downwards to 37.00 for ADV and jumps up again to 42.75 for NS. It is this erratic behaviour that has made DEVLIN more towards significance, wiping out any trend, as can be seen from the histogram.

E: 38.50 I: 51.00 A: 37.00 N6: 42.75

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FIGURE 4.6 Histogram showing group means for SS

A look at Table 4.6 confirms that there is only the slightest hint of a difference between ELEM-INT both for T-TEST and CONTRAST. None of the comparisons attains the prescribed level of significance.

## 4.4.3.2 Testing the Hypothesis

From the statistical evidence presented in the preceding Section, the null hypothesis has to be accepted as there is no evidence of any effect on the teachers' speech by the level of knowledge of the students i.e. they use simple sentences in their speech without regard to level of proficiency.

## 4.4.4 Category 4

Includes those variables none of whose statistic attained any level of significance. The variables within this category are: WPM (Words per Minute), MV (Modifier Variation), LD (Lexical Density), TTR (Type/Token Ratio), SCI (Subordinate Clause Index), CX (Complex Sentences), CD (Compound Sentences), NOM (Nominal Clauses), REL (Relative Clauses), REA (Reason Clauses), TIME (Time Clauses), TSW (Teacher Supplies/Corrects Word) and COT (Change of Tack).

	VARIANCE	LINEAR T	DEV. LINEAR		GRO	up mea	SN
	F-Prob	F-Prob	F-Prob	EL	INI	ADV	SN
MPM	0.36	0.50	0.25	145.75	126.00	150.00	145.75
MV	0.30	0.11	0.59	7.35	7.60	6.96	5.93
9	0.67	1.00	0.48	39.72	40.99	40.91	39.74
TTR	0.38	0.10	1.00	20.64	22.07	24.79	26.13
SCI	0.55	0.71	0.39	1.70	1.56	1.68	1.70
8	0.66	0.53	0.56	6.25	5.00	7.25	3.25
Š	0.19	0.81	0.10.	55.25	44.00	53.25	53.50
MON	0.64	0.56	0.52	57.25	55.00	61.50	49.00
REL	0.68	0.56	0.56	21.75	19.75	17.75	27.75
REA	0.68	0.28	0.87	14.00	11.50	6.25	7.25
TIME	0.29	0.09	0.68	7.00	13.75	14.50	16.00
MST	0.20	0.07	0.51	5.00	2.50	3.50	0.00
COT	0.45	0.43	0.37	16.75	25.75	20.00	10.75

5

TABLE 4.7 Results of Analysis of Variance for Variables WPM, MV, LD, TTR, SCI, CX, CD, NOM, REL, REA, TIME, TSW and COT. (Only F-Prob

is included).

COL 1 COL 2 COL 3 COL 4 COL 5 COL 6 COL 7 COL 8 COL 9 COL 10 E - T E-A E-NS A-NS I-A I-NS E/I-A E/I-NS I/A-NS E/A-NS WPM T-TEST 0,35 0.60 0.88 0.19 0.28 0.65 0.65 CONTR 0.35 0.60 0.88 0.19 0.28 0.17 0.36 0.48 0.91 MV 0.72 T-TEST 0.82 0.21 0.47 0.08 0.14 0.47 CONTR 0.82 0.72 0.21 0.08 0.14 0.51 0.04 0.08 0.04 LD T-TEST 0.49 0.33 0.98 0.97 0.49 0.31 CONTR 0.49 0.33 0.98 0.97 0.49 0.31 0.68 0.52 0.25 0.37 TTR T-TEST 0,68 0.23 0.13 0.47 0.30 0.71 CONTR 0.68 0.23 0.13 0.47 0.30 0.71 0.29 0.16 0.41 0.28 SCI T-TEST 0.21 0.89 0.96 0.38 0.11 0.85 CONTR 0.21 0.89 0:96 0.38 0.11 0.85 0.71 0.39 0.36 0.87 TSW T-TEST 0.31 0.63 0.08 0.70 0.06 0.22 CONTR 0.31 0.06 0.93 0.63 0.08 0.70 0.22 0.03 0.07 0.03 COT 0.35 T-TEST 0.50 0.65 0.65 0.27 0.10 CONTR 0.50 0.65 0.35 0.65 0.27 0.10 0.87 0.16 0.12 0.08 NOM T-TEST 0.83 0.65 0.35 0.57 0.59 0.22 CONTR 0.83 0.65 0.35 0,57 0.59 0.22 0.55 0.40 0.29 0.22 REL T-TEST 0.83 0.58 0.50 0.83 0.45 0.29 CONTR 0.58 0.50 0.83 0.83 0.45 0.29 0.66 0.43 0.32 0.34 REA T-TEST 0,79 0.41 0.46 0.40 0.44 0.85 CONTR 0.79 0.41 0.46 0.40 0.44 0.85 0.31 0.71 0.33 0.61 TIME T-TEST 0.20 0.20 0.09 0.89 0.62 0.77 0.89 CONTR 0.20 0.20 0.09 0.62 0.77 0.41 0.17 0.64 0.22 CX 0.78 0.80 T-TEST 0.13 0.06 0.04 0.96 CONTR 0.13 0.77 0.80 0.06 0.04 0.96 0.45 0.38 0.21 0.87 CD T-TEST 0.70 0.78 0.40 0.52 0.60 0.30 CONTR 0.70 0.78 0.39 0.52 0.60 0.30 0.61 0.43 0.36 0.28

# TABLE 4.8Results of T-Test and Contrast for Variables: WPM, MV,LD, TTR, SCI, TSW, COT, CX, CD, NOM, REL, REA, TIME

#### 4.4.4.1 Interpretation and Comments

Although they do not reach the prescribed level of proficiency, there are certain interesting features that could be pointed out with respect to some of these variables:

a)

b)

The LINEAR TERM for TIME (Adverbial Clauses) and TSW (Teacher Supplies Word) faintly suggests a trend from ELEM to NS, a trend confirmed by the group means (TIME: E=7.00; INT=13.75; ADV=14.50; NS=16.00). Note, too, the "reverse" trend for TSW (E=5.00; INT=2.50; ADV=3.50; NS=0.00), an activity in which a teacher would indulge more at NNS than at NS level. (See Appendix VI for histograms of all variables).

As far as T-TEST and CONTRAST are concerned, there is no difference between the NNS groups themselves nor between the individual NNS groups and NS. It is interesting to note, however, that when the NNS contrasts are taken jointly (cols.8-10) a difference tends to crop up between the NNS groups and the NS. So we do not find any differences in cols. 1, 2, 4 and 7 - i.e. all NNS groups compared with each other. However, when it comes to columns 8 to 10 (i.e. NNS groups compared with NS groups) we find the following results for MV (Modifier Variation) and TSW (Teacher Supplies/Corrects Word):

Co	lumn 8	8 (E/E-NS)	Column 9 (I/A-NS)	Column 10 (E/A-NS)
7	MV	0.04	0.04	0.08
e fi	TSW	0.03	0.07	0.03

It may be noted in passing that TSW and MV have two values that are significant at the 5% level. In other words, there seems to be a consistent difference, thrown up by analysis, between the language addressed to the NNS groups singly or collectively and that addressed to the NS groups. we shall go further into the implications of this trend in the discussion of the results. (Chapter V).

## 4.4.4.2 Testing the Hypothesis

Since none of the variables has reached the prescribed level of significance, the null hypothesis cannot be rejected. In other words, as measured by the variables in Category 4 (See p.120), the level of proficiency of the students has no effect on the speech of the teachers addressing them.

#### 4.5 JUSTIFICATION OF STATISTICAL ASSUMPTIONS

Underlying the foregoing results is the assumption that the samples analyzed are representative of the parent population. However, the question may arise as to whether thege results
are really those of a representative sample from the true population or not. In other words, are the pooled results from the four teachers at each level valid indicators of the linguistic behaviour of all teachers at those levels in the parent population? In the following passage, Sprent (1977) provides what could be considered an answer to the above question in statistical terms:

> "For children of a given age, say 11 years, there is a wide spread of recorded heights, but it is fairly well established that within the age range from 6 to 12 years the average heights of children vary linearly with age. The heights of a group of children of the same age represent a sample of all children of that age; but taking samples at different ages and fitting a straight line as best we can to the height means for each age we obtain an estimate of the population mean height at any other age within the range of our observations." (p.135)

> > (emphasis in the original).

If we examine this passage in the light of the present experiment, we see that for teachers of any given level there is indeed a wide spread of variability within each level, as the results for MTUL show:

EL : 12.29 11.83 10.64 11.02 Mean 11.45 Range 1.67 10.38 11.91 12.15 10.91 Mean 11.34 Range 1.77 INT: 11.67 Mean 12.73 Range 2.30 13.00 13.97 12.26 ADV: NS : 15.10 13.10 14.82 13.66 Mean 14.17 Range 2.00 Investigators in this field (Gaies, 1977; Chaudron, 1978, 1979; Henzl, 1979) have established that the language of the same subject varies as s/he progresses from one level to another, becoming increasingly complex from Elementary,

through Intermediate and Advanced, to Native Speaker level. In the present case, the results show the same tendency reported by the above mentioned investigators. In other words, the pooled results of the group at each level in the present study behave in the same manner as the separate results of the same subject in the other investigations. Or, to put it another way, the pooled results here are representative of the individual variability exhibited by each subject in the other investigations, insofar as these have been established, since the trend exhibited by the other investigations is similarly noticeable in the present work. Of course, the true means for the different levels have not yet been empirically verified, as is the case with age-height correlation in children. Nevertheless, all the evidence produced so far does point to a tendency to greater complexity as one moves from the Elementary towards the Native Speaker level. This being precisely the tendency noted in this thesis it is not unreasonable to consider the samples as representative of the parent population as those of the other investigations. By taking samples, as Sprent says, at the different levels and fitting a straight line (LINEAR TERM) as best we can to the group means for each level, we shall obtain an estimate of the true population mean for all levels within the range of our observations. Much more research is needed in this area, but the important thing to note is that all the evidence, including the present one, points consistently to a trend to increased complexity as teachers move from the lower to the upper levels of proficiency.

## 4.6 SUMMARY

This Chapter has presented an analysis of the results of the investigation by means of the application of statistical measures (ONEWAY ANOVA, T-TEST, CONTRAST) to these results. A sample analysis of two short passages was included to allow the reader to verify the investigator's measures. The statistical results were divided into four categories in accordance with the level of significance each variable attained. The hypotheses were then tested for acceptance or rejection on the basis of the statistical evidence presented. The null hypothesis was rejected in the case of MTUL (Mean T-Unit Length), MLG (Metalingual Glosses and CUF (Checking for Understanding and Feedback), it was accepted for the other variables. There is, however, an indication that LV (Lexical Variation) and ACL (Average Clause Length) at all NNS levels do vary significantly from the native speaker level, though not at the level prescribed in the present thesis. Finally, statistical and empirical evidence was presented to show that the sample is, as nearly as possible, representative of the parent population. Some of the variables presented in this Chapter, notably MTUL (Mean T-Unit Length), have behaved in a way similar to that of previous studies. Some however, have not followed a similar pattern, e.g. SS (Simple Sentences). The results, no doubt, hold implications for the study of Foreigner Register and these will now be considered in the following Chapter.

CHAPTER V

DISCUSSION

## DISCUSSION

### 5.1 INTRODUCTION - BRIEF REVIEW OF THE STUDY SO FAR

The guiding principle of this study is to examine the nature of the input to the learner in the EFL classroom (1.1) or what was termed Classroom Foreigner Register in this study (2.5). Thus, the study was designed with a view to examining the syntactic, lexical and pragmatic properties of the speech of the subjects at four levels (Elementary, Intermediate, Advanced and Native Speaker). In this connection, three basic research questions were posed (3.3.1), reformulated here for convenience:

Question No.1: What are the properties of Foreigner Register as identified by the variables to be observed?

- Question No.2: How does the language used by teachers a) to the native speakers and b) to the nonnative speakers, differ when each level is compared to the other? In other words, how does Foreigner Register differ from Native Register at each level?
- <u>Question No.3</u>: i) What are the characteristics of the pragmatic behaviour of the teachers when addressing a) native speakers; b) nonnative speakers?

ii) Are these characteristics present at all levels? These questions refer to the modification of rhetoric (Corder, 1979) which is triggered when a native speaker is engaged in interaction with a low proficiency non-native speaker or a child acquiring language (cf. 3.3.1). Since the students in this study are of differing linguistic ability, if the behaviour turns out to be different at each level, the difference in speech could then reasonably be said to have been prompted by the level of the students being addressed by the teachers.

Two hypotheses were formulated to test this assumption (3.3.2) and a set of measures devised that would provide an indication of the syntactic, lexical, and pragmatic properties present in the discourse, with a view to establising differences and similarities between the different levels. This information would then provide the basis for a descriptive statement about the properties of Foreigner Register as measured by the variables in this study. Having presented the results of the analysis in Chapter IV, it now remains to attempt to identify the different properties of Foreigner Register as gleaned from the measures applied to the data, and to seek to determine whether these properties characterize it as a simple or a complex register. The discussion will attempt to answer the research questions drawing on the results of the analysis done in this study, as well as on those of previous studies in this and related The answer would simultaneously provide a tentative fields. description, and an index of the different features of

Foreigner Register. Attempts will be made, during the discussion, to explain why some variables may have exhibited a different behaviour from the one observed for the same variables in other studies.

It has been pointed out elsewhere (1.7; 2.4.1) that very little work has been done in this field - especially studies that have applied statistical analysis to their results. This will explain the seemingly very frequent references made to Henzl (1974, 1975/1979); Gaies (1977b); Freed (1978/ 1979); Chaudron (1978, 1979, 1980) and Long (1980). In one form or another, these investigators have studied similar variables to the ones in this study. Most importantly, they are among the first to apply statistical analysis to their results.<sup>1</sup>

One final point must be made with regard to the discussion. The results of the analysis were presented in four categories (Section 4.4. et seq.), this gave an instant picture of which variables were significant and which were non-significant. It is now proposed to regroup them under their linguistic categories for the purposes of the discussion.

Except for Henzl and Chaudron; the latter intends to do so in the near future, though. (personal communication).

## 5.2 BEHAVIOUR OF THE VARIABLES: SYNTACTIC

5.2.1 MTUL (Mean T-Unit Length) (See Tables 4.1 and 4.2)

This is the only variable to have achieved significance at the prescribed level for both VARIANCE and LINEAR TERM i.e. there is <u>both</u> a significant difference <u>and</u> a marked trend to greater length in the direction of the native speaker groups. The T-TEST revealed that there was a significant difference between ELEM-NS and INT-NS (both p=0.00). The difference between the other groups was not significant: ELEM-INT (0.854); ELEM-ADV (0.085); INT-ADV (0.076); ADV-NS (0.080). Though the last three are not significant at the <u>prescribed</u> level, there certainly is a difference (0.10) between them as shown by the means: ELEM: 11.45; INT: 11.34; ADV: 12.73; NS: 14.17. The very small difference between them (0.11) explains the non-significance of the ELEM-INT result (0.854).

However, it is by looking at CONTRASTS that we see the full significance of the results for Foreigner Register. As explained in 4.2.2, CONTRASTS use the <u>t</u> statistic to test <u>a priori</u> contrasts between groups to see whether the results are in accordance with the investigator's idea of the trends and differences between groups - in this case that the manifestations of language go from simple to complex, in accordance with the group being addressed.

In the case of MTUL, the NS-ELEM and NS-INT contrasts were significant (0.01) while the NS-ADV reached the 5% level (0.04). The most interesting point to be noted is that all

the NS-NNS contrasts (cols.8, 9, 10) were significant at the prescribed level. This indicates that, in the present study at least, the teachers are making a consistent distinction between the NS and the NNS groups with respect to MTUL.

The findings of this study serve to confirm those of the other studies described in Chapter II. Mean Length of Utterance (MLU) in Adult-Child studies and T-Unit Length in NS-NNS studies were mentioned in all as showing consistent differences between the speech addressed by the native speaker to the linguistically inferior interlocutors, MLU or TU increasing in length in pace with the proficiency of the interlocutor. To go through them again here would be redundant, but it is necessary to point out that in the most relevant findings to the present ones, Gaies (1977b) statistically confirmed Henzl's (1974) findings. He found that T-Unit Length varied as a function of the level his trainee teachers were addressing, so a shorter/longer T-Unit was addressed to the level immediately below/above the one being observed. Thus, for Beginner, Upper Beginner and Intermediate, Beginner got shorter TU's than Upper Beginner, and Intermediate got longer TU's than Upper Beginner. Chaudron's (1978, 1979) study also used Gaies' variables. He reports similar findings to Gaies' but presents no statistical evidence.

# 5.2.2 ACL (Average Clause Length), SCI (Subordinate Clause Index (or ratio of Clauses to T-Units)) in relation to MTUL (Mean T-Unit Length) (Tables 4.3, 4.4, 4.7 and 4.8).

SCI and ACL are both directly related to MTUL. ACL is more sensitive in that it uses the number of <u>words</u> per clause whereas SCI uses the number of <u>clauses</u> per T-Unit (See 3.2.2.2-3 and Gaies, 1977b:100, 103). The non-significant results for the subordinate clause index (SCI) show that in the speech analyzed there is no significant difference as to the <u>amount</u> of subordination at each level. However, the Average Clause Length (ACL) and T-Unit Length (MTUL) show that there is indeed a significant difference between the subordinate clauses at Elementary and Intermediate and those at Native Speaker level (0.00 and 0.04 respectively). MTUL also shows a difference (albeit non-significant) between the Advanced and Native Speaker levels, ACL does not. (For full results, see Appendix V and VI).

These results support Gaies' (1977b) findings. He found that the teachers' use of subordinate clauses increased significantly with increase in student proficiency level, although he reports that there was an "extremely slight tendency" for the subjects' classroom language to <u>decrease</u> in syntactic complexity over the ten-week period. This tendency, incidentally, was <u>not</u> detected by his subordinate clause index either (p.100, 103). Long (1980), who also confirmed Freed's (1978) and Henzl's (1974, 1975/1979) results, likewise found that the average length of T-Units was shorter in speech addressed to non-native speakers than to native speakers.

In sum, the present study has presented evidence confirming the results of studies in other related fields: <u>Classroom</u> (Gaies, Chaudron); <u>experimental</u> (Long, Arthur et al.); <u>naturalistic</u> (Freed); <u>Adult-Child</u> (Newport (1976), Cross (1977), <u>inter alia</u>). These studies all found that MTUL (or MLU for Adult-Child) was a reliable index of syntactic simplicity/complexity. As in the other studies, the trend found in the present one is toward an increase in length with increase in proficiency.

It must be pointed out, however, that <u>longer</u> utterances (T-Units) do not automatically entail <u>complex</u> language and vice versa. There is, after all, only a probabilistic - not a simple cause-and-effect relationship between length and complexity (cf. Hunt 1965, 1970). In the search for a possibly more reliable guide to complexity, attention will now be turned to the variables that comprise T-Units: Main and Subordinate Clauses.

5.2.3 <u>Sentences: SS (Simple), CX (Complex), CD (Compound)</u> Subordinate Clauses: NOM (Nominal), REL (Relative),

REA (Adverbial-Reason), TIME (Adverbial-Time).

The first thing that strikes the eye is that all but one of these variables (SS) fall under Category 4 and that all are statistically non-significant. Each will now be taken in turn.

## 5.2.3.1 SS (Simple Sentences) (See Tables 4.5 and 4.6)

In accordance with previous studies, one would have predicted that this variable would have yielded significant In fact, the variable behaves in an erratic results. fashion. VARIANCE shows a faint difference at 0.09 but DEVIATION FROM LINEAR (DEVLIN) is significant at the 0.05 level. It will be remembered that it shows that there is no linear relationship between groups. This is in fact evident in the group means: (ELEM: 38.50; INT: 51.00; ADV: 37.00; NS: 42.75) with the irregular jump between groups being quite notable. The T-Test shows a difference between ELEM and INT (p:0.05) and between INT and ADV (p:007) but not between ELEM and ADV (0.82) nor, most strkingly, between ELEM and NS (0.47) nor between INT and NS (0.13). The results seem counter-intuitive.

In his study, Long (1980) had predicted a lower number of S-Nodes per T-Unit (i.e. more simple sentences) to non-native speakers (Hypothesis 13). Like Steyaert's (1977), Long's results did not support the hypothesis. As Long explains, however,

> "...of those few studies which have reported significant findings, most were based on a comparison of teachers' classroom speech <u>during second language instruction</u> and NS-NS interaction <u>in informal</u> (non-instructional) conversation." (pp.154 - 155) (emphasis mine)

In other words, comparisons were being made of speech from non-comparable situations. The very nature of language instruction demands short utterances for comprehension - if processing by the learner's short term memory is not to be overtaxed. On the other hand, an <u>informal conversation</u> between native speakers suffers no such constraints. The reader is reminded of the great amount of elaboration employed by Henzl's (1975/1979) native speakers when addressing fellow native speakers as opposed to the paucity of comment and bare-fact presentation they made to the non-native speakers in the classroom.(2.4.2).

In the present study, the teachers, by design, are all engaged in the same activity, in the same situation. It is not an instructional situation but rather one of exchange of information and discussion at each level, and the results are non-significant between all groups: both NS-NS and NS-NNS. These results parallel Long's and Steyaert's whose data, also by design, were produced under identical conditions, although in Steyaert's case there was no speakerhearer interaction - also by design. On the basis of this evidence, then, a possible explanation for the erratic behaviour of this variable might be that the nature of the discourse determines the distribution of sentence types and that it is non-significant between levels if the nature of the discourse is kept constant.

5.2.3.2 <u>CD (Compound Sentences) (See Tables 4.7 and 4.8</u>) These were not very numerous in the data. Since they are basically two simple sentences, it is not surprising that they produced null findings as well. No more mention will be made of them here.

## 5.2.3.3 <u>CX (Complex Sentences) and Subordinate Clause</u> <u>measures: NOM (Nominal), REL (Relative), REA</u> (Adverbial-Reason), TIME (Adverbial-Time) (See Tables 4.7 and 4.8)

These are all taken together because of their intimate relationship - the subordinate clause forming part of the complex sentence. As in the case of SS (Simple Sentences), the null findings for these variables at first seem to be counter-intuitive. One would expect to find significantly more complex sentences in the speech addressed to native speakers. The results do not in fact meet this expectation. There is no evidence of any kind of difference in VARIANCE for any of the variables (CX:0.19; NOM:0.64; REL:0.68: REA:0.68; TIME:0.29). There is a faint hint of a trend to a greater use of TIME progressively from ELEM to NS as evidenced by the (non-significant) LINEAR TERM (0.09). This trend is borne out by the group means (ELEM:7.00; INT:13.75; ADV:14.50; NS:16.00) which, as can be seen are higher at each level. On the other hand, the other three types of clauses show that proportionately more NOMINAL CLAUSES (Means: ELEM: 57.25; INT: 55.00; ADV: 61.50; NS: 49.00) and REASON CLAUSES (Means: ELEM:14.00; INT:11.50; ADV:6.25; NS:7.25) are addressed to the non-native speakers, while more RELATIVE CLAUSES are addressed to the native speakers. (Means: ELEM:21.75; INT:19.75; ADV:17.75; NS:27.75). While these results confirm Gaies' (1977b) findings with

respect to relative and nominal clauses, they do not contribute any information as to the <u>complexity</u> of the complex sentences (Means: ELEM:55.25; INT:44.00; ADV:53.25; NS:53.50), since they show no difference between NS-NS and NS-NSS groups. It may be in order, then, to take a closer look at Gaies,who did in fact find significant differences between levels for nominal (noun), relative (adjective) and adverbial clauses. (Gaies' Mean Length of T-Unit, Mean Length of Clause and Ratio of Clauses to T-Units are, respectively, MTUL, ACL and SCI in this study).

With respect to the Ratio (SCI), Gaies comments:

"Because the ratio of clauses to T-Units is the ratio of all clauses (both main and subordinate) to T-Units, this measure does not perhaps suggest how considerable a decline there was in the subjects' use of subordinate clauses over the duration of the ten-week course." (pp.100 - 103) (emphasis mine)

In other words, Gaies' Ratio (or SCI) behaved similarly to the present study's: it did not show up the differences. His mean Length of T-Unit and Clause (or MTUL and ACL here) were highly significant. In the present study only Mean T-Unit Length (MTUL) reached the prescribed level of significance, but Average Clause Length (ACL) was so at the 5% level (0.04).

So the apparently counter-intuitive result is not really such, after all. What has actually happened, according to these results, is that the <u>number</u> of clauses used (i.e. of NOM, REL, REA or TIME - in other words, the Subordinate Clause Index) is not significantly different, but rather, the length of the clauses, as borne out by MTUL and ACL).

## 5.2.3.4 PVL (Pre-Verb Length) (See Tables 4.7 and 4.8)

When extracting meaning from an utterance, the listener has to combine and process information from several levels, of which research has identified a range from the phonetic to the semantic (Fodor et al. 1974; Freund 1975). Following Kuno (1974) and Snow (1972), it was reasoned (3.2.2.8) that the lesser the number of words before the main verb in a sentence, the lesser would be the degree of embedding and, consequently, the lesser the load on the students' short-term memory. In its turn, this would possibly lead to a greater ease of processing and comprehension of the input. Although Pre-Verb Length (PVL) did not achieve significance at the prescribed level, there nevertheless is an indication not only of a difference between groups (VARIANCE = 0.057) but also of a significant tendency for PVL to increase from the lower to the higher levels (LINEAR TERM: 0.01) as borne out by the group means: ELEM:2.40; INT: 2.56; ADV: 2.52; NS: 2.79. In other words, like Snow's (1972) mothers, the teachers in this study tended to use less words before the main verb (i.e. shorter subjects) when addressing the less proficient students. Judging from the null findings for the subordination index (SCI), one could not speak of less embedding since, as has been seen, the measure was nonsignificant. It might perhaps be more accurante to say less length of embedding, as the Average Clause Length (ACL) was significant (at the 0.05 level).

#### 5.2.3.5 Summary of the behaviour of the Syntactic Variables

A review of the syntactic variables discussed in this section reveals a close relationship between them all: the Abstract T-Units (Main and Subordinate Clauses) are realized as either Simple, Complex or Compound Sentences. Complex Sentences in their turn, contain nominal, relative and adverbial clauses. Since each sentence has a main verb, Pre-Verb Length features in all.

Of the syntactic variables, no significant difference was found in the use of sentences (SS, CX, CD) or types of clauses (NOM, REL, REA, TIME) to either native or non-native groups i.e. in their use in Native or Foreigner Register. The subordination Index (SCI) was found not to be sensitive enough to detect differences between the two registers. In accordance with other studies, Mean T-Unit Length (MTUL) and Average Clause Length (ACL), together with Pre-Verb Length (PVL) have shown consistent differences between Native and Foreigner Register in this study (cf. Gaies, 1977b; Chaudron, 1978, 1979; Long, 1980; Snow, 1972). These three variables are the ones that provide an indication of <u>greater</u> <u>length</u> becoming a feature of the speech as one moves from Elementary, through Intermediate and Advanced, to Native Speakers.

The issue raised at the end of 5.2.2 with respect to <u>length</u> and complexity has not yet been satisfactorily resolved, but further discussion will be postponed until a full picture of the behaviour of all variables has been drawn.

## 5.2.3.6 Answer to Research Questions Nos. 1 and 2

Both questions can be fused, and answered as follows: With respect to the syntactic variables observed in the corpora analyzed in this study, the (syntactic) properties of Foreigner Register identified in them and the differences between Foreigner Register and Native Register at each level are:

- 1) A shorter MTUL (Mean T-Unit Length)
- 2) A shorter ACL (Average Clause Length)
- 3) A shorter PVL (Pre-Verb Length)
- 4) A tendency to use more nominal clauses
- 5) A tendency to use more reason clauses
- 6) A tendency to use less relative clauses
- 7) A tendency to use less time clauses

With respect to the other variables, Foreigner Register does not exhibit differences from Native Register in:

- Subordination (SCI Subordination Clause Index)
- The use of Simple (SS), Complex (CX) or Compound (CD) Sentences.

In these respects, then, Foreigner Register and Native Register share the same syntactic properties in the present study.

## 5.3 BEHAVIOUR OF THE VARIABLES: PHONOLOGICAL

## 5.3.1 WPM (Words per Minute) (See Tables 4.7 and 4.8)

Contrary to other research findings and to expectations, the variable produced null findings in this study. Neither VARIANCE nor LINEAR TERM show any difference or even trend. Arthur et al. (1980) were also surprised by similar results:

"....since it runs counter to the common wisdom: virtually all the speakers we questioned thought that they spoke more slowly when addressing non-native speakers." (p.119)

The only significant difference that surfaced was when male/female native speakers (primarily female) were addressing other native speakers of their own sex.

In contrast, other studies (e.g. Henzl, 1975/1979; Freed, 1978/1979) found that speech tempo to non-native speakers was characteristically slower, as was also the case in adult-child speech.

It could be that ticket agents, being a harassed and busy lot, have little time and inclination to decelerate for the sake of a foreign voice at the other end of the phone, especially if that voice does not contribute to the flow of speech but maintains a stony silence instead. It is no wonder that some ticket agents sounded ill at ease and ended conversations abruptly,

"....not enquiring whether the non-native caller wished to purchase a ticket" (p.118)

Hatch et al.'s (1975) findings, in part, lend support to this explanation. They found that the non-native speakers who got the most sympathetic treatment were those who proffered sympathetic comments while the native speaker was addressing them.

In the case of the present study, individual teacher variation was extremely great. In fact, one of the

elementary teachers (T-13), shared the highest individual score (164) with one of the native speaker group, T-14. The null findings may be due to the fact that teachers and students knew each other well. The students were therefore accustomed to the teachers' voices and way of speaking (cf. Brodkey, 1972). The teachers, too, were "at home" and would not have had to feel their way as much as those in the studies which produced significant results.

## 5.3.2 Answers to Research Questions Nos.1 and 2

Based on the null findings in this study, Speech Tempo (Words per Minute) in Foreigner Register is not significantly different from that of Native Register. As stated in 3.2.2.4, however, WPM is not a wholly reliable indicator as rate of delivery may vary widely from speaker to speaker. Slowing down could, for instance, be achieved by more frequent pauses on the part of one speaker, who might nevertheless achieve a higher rate simply because s/he speaks more rapidly than another.

## 5.4 BEHAVIOUR OF THE VARIABLES - PRAGMATIC

## 5.4.1 <u>CUF (Checking for Understanding and Feedback) MLG</u> (Metalingual Gloss) and TSW (Teacher Supplies/Corrects Word) (See Tables 4.3, 4.4, 4.7 and 4.8)

None of these three pragmatic variables found a place in , the NS-NS output. This is not unexpected behaviour since it is not the usual custom for a native speaker to be checking to see whether his fellow native speaker has understood, or needs the meaning of a word clarified or explained. This, of course, could be the case in <u>content</u> classrooms, but, in the context of the present study, the behaviour would probably be considered "out of order" by the native speakers.

The "reverse" trend in the results (from greater to smaller to zero) is also expected since teachers tend to explain, elaborate, and clarify or supply vocabulary as well as to check for understanding when the students are of low proficiency. Thus for CUF there is a group mean of 13.75 for ELEM as opposed to ADV and INT (2.25 and 0.75) and 0.00 for NS. Similarly MLG exhibits 3.25 for ELEM, 2.00 for INT, 0.75 for ADV and 0.00 for NS. Finally, TSW shows 5.00 for ELEM, 2.50 for INT, 3.50 for ADV and 0.00 for NS. Similar behaviour was reported by Long (1980). He found that on all tasks combined, the native speakers in NS-NNS interaction used significantly more (p=0.005) confirmation and comprehension checks and clarification requests (i.e. CUF) and repetition of both the interlocutors' and the native speakers' own utterances (i.e. TSW). He also found more expansion of the interlocutors' utterances (i.e. MLG) (Long's Hypotheses 5 to 11 and 20 to 26). Long suggests that the presence of the variables in NS-NNS interaction is due primarily to a desire on the part of the native speaker to avoid a communication breakdown or to repair the discourse if a breakdown did occur.

In the present study, the three variables appear in greater numbers at the elementary level, which is where the teacher

would have the greatest occasion to try to avoid breakdowns. Of the three, CUF (Checking for Understanding and Feedback) occurs the most.

The lower mean for MLG is also reported by Chaudron (1979). He suggests that this implies that a great deal of vocabulary is clarified only minimally in ESL classes. He wonders,

> "....whether the students comprehend such cases or are able to acquire the proper meanings for these words and expressions through these elaborations (as) very few of even explicit elaboration instances required extensive productive use by the learners." (p.8)

Long (1980) however, quite rightly points out that,

"....this could also have been due to the ESL teachers' initial choice of more lexical items with which they knew their students to be familiar, thereby obviating the need for as much vocabulary explanation, explicit or implicit." (p.41)

The present study supports Long's idea, since most of the instances in which the three variables were used were typically when the teacher introduced a vocabulary item which s/he thought might not be familiar to the students. This ocurred mostly at the Elementary level. In the following examples, <u>CUF</u> and <u>MLG</u> are underlined (the sign = indicates a pause. See Appendix I):

T-5(E)-1: And I don't believe = that = by = having what was called a "devolved government" that = means = like a deputy = as it were (MLG) = a small unit of people who could make decisions on certain aspects of Scottish life, mhm." Here we have an example of Chaudron's explicit elaboration, spontaneously offered by the teacher because s/he thought the students were unfamiliar with the items "devolved government". The prefaced phrase "what was called" surfaces regularly before vocabulary items or expressions the teacher will expand or believes the students do not know. (Other forms: what is/were called; what we/they called).

- T-5(E)-34: But it's always true, though, that you
  have extremists, isn't it? === # Do you
  know what I mean by "extremists"? ## (CUF)

The example provides an instance of both CUF and MLG. The long pause before the checking for understanding (i.e. the silence) may have indicated to the teacher that "extremists" had not been understood, hence the check and subsequent Metalingual Gloss (MLG) when the students answered in the negative. During the further elaboration of "extremists", the search for "the right word" is indicated by the pauses before the lexical items, notably longest before "diverted". In many cases Checking (CUF) and Metalingual Gloss (MLG) interacted spontaneously and automatically during the teacher's explanation. This is best exemplified by T-10(EL). (The reader is referred to Appendix VII for the full texts, especially Turns 23 to 24D). T-10(E)-18: ....foreign policy = would not be separate
 # you understand what I mean by "foreign
 policy"? (CUF) # That means if = if England
 wants to say there will be war with = Japan
 and % = Scotland has to do the same." (MLG) #

In sum, then, the study has shown that CUF, MLG and TSW featured prominently in the speech of the teachers who were addressing the less proficient groups. Their use became progressively less frequent with increase of proficiency and disappeared altogether at the native speaker level.

5.4.2 COT (Change of Tack) (See Tables 4.7 and 4.8)

This variable refers to that occasion when a teacher restructures or rephrases all or part of his utterance, probably because s/he feels the student will not understand it or because s/he wants to hedge what is being said. The variable occurred both in NS-NS and NS-NNS speech.

The following seems to be evidence of a change to what the teacher considered an easier structure:

T-8(ADV)-2: Did you uhm expect % = Do you think that Scotland would benefit from an assembly in Edinburgh? ##

The change is undoubtedly from past to present. For the rest, one could speculate that s/he would have finished the question with:

1) ... Scotland to benefit ... that Scotland would benefit ...

but there is no telling what it could have been. T-4(ADV)-86: Oh yes! It was % A lot of people said it was ridiculous #

Here T-4 seems to have been about to say "It was ridiculous.", but this seemed too committed, therefore the rephrasing to avoid the full responsibility. However, this is only speculation.

The results were non-significant, there being no evidence of either a difference or of a trend. This would indicate that teachers are liable to rephrase and restructure and hedge their utterances at whatever level they are performing.

5.4.3 Summary of the behaviour of the Pragmatic Variables

The pragmatic variables observed revealed that when the teacher is addressing non-native speakers his pragmatic behaviour is characterized by Checking for Understanding and Feedback (CUF), by explanation and elaboration of vocabulary (MLG) and supplying or correcting missing, unknown or wrongly used words (TSW) on the part of the non-native student. The behaviour of these three variables is not manifest at the native speaker level and exhibits a "reverse" trend i.e. it declines, rather than increases, with increase in proficiency level.

The fourth variable, COT (Change of Tack), is present at all levels, there being no difference between the native and non-native speaker levels.

## 5.4.4 Answer to Research Question No. 3

With respect to the pragmatic variables observed in the corpora analyzed in this study, the pragmatic characteristics of the teachers' linguistic behaviour when using Foreigner Register are:

- 1) Checking to see if student understands and to avoid a communication breakdown (CUF).
- 2) Explanation and elaboration of vocabulary (MLG).
- Helping the student by supplying/correcting words s/he does not know or has used wrongly (TSW).

These characteristics are present only at the non-native speaker level i.e. only when Foreigner Register is being used and follow a "reverse" trend from Elementary (where they are most active) to Advanced (where there is very little manifestation).

One pragmatic variable COT (Change of Tack) is common to both Foreigner Register and Native Register i.e. it is present at all levels, both native and non-native.

5.5 BEHAVIOUR OF THE VARIABLES - LEXICAL

5.5.1 LV (Lexical Variation) and LD (Lexical Density) (See Tables 4.3, 4.4, 4.7 and 4.8)

Linnarud (1975) found that Lexical Density (LD) did not give a true reflection of the width and range of an individual's vocabulary since it takes every single word in the corpus and uses that total to divide only the lexical items. She therefore developed Lexical Variation (LV) as a check on LD. Since it uses only lexical items, it gives a truer picture of a person's use of vocabulary (cf. 3.2.2.5-6).

The results show that Lexical Density may indeed not be reflecting as true a picture as Lexical Variation. In the rest of this discussion, attention will be focused only on LV as a more valid indicator of richness/paucity of vocabulary. (See further 5.6.2.7 ff).

VARIANCE shows that there is a definite difference between groups (0.0396) with a marked trend indicated by the highly significant LINEAR TERM (0.0059). The group means indicate the direction of the trend (ELEM: 33.65; INT: 36.31; ADV: 41.67; NS: 45.31) clearly as a progressive increase in the number of lexical items beginning at the elementary and going towards the native speaker groups.

The higher lexical variation in the native speaker groups shows that less semantic load is being placed on the lexical items used to the native speakers. The teachers here are probably using more specific terms, and a look "backwards" (at the means) shows a decrease in specificity as proficiency decreases. There is a total difference in means between the NS and NNS groups of 11.66, 9.00 and 3.64 for ELEM, INT and ADV respectively.

These results support Chaudron (1980) who found that teachers used more circumlocutions when addressing nonnative speakers while they used a more precise word or expression for the identical content to the native speakers. The following examples are from Chaudron. The speaker

in all cases is the same university lecturer addressing, on the same day, a) native speakers and b) non-native speakers on the same topic and expressing the same context.

1 a) .... clinging ....

1 b) .... hold on very tightly....

4 a) .... if you worked hard, you would make it.

4 b) .... if you could work hard, you would be <u>rewarded</u>. (emphasis by teacher as he spoke)

a) items to native-speakers; b) items to non-native speakers. Chaudron (1980:8)

The most conclusive indication of the vast lexical difference found between Foreigner Register and Native Speaker in the data for the present study is provided by T-TEST and CONTRAST (Table 4.4). It can be seen that NONE of the T-TEST or CONTRASTS between the non-native groups is significant, so there seems to be a homogeneity in the use of lexical items among the groups. On the other hand, ALL of the CONTRASTS between the NS and NNS groups <u>taken together</u> (columns 8, 9 and 10) are significant: E/I-NS=0.00; I/A-NS=0.03 and E/A-NS=0.01. Taken <u>singly</u>, however, the A-NS CONTRAST shows <u>no difference</u> while the E-NS and I-NS still do.

If it is remembered that the speech being addressed to the non-native and native groups is what is being termed here Foreigner Register and Native Register respectively, these results show that <u>on the whole</u>, Foreigner Register is significantly different from Native Register. However, when each level of Foreigner Register is compared individually to Native Register, the <u>Advanced</u> level is sufficiently near to the native speaker level in lexical variation for there not to be any <u>significant</u> differences with regard to the <u>quantity</u> of lexical items in both registers. (The issue of <u>quality</u> will be taken up in 5.6.2).

## 5.5.2 <u>HAP (Hapax Legomena) and TTR (Type/Token Ratio)</u> (See Tables 4.3, 4.4, 4.7 and 4.8)

Although TTR produced null findings, the group means indicate a gradual increase in ratio from elementary to native speakers (20.64; 22.07; 24.79 and 26.13). Nevertheless, by showing this tendency, it serves to confirm Henzl (1975/ 1979) who also found a lower type/token ratio (TTR) in the speech to the non-native speakers. As with Lexical Variation, TTR shows that the teacher is using less words more when addressing, especially, the elementary level. In this respect, TTR could be taken as confirming the results obtained by LV (Lexical Variation), (See Histograms Appendix VI). HAP (Hapax Legomena) did not attain significance either, although the figure (0.0955) suggests a faint difference. The LINEAR TERM shows quite clearly that the trend observed in both LV and TTR is also present here. A look at columns 8, 9 and 10 of Table 4.4, however, shows that the differences for HAP are not so clear as for LV. This is probably due to the fact that HAP measures words that are used only ONCE in a text. As such, it may also include grammatical or function words. In LV (Lexical Variation) only lexical items are used.

These results generally confirm Linnarud's (1975) findings in her comparative study of the lexical texture of Swedish students' written work (essays) with that of native speakers writing on the same subject. She found that the native speakers' use of the language followed a much more varied pattern than did the Swedish students' (p.20). Strictly speaking, the results are not comparable, since the data are from different modes. There is, however, a common underlying assumption in both studies, borne out by the results, that the native speaker's greater command of the language puts him in a position to make more varied use of lexical items. In this study this was reflected by LV (Lexical Variation), HAP (Hapax Legomena) and TTR (Type/ Token Ratio).

5.5.3 MV (Modifier Variation)

Designed to test whether teachers had a greater preference for the use of modifiers at particular levels, the measure produced no significant results. VARIANCE and LINEAR TERM are non-significant, suggesting homogeneity of modifier use between the groups. The group means suggests that modifiers were used in greater quantity to the non-native speakers (ELEM: 7.35; INT: 7.60; ADV: 6.96; NS: 5.93). However, no great store should be set by these results since the presence or absence of modifiers, to a certain degree, is not indispensable for the communication of meaning. What did emerge from the study, however, is the existence of a "common core" set of high frequency modifiers

(e.g. good, big, little) which featured in the speech of all teachers at all levels and a fringe set of low frequency ones which was used chiefly at the native speaker and advanced levels (e.g. ridiculous, personally, purely, beneficial, illustrative, multiple).

#### 5.5.4 Summary of the behaviour of the Lexical Variables

As it did with the syntactic variables, a review of the lexical variables shows that they are also closely interrelated. LV (Lexical Variation) gives a clear indication of the scope of the vocabulary being used by the teacher. HAP (Hapax Legomena) and TTR (Type/Token Ratio) also give an indication of the scope, but with decreasing sensitivity, TTR being the least sensitive. The two measures, however, serve as a "double check" on Lexical Variation. LD (Lexical Density) proved the least sensitive of the measures for vocabulary. MV (Modifier Variation) showed a homogeneity of modifier use at all levels.

## 5.5.5 Answers to Research Questions Nos. 1 and 2

With respect to the lexical variables observed in this study, the lexical properties of Foreigner Register identified in the data and the differences between Foreigner Register and Native Register at each level are:

- 1) A lower LV (Lexical Variation)
- 2) A lower TTR (Type/Token Ratio)
- A lower HAP (Hapax Legomena)

With respect to the other variables, Foreigner Register does not exhibit differences from Native Register for:

- 1) LD (Lexical Density)
- 2) MV (Modifier Variation)

## 5.5.6 Summary - Behaviour of ALL variables

Having now discussed the behaviour of all the variables in the data, the picture that has emerged of Foreigner Register is that of a syntactically and lexically simpler register with the concomitant pragmatic features of checking for understanding and elaboration, as well as supplying of vocabulary, decreasing in inverse proportion to proficiency. These features are detailed in an index built up by means of the answers to Research Questions Nos. 1, 2 and 3. (See 5.2.2.6; 5.3.2; 5.4.4 and 5.5.5).

## 5.6 FOREIGNER REGISTER AND THE SIMPLE - COMPLEX ISSUE

This issue was first raised at the end of 5.2.2 and touched briefly upon in 5.2.3.5 and 5.5.1, but postponed until all the variables had been discussed. It was stated in 5.2.2 that <u>shorter/longer</u> utterances do not automatically entail <u>simple/complex</u> language since it is only a probabilistic, and not a cause-and-effect, relationship. If it is asserted that Foreigner Register is simpler because it has a shorter MTUL (Mean T-Unit Length) and ACL (Average Clause Length) as well as a lower LV (Lexical Variation), the implication would be that Foreigner Register utterances are simpler <u>because</u> they are shorter. That this equation (SHORT = SIMPLER) is not <u>ipso facto</u> valid was ably demonstrated in a lecture by Donaldson (1980). Taking two of her examples:

- 1) We can but try
- 2) The rot set in

and comparing them with the following:

3) The teacher asked Helen what she wanted

I see what you mean now

one could hazard a guess that 3 and 4 would be more easily understood than 1 or 2 by an Intermediate student even though 1 and 2 have <u>shorter</u> T-Units and clauses than 3 or 4. By the implication referred to above, 1 and 2 would be classified as <u>simpler</u> than 3 and 4, when in fact they are not. Clearly, a question still remains to be answered which could be formulated thus:

Why, in the case of Foreigner Register should a shorter MTUL and ACL as well as a lower LV imply <u>simpler</u> language?

The key to this question clearly lies in LV (Lexical Variation) since it provides the <u>sine qua non</u> for utterances/sentences (i.e. T-Units and Clauses): VOCABULARY. Before an asnwer is attempted, however, a look will be taken at this most important component of both Foreigner and Native Register.

## 5.6.1 Use of Vocabulary - General Issues - Frequency Lists

Vocabulary is a little known area and very difficult to deal with objectively. There exists no "personal vocabulary index" against which an individual's productive and receptive vocabulary may be objectively measured. Personal vocabulary choice is very much a matter of idiosyncracy, and a person is just as likely to choose highly specific

or highly general terms during a conversation. It is difficult to say exactly what is the level of generality/ specificity of a word as shown by frequency lists such as West's (1936/1953), Paivio et al. (1968) or Kučera and Francis (1967), since the generality or specificity (coverage) of a term varies with the universe of discourse. There are certain words which occur in a wide range of different discourses with a relatively low frequency, and others which occur with high frequency in a limited number of discourses and virtually not at all in others. "Taw", "kite" and "dolly" are words of low coverage in that sense since they occur very frequently under certain circumstances (children's games) but rarely otherwise. Unless one happened to fall in that particular circumstance (e.g. parent /adult playing with small children) one is not ever likely to hear the words again after childhood.

The present study deals with words that presumably have both a wide coverage and high frequency. These are the words the teacher has assumed the learner will know (cf. Chaudron (1979, 1980), Long (1980)). Each individual teacher chose what vocabulary s/he believed s/he could communicate and explain. There may be, then, a certain degree of selfcentredness and a consequent lack of uniformity in the words they chose to use at each level or maybe even to each class or perhaps, each teacher to each class at each level. Common sense suggests that when speaking to foreigners one might use "commoner" words. It was just pointed out,

however, that their use is unpredictable and dependent on the universe of discourse. Therefore terms like "commoner", "frequent", "general" and "specific" are subject to qualification.

In the light of the foregoing, it was decided not to use frequency lists for comparisons (other than those generated by the corpora themselves), since they would probably not reflect the true frequency and use of vocabulary in this particular universe of discourse. This does not mean to say, of course, that these lists do not have their uses, as demonstrated by Williams (1970).

## 5.6.2 Study of Vocabulary in the present thesis

#### 5.6.2.1 Introduction

It has been shown in previous sections (5.2.1 and 5.2.2) that MTUL (Mean T-Unit Length) and ACL (Average Clause Length) are important indicators of the difference between Foreigner Register and Native Register. When these are realized, however, what the speaker uses is <u>lexical items</u> to form his utterances. The study has shown (ibid) that in so doing the teacher modifies his language in accordance with the level of proficiency of the students s/he is addressing, with the distinctive characteristics described in 5.2.3.5; 5.4.4 and 5.5.5. This, it will be recalled, is the assumption underlying the present thesis: that a speaker modifies his language in the interests of effective communication (1.5).

## 5.6.2.2 Problems Encountered

The design of the experiment for the present study was not aimed at controlling vocabulary since it is very difficult, if not impossible, to determine <u>objectively</u> (cf. 5.6.1) how simple or complex is the use of vocabulary in any spontaneous conversation or classroom discussion. As Chaudron (1980) puts it,

> "Short of an accumulated measure of commonness of all words used in a given lesson, it is difficult to determine the simplicity of vocabulary use in that entire classroom." (p.4)

It is a daunting prospect indeed.

Even if one were to manage to compile an objective assessment of the vocabulary on one lesson, there does not seem to be a way of effectively and <u>objectively</u> comparing it with an objective assessment of another lesson by another investigator since subjective criteria generally creep in.

In the classroom, a teacher's choice of lexical items is, as already stated, highly idiosyncratic, and there is no objective way of foretelling what vocabulary a given teacher is likely to use in a given situation. Each individual chooses what s/he believes s/he could put across and explain. If s/he sees (or is told) that the item is not understood, s/he then proceeds to try and explain the item.

5.6.2.3 <u>Procedures followed in the present thesis</u> The absence of objective measures has obliged investigators
to fall back on <u>subjective</u> comparisons (Chaudron 1980). Under the circumstances, it is a legitimate procedure, the assumption being that there exists a reasonable possibility of intersubjective agreement, among educated native speakers, with respect to the use of, for example, idiomatic expressions, collocations and cultural references in the discourses that are being compared.

The present study will follow three procedures:

- Take an example from each level and then comment briefly on the vocabulary used in each;
- b) a partially objective measure, devised with the aid of the CONCORD frequency lists, will then be applied to each example;
- c) finally, reference will be made, subjectively, to some of the idiomatic and other expressions in the corpora.

These three procedures should give a general idea of the type of vocabulary used in the selections and the corpora as a whole.

#### 5.6.2.4 Material chosen for vocabulary comparison

This study did not have Chaudron's good fortune: same lecturer, same topic, same day to <u>both</u> native speakers and ESL students. In order to obtain what could perhaps be the most "comparable" material in the four teachers' output, it was decided to take as a sample that part of the teacher's speech when s/he introduced the subject to the students, as the most likely to produce language common to all four. Two teachers were chosen at random: T-1 (INT), T-8 (ADV). The other two were chosen because they were the ones who shared the highest words per minute score: T-13 (EL), T-14 (NS).

#### T-13 (EL)

1	< X T-13 - 1> Right now then # I suppose you all saw in the
2	newspapers last week that all the Scottish people had to =
3	vote in an election, like an election, OK ? (CUF) # it
4	was called a referendum and it was about = devolution
5	OK ? (CUF) devolution #

### FIGURE 5.1 T-13 (EL)'s Introduction

#### T-1 (INT)

1	< X T-1 - 2> the $%$ not an election, the referendum,	the
2	referendum # that's right, about devolution in	
3	Scotland # or your ideas on devolution in - in er	% =
4	to do perhaps with other places, not only with	
5	Scotland = but starting with Scotland and we can	
6	work to other = things #	

## FIGURE 5.2 T-1 (INT)'s Introduction

#### T-8 (ADV)

1	< X T-8 - 2A > Right no doubt most of you have read the
2	newspapers and read about the devolu - = devolution
3	referendum # uh = Do you think the result % = were
4	you surprised by the results ? #
5	<pre><x -="" 3="" t-8=""> Did you uhm expect % = Do you think</x></pre>
6	that Scotland would benefit from an assembly in
7	Edinburgh ? ##

#### FIGURE 5.3 T-8 (ADV)'s Introduction

#### T-14 (NS)

Now the idea is that = you all do some toping % 1 talking - toping ! # the subject under discussion is 2 devolution # this is er what he thought would be 3 4 an entertaining and er = maybe an illustrative uhm = 5 vehicle to get you talking to - to have something going 6 in the classroom situation # what I have done is 7 I have = noted one or two features here on = 8 devolution and I'll put them on the board and they 9 will be good = discussive points uhm and I think if you don't know anything about it = take you into 10 11 # and I'd be very surprised if you'd be able it 12 to avoid anything on - on devolution in the last 13 little while # so I'll put these on the board and = 14 in the meantime if you can think about it = think 15 of the whole issue of devolution from any angle 16 at all #

FIGURE 5.4 T-14 (EL)'s Introduction

#### 5.6.2.5 Comment on the Samples

Immediately strking is the amount of language <u>T-14 (NS)</u> uses to introduce the topic and the quantity of information s/he gives the students. One is reminded forcibly of Henzl's (1975/1979) native speakers (2.4.2). T-14 assumes that some students may not know but that the points s/he puts on the board will give them a start and "take you into it" (lines 10 and 11). Note the use of the expression. The Advanced teacher (T-8) reminds the students of the referendum and states the topic almost in the same breath. S/he immediately starts to ask questions, assuming that the students know all about devolution and the referundum and what benefits, if any, it would bring to Scotland. Note the two Changes of Tack (COT) and subsequent rephrasing

of the question.

The Intermediate teacher (T-1) follows along roughly similar lines. S/he corrects the students' erroneous idea of "election" instead of a referendum, states the topic of discussion and announces a possible widening of the discussion to other places besides Scotland. Note that all three teachers so far assume the students know about devolution. The Elementary teacher (T-13) also states the topic, first reminding the students about the referendum in much the same way T-8 (ADV) did. Three differences between T-13 and the others are immediately apparent:

 S/he starts by almost defining the term i.e. s/he does not assume the students know it.

- 2) S/he repeats two words (election, devolution).
- S/he keeps checking for understanding and feedback to make sure they understand.

Note: None of this behaviour was apparent in any of the other teachers.

#### 5.6.2.6 The Quasi-Objective Comparison of the Vocabulary

In order to take a more "objective" look at the vocabulary used by the teachers and compare them with each other, the following measure was devised and applied: The Iexical items present in each teacher's introduction were listed and the CONCORD frequency lists for each teacher checked for the total number of times that that item was used in each teacher's total output. In this way, it was hoped to see the semantic weight each teacher placed on the items. The basic vocabulary items referring to devolution were then isolated in each output and checked against the others. The procedure has been termed "quasi-objective" since the choice of teachers was in part subjective, as was the decision to choose their introduction to the topic. However, a case may be made for objectivity if it is recalled that all teachers received the same instructions and were therefore free to introduce their topic as they saw fit (See 3.1). Bearing in mind, also, the idiosyncratic behaviour referred to in 5.6.1, it could legitimately be said that they chose their words in accordance with what they thought the students would understand.

Tables 5.1 to 5.4 show the results of the quasi-objective measure.

ITEM	T13(	2948)	T1 (3546)	T8 (968)	Т14 (3298
suppose		-	-	0	0
saw		-	-	0	0
newspapers		2	0	-	0
week		2	0	0	0
Scottish		19	3 S	9	15
people		72	40	11	13
vote		28	47	£	15
election		7			0
called		7	-	0	-
referendum		7	11	1	0
devolution		14	7	10	7

TABLE 5.1Results of vocabulary measure on T13EL'S introduction<br/>(Numbers in brackets = total teacher output).

ITEM	T13(2948)	T1 (3546)	T8 (968)	T14(3298)
			а Х	
election	7	-	1	0
referendum	7	11	٦	0
devolution	14	7	10	7
Scotland	39	14	7	24
ideas	1	11	0	2
places	-	4	0	۲
starting	0	2	0	ß
work	4	5	0	6
things	5	17	7	10

TABLE 5.2 Results of vocabulary measure on T1INT'S introduction (Numbers in brackets = total teacher output).

ITEM	T13(2948)	T1 (3546)	T8 (968)	T14(3298)
doubt	0	0	-	٦
read	-	0	2	4
newspapers	2	0	-	0
devolution	14	7	10	7
think	35	. 39	22	35
result(s)	0	ю	7	-
surprised	-	-	-	-
expect	0	0	-	0
benefit	0	0	e	0
assembly	4	-	2	7
Edinburgh	8	2	-	-
TABLE 5.3 R	esults of vocabular	y measure on '	T8ADV'S intr	oduction
	NUMBERS IN ALASSA	10001 10001	יוכד המרהמהו	

ITEM	T13(2948)	т1(3546)	T8(968)	T14(3298)
idea	2	11	0	2
talking	1	1	0	4
subject	1	1	0	1
discussion	1	4	1	3
thought	3	6	0	2
entertaining*	0	0	0	1
illustrative*	0	0	0	1
vehicle*	0	0	0	1
going	12	24	0	11
classroom*	0	0	0	1
situation	3	0	0	1
done	0	14	0	1
noted*	0	0	0	1
features*	0	Ο.	0	1
devolution	14	7	10	7
put	0	3	2	7
board	0	0	0	5
good	3	3	4	2
discussive*	0	0	0	1
points	1	10	0	6
know	16	18	12	8
surprised	1	1	1	1
able	4	0	0	2
avoid*	0	0	0	1
little	3	2	1	5
while	0	1	0	2
meantime*	0	0	0	1
whole	1	4	4	12
issue	0	0	0	3
angle	0	0	0	2
think	35	35	22	35

\* Hapax Legomena

## TABLE 5.4 Results of vocabulary measure on T14NS'S introduction (Numbers in brackets = total teacher output).

#### 5.6.2.7 Comment on the Result of the Quasi-Objective measure

<u>T-13 EL</u>: Taking the basic vocabulary referring to devolution, it is seen that T-13 is giving basically the bare facts. The other items: <u>suppose</u>, <u>saw</u>, <u>newspapers</u>, <u>week</u> from part of his reminder to the students about the referendum. This teacher stuck to the basic vocabulary (Again cf. Henzl 1975/1979).

<u>T-1 INT</u>: This teacher also has the basic vocabulary for devolution that T-13 used. However, other items feature as well: <u>ideas</u>, <u>places</u>, <u>starting</u>, <u>work</u>, <u>things</u>. All also refer to the basic topic - <u>devolution</u>.

<u>T-8 ADV</u>: The basic vocabulary also features here (<u>doubt</u>, <u>read</u> and <u>newspapers</u>, being the same means T-13 elected to use as a reminder). However, this teacher brings in six additional items: <u>think</u>, <u>surprised</u>, <u>benefit</u>, <u>expect</u>, Edinburgh, assembly.

Note that <u>election</u> and <u>referendum</u> figure in all three NNS introductions but not in the NS one. All non-native speakers had thought it was an election and T-13 chose it as the vehicle for making his students inderstand the concept of referendum.

<u>T-14 NS</u>: This teacher also has the basic vocabulary in his output. In addition, however, s/he has twelve words, nine of which not only do not figure in the non-native speaker introductions, but occur in T-14's as Hapax Legomena! (Marked with an asterisk in the tables).

Examination of each output frequency shows that both T-13 (EL) and T-1 (INT) are placing the heaviest semantic load on the basic items (Scottish, people, vote, referendum, devolution (See Table 5.1)), followed by T-8 (ADV). The figures may at first lead one to believe T-14 (NS) places more semantic weight than T-8 (ADV). One has only to see though, that T-14's output is almost 3½ times as large as T-8's to realize that this is not the case. Note, incidentally, that T-14 did not use the term "referendum" at all: s/he probably did not feel s/he had to state the obvious. These results, it would seem, indicate that the teachers at elementary level started with the basic facts, and that the teachers at each succeeding; level added a little more information to these basic facts until the native speaker level, at which stage the teacher feels free to use as much and as varied a vocabulary as possible.

This analysis is based on a very limited set of data, part of which was subjectively chosen, and extreme care must therefore be exercised in the interpretation of the results. These results, however, support Arthur et al.'s (1980). They found that native speakers added more "bits of information" to the explanations they gave to native speakers in comparison to those they gave to non-native speakers. Much more research has to be done, of course, but meanwhile, it is interesting to note that the results seem to be suggestive of the same increase in length that was seen in MTUL (Mean T-Unit Length) and ACL (Average Clause Length) (See 5.2.1-2).

#### 5.6.2.8 Idiomatic and Other Expressions and Low Frequency Items

Reference to these will be brief. There are no instances of such expressions in the speech to the non-native speakers whereas there is an appreciable amount in the speech to the native speakers.

Idiomatic and Other Expressions

As different as chalk and cheese (T-16 (NS)) It's all monopoly money, anyway (T-16 (NS)) The job is up for grabs again (T-14 (NS)) It's been hacked, carved, butchered in the (T-14 (NS)) committee stages deliberately It's the lack of eyelids being opened (T-14 (NS)) <u>Low-frequency Items (with respect to the data for this</u> <u>study only</u>). Thereabouts, eligible, peculiar, layers, (T-2 (NS))

lenient		
Repealed, bill, committee, delve, misled	(T-16	(NS))
Backsides, flights	(T-15	(NS))
Controller, Lallans, brokerism ignominy insularity, mating, perambulating warlords	(T-14	(NS))

These brief examples should serve to show that the vocabulary used in the speech addressed to the Native Speakers (i.e. Native Register) is considerably more varied and difficult in comparison with the one used to the non-native speakers (i.e. Foreigner Register). This may account for the fact that, in spite of the many lexical choices open to the native speakers and of all the idiosyncratic differences that may exist among them, <u>as a group</u> they were still significantly different from the non-native groups in Mean T-Unit Length (MTUL), Average Clause Length (ACL) and Lexical Variation (LV). The results could also be taken as an indication of the effectiveness of LV as a measure of vocabulary.

One thing emerges from this vocabulary study: Although Foreigner Register shares syntactic and pragmatic properties with Native Register (See 5.2.3.6 and 5.4.4), it does not share its semantic or stylistic properties. It has been seen that lexical choice in Native Register has none of the constraints that govern lexical choice in Foreigner Register. That is why "<u>shares syntactic properties</u>" is preferred here to "<u>has similar syntactic properties</u>." Strictly speaking, one should not talk of <u>similarities</u> between Foreigner and Native Register but, rather, about <u>more</u> or <u>less</u> difference between them. E.g. Advanced level was seen to be closer to NS level - one could say it showed less differences than either INT or ELEM from NS. (The reader is invited to confirm these impressions by reading the texts in Appendix VII).

## 5.6.2.9 <u>Resolving the Simple-Complex issue with respect to</u> Foreigner Register

An answer can now be attempted to the question posed in 5.6: In the case of Foreigner Register, a shorter Mean T-Unit Length (MTUL) and Average Clause Length (ACL) indicates a simpler form of language because of the concomitant lexical choice made by the native speaker, the teacher in the case of the present study.

Common sense would suggest that it is the teacher's choice of lexical item that triggers off the modification process and gives rise to the syntactic, lexical and pragmatic features highlighted in the course of this discussion. In other words, it seems to be the teacher's search for what s/he thinks is the word or expression most likely to be understood by the students that might cause the clause to be longer or shorter. It has been shown in Chaudron (1980), Long (1981a, 1981b) and in this study (5.4.1) that a native speaker's use of unfamiliar words immediately sets up an interactive modification process during which the native speaker does his best to keep communication going, thereby affecting the length of his utterance.

#### 5.7 FOREIGNER REGISTER - AN INDEX OF ITS FEATURES

The answers given at various points in the discussion (5.2.3.6; 5.4.4; 5.5.5) to the research questions posed in 5.1 have each provided a partial index to the properties of Foreigner Register identified as different from Native Register by the measures applied in the study. It now only remains to bring them together to form the index of Foreigner Register features.

As measured by the variables observed in this study, Foreigner Register may be said to have the following features, <u>as a</u> <u>function of Lexical Choice:</u>

1)	A shorter Mean T-Unit Length	(MTUL)
2)	A shorter Average Clause Length	(ACL)
3)	A shorter Pre-Verb Length	(PVL)
4)	A lower Lexical Variation	(LV)
5)	A lower Hapax Legomena	(HAP)
6)	A lower Type/Token Ratio	(TTR)

and a concomitant PRAGMATIC BEHAVIOUR characterized by the following properties (which decrease in inverse proportion to INCREASE IN PROFICIENCY):

7)	Checking for Understanding and Feedback	(CUF)
8)	Explanation/elaboration of vocabulary	(MLG)
9)	Supplying/correcting words for the non-native speaker	(TSW)

Throughout this discussion, it has been seen that it is precisely these features that identify Foreigner Register as one that is simpler than Native Register. They may therefore be looked upon as <u>indicators</u> of a simplified register. The pragmatic variables are of particular interest here, since their presence was seen to increase as proficiency level decreased: the greater the attempt at simplification, the higher the incidence of checking for understanding and of explanation and/or elaboration of the lexical items chosen by the teacher.

#### 5.8 SUMMARY

The discussion in this chapter has centred round three research questions designed to elicit answers that would provide a partial index of the properties (features) of Foreigner Register as identified by the measures applied to the data in the study.

It was found that there are nine distinctive features which set Foreigner Register apart from Native Register, all being a function of lexical choice. These are:

a) A SHORTER:

1)	Mean T-	Unit Ler	ngth	(MTUL);
2)	Average	Clause	Length	(ACL);

3) Pre-Verb Length (PVL);

#### b) A LOWER:

4)	Lexical Variation	(LV):
5)	Hapax Legomena	(HAP);
6)	Type/Token Ratio	(TTR);

- c) A concomitant <u>pragmatic behaviour</u> characterized by the following properties (which decrease in inverse proportion to increase in proficiency)
  - 7) Checking for Understanding (CUF) and Feedback
  - 8) Explanation/elaboration of (MLG) vocabulary
  - 9) Supplying/correcting words (TSW) for the non-native speakers

These features may all be considered to be indicators of the use of a simplified register.

## CHAPTER VI

# LIMITATIONS, CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH.

## LIMITATIONS, CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

#### 6.1 INTRODUCTION

This study set out to analyze the variation in the speech of Teachers of English as a Foreign Language - herein termed Foreigner Register - to students at three levels of proficiency: Elementary, Intermediate and Advanced. In so doing, it aimed to provide a tentative description of the features of this register that stand out as distinct from Native Register - the speech the teachers addressed to a control group of native students. A Null Hypothesis was set up which stated, basically, that the speech of the teachers would remain unaffected by the students' proficiency level. Great care was taken to ensure that the data were collected under natural circumstances and that the subjects were unaware of the true purpose of the investigation. A set of measures was then applied to the data and the results of each level of Foreigner Register were analyzed and compared with the Native Register control group. The comparisons showed that there were definite differences between the two registers, but only in some This indicated that the null hypothesis was only cases. in part being supported by the data. The study, however, suffers from two limitations, and it is important that these should be considered before coming to any conclusions about these results or suggesting any implications thereof.

#### 6.2 LIMITATIONS OF THE STUDY

#### 6.2.1 Sample Size

The degree of generalization that can be made from the results of a study depends crucially on the size of the sample: the larger the sample, the greater the likelihood of the results' being statistically reliable and the lesser the probability of getting "chance" significance. In a study of the kind undertaken here, the use of samples large enough to claim statistical reliability would have taxed the resources of a team of workers, not to mention those of a single individual. Being a one-man study and limited in time and resources, it was necessary to take a sample of realistic proportions. Safeguards were then established as to its reliability by setting the most stringent level of significance: 0.01; and collecting a sufficiently large amount of data per teacher (average: 2,000 words). As was seen in 4.5, the fact that the results obtained herein parallel those of other studies with respect to some of the variables provides a certain amount of statistical evidence that the sample is representative of the parent population.

#### 6.2.2 Design of the Experiment

Originally, the design had planned the use of five teachers only, each working across levels. It would then have been possible to observe the different ways in which each teacher put across the concepts by studying their linguistic manifestations at each level. This ideal design had to be abandoned because of administrative reasons. It proved impossible to get enough teachers to agree, because some flatly refused to even think about it, since they did not consider their students capable of understanding a discussion. (This is, unfortunately, one of the hazards with which research into teacher language is fraught).

As a consequence, use had to be made of an alternative design, using four different teachers at each level. The use of four different teachers occasioned the loss of information on individual variation, since it is not reflected in the pooled results. The results, however, have shown that the group of four as a whole behaved in much the same way as the individuals in Henzl's (1975/1979), Gaies' (1977b), Steyaert's (1977) and Chaudron's (1978,1979) classroom studies, as well as in the various experimental and naturalistic studies, such as Scarcella and Higa's (1980) and Long's (1980). Taking into consideration the statistical evidence from Sprent referred to above (4.5), the fact that the study showed that differences do exist between the groups may be taken as evidence in favour of the assumption that, along general lines, a group of teachers at a given proficiency level behaves in much the same way as the individuals comprising it; and that, whoever they are, they are adapting their language differently to the different groups, individual variation not being sufficient to influence group variation (See 5.5.1).

#### 6.3 CONCLUSIONS

Bearing in mind the limitations considered in the previous section, the following conclusions may be drawn on the basis of the results obtained in this study:

#### 6.3.1 Support for the null hypothesis

Of the twenty-one variables observed, five did not support the null hypotheses,  $H_0^{-1}$  and  $H_0^{-2}$ , as stated in this thesis (3.2.2). By attaining the prescribed level of significance (0.01), these variables showed that the level of proficiency of the students does indeed affect the speech of the teachers addressing them and the null hypotheses were therefore rejected in their case. These results confirm those obtained by other investigators, notably Henzl (1975/1979), Gaies (1977b), Freed (1978), Long (1980) and Chaudron (1978, 1979). The variables are identified as follows:

Syntactic Variables (H\_1)

MTUL (Mean T-Unit Length)

ACL (Average Clause Length)

## Lexical Variables (H\_1)

LV (Lexical Variation)

## Pragmatic Variables (H\_2)

CUF (Checking for Understanding and Feedback)

MLG (Metalingual Glosses).

The other sixteen variables fully supported the null hypotheses. No significant differences were observed between Native Register and Foreigner Register with respect to any of the following:

180

Syntactic Variables (H\_1)

Nominal Clauses	(NOM)	Simple Senter	nces	(SS)
Relative Clauses	(REL)	Complex Sent	ences	(CX)
Time Clauses	(TIME)	Compound Sen	tences	(CD)
Reason Clauses	(REA)	Pre-Verb Len	gth	(PVL)
Subordinate Clause Index	(SCI)			
Lexical Variables (H <sub>0</sub> 1)				
Modifier Variation (MV)	Туре	/Token Ratio	(TTR)	
Lexical Density (LD)	Нара	x Legomena	(HAP)	
Phonological Variables (Ho	1)			
Words per Minute (WPM)				
Pragmatic Variables (H <sub>o</sub> 2)				
Teacher Supplies/Corrects W	Nord (T	SW)		
Change of Tack	(C	OT)		

Although PVL, TTR, HAP and TSW did not reach the prescribed level for the null hypotheses to be rejected, their behaviour exhibited consistent enough differences from Native Register to warrant their inclusion in the Foreigner Register Feature Index (See 5.7).

The features in the Index, it will be remembered, are indicators of the use of a simplified register, therefore the behaviour of these variables lends weight to the assumption underlying this thesis, as stated in Section 1.5: that there is an effort on the part of any speaker of any language to accommodate and adjust his speech on a number of linguistic levels in order to achieve effective communication with his interlocutor(s). Specifically, it is proved herein that the teachers at each level made adjustments to the perceived proficiency of the students in broadly similar ways, with the variables in the Foreigner Register Feature Index exhibiting significant differences at each level. Since the topic was kept constant, the cause of variation is ascribed to the proficiency level of the students. As already stated, in spite of individual variations in each group, <u>as a group</u>, the teachers exhibited significant inter-level differences when it came to the Native Speaker- Non-Native Speaker comparisons.

6.3.2 Results Confirm the Existence of Foreigner Register Under differing conditions, Henzl (1974, 1975/1979), Gaies (1977b) and Freed (1978) each identified a register which, typically, consists of a simpler use of language and is used, characteristically, when addressing non-native speakers of the language in question (English, German or Czech). Other studies, notably Chaudron (1978, 1979) and Long (1980), have also confirmed the existence of such a register. The present study, which differs from all of those just mentioned in the four important aspects indicated in Section 1.7, has now confirmed the results they all obtained under different situations and conditions. This is fair proof that Foreigner Register is produced under naturalistic (Freed), experimental (Long, Scarcella and Higa, Arthur et al.) and classroom situations. In the latter, it is either elicited i.e. teachers retelling stories from pictures (Henzl, Steyaert) or natural, as used in teaching and explaining (Gaies, Chaudron, Schinke). Foreigner Register has distinctive features that identify it as different from Native Register (See 5.7). These include four of the variables that supported the null hypotheses (See 6.3.1). As already stated, the decision to include them was based on their consistently exhibiting a sufficiently marked trend, progressing from simple to complex, at each of the proficiency levels; and also especially because the behaviour was in accordance with the one observed in previous studies (Snow, 1972; Henzl, 1975/1979; Long, 1980).

## 6.3.3 Existence of a Common Core between Foreigner Register and Native Register

Foreigner Register and Native Register share eleven of the twelve variables that produced null findings (10 syntactic and 1 pragmatic). (The exception is WPM (Words per Minute) which, although non-significant here, was found to be significant by Henzl, Freed and the Adult-Child NS-NNS studies). Though both registers share these <u>syntactic</u> and pragmatic properties, they do not share their <u>semantic</u> <u>content</u>, as shown by the vocabulary study (5.6.2.4-9). It is found that both registers differ significantly with respect to socio-cultural allusions, style and lexical choice (idiomatic and other expressions, low frequency items, as in 5.6.2.8) at least, as far as Classroom Foreigner Register is concerned.

#### 6.3.4 Existence of at least two Types of Foreigner Register

At least two types of Foreigner Register are established:

- a) Classroom Foreigner Register, characterized by its inherent grammaticality (cf. Henzl).
- b) Conversational Foreigner Register, which could become ungrammatical according to the situation in which it is being used. (See Long, 1980: 44 ff).

## 6.3.5 <u>Theoretical distinction between Foreigner Register</u> and Foreigner Talk.

A theoretical distinction is made between Foreigner Register and Foreigner Talk in order to remove the ambiguity inherent in the use of the latter term:

Foreigner Register is established as the language used by a native speaker to communicate with a foreigner. As such, it would, initially, make use of the normal rules of the native speaker's code, although circumstances and the urgency of the situation could subsequently affect its grammaticality (See 2.3.4.8).

<u>Foreigner Talk</u> is established (as it originally was) as Ferguson's (1975) ungrammatical elicitation-type of imagined language, the type that, according to Freed (1978), displays

"....another level of speaker potential" (p.246) Foreigner Talk in this sense has no communicative value, it is only a representation of the way native speakers think a foreigner would actualize their language.

#### 6.4 IMPLICATIONS OF THE PRESENT STUDY

The main concern of this thesis has been to show that teachers vary their language in accordance with their perception of the level of proficiency of the students they are addressing. The results of the present study lend empirical support to previous studies which have found that linguistic modification by native speakers was occasioned by lack of proficiency in one of the interlocutors. This support has greater validity in the present thesis for the following important reasons:

- a) The language used for analysis is actual language, spoken by trained <u>teachers</u> of English to <u>students</u> at all levels. Comparisons are therefore legitimate as the language was produced under the same normal classroom conditions. The description is therefore of authentic Classroom Foreigner Register, a spontaneous product of classroom interaction between the teachers and their students. In most of the previous studies, Chaudron excepted, the language is from different situations.
- b) All teachers discussed the same topic at all levels.
- c) The discussion sessions were not <u>ad hoc</u> they formed part of the normal time-table activities and took place in the students' and teachers' own classrooms i.e. in familiar surroundings.

d) The teachers and the students were previously acquainted - a factor that contributed to the production of spontaneous language. The interlocutors did not have to "feel their way" while a common basis was established between them, as was the case in some studies (in which the participants met for the first time on the occasion of the experiment).

#### 6.4.1 Modification follows basically the same lines

Since the results confirm these other studies, it seems that modification follows basically the same pattern whether the samples are taken on a one-to-one or one-to-many basis in a naturalistic, experimental or classroom situation. Though modification follows the same general lines, some variables behaved differently in this and the Long (1980) study. The reason for this, it was argued, is that the language used for comparison in those studies came from totally different situations (See 5.2.3.1). More research is needed in this area to ascertain whether results would be identical either way (i.e. to the former studies or to the present one) if the samples analyzed were produced under the same conditions.

# 6.4.2 Adjustment is geared to the teacher's perception of level of proficiency

The degree of adjustment is geared to the teachers' perceived image of the level of proficiency of the students. There is accommodation such that <u>individual</u> teacher variation is not enough to influence <u>group</u> differences. The increase in complexity as a function of level of proficiency indicates that students hear more and more complex speech as their level of proficiency rises.

#### 6.4.3 Usefulness of the description for Teacher Training

The unconscious adjustments highlighted here could be brought to the notice of teacher trainees in training programmes. They could be encouraged to monitor their speech for these features, to try and build in redundancy at the lower levels and to apply these principles at least to the preparation of drills and exercises for classroom use at all levels i.e. use simpler language at lower, and more complex at advanced, levels (cf. Stieglitz, 1973; Darian, 1979; Barrett, 1972).

#### 6.5 SUGGESTIONS FOR FUTURE RESEARCH

Now that some of the characteristics of Foreigner Register have been highlighted, it may be useful to set up studies to monitor whether the deliberate use of these features helps the learner to process the input.

The accumulating evidence of variation and accommodation, and of its directional trend from simple to complex as higher levels of proficiency are achieved, would suggest that a profitable and less time- and energy-consuming approach to the study of individual variation might be made by using a series of case studies of <u>one</u> or <u>two</u> persons teaching at all levels - from elementary to native speaker, with retrospective checks by the investigator with the teacher in order to ask him directly what intentions s/he had at particular points in the interaction. In this way, it might be possible to gain insights into the mental processes at work during the interaction.

Interesting and probably revealing results could be obtained from studies using monolingual and bilingual teachers doing the same task and then making comparisons of the performance of each teacher according to language and accommodation. The design could be along these lines, for example: A teacher whose mother tongue is English and foreign language Spanish and another vice versa: Spanish (MT) and English (FL) and then comparing the results of their teaching performance on a given topic under natural conditions.

#### 6.6 OBSERVATIONS AND CONCLUSION

The following observations may be made with regard to the results of this thesis and their relation to other work in the field: Firstly, by providing a description of Foreigner Register and highlighting its features as identified by the variables observed, this thesis has, besides confirming the results of previous studies, also provided proof that teacher variation under natural classroom conditions in a discussion situation follows basically the same pattern as under experimental, naturalistic or elicited classroom conditions. Secondly, by making a theoretical distinction between Foreigner Register and Foreigner Talk, it has introduced a greater precision into the study of either of the two registers, removing the ambiguity that was intuitively felt by some investigators to exist in the term "Foreigner Talk", (cf. Arthur et al., 1980).

Thirdly, the thesis has presented a quasi-objective measure designed to test vocabulary at each level of proficiency. By bringing vocabulary into the study of complexity in Foreigner and Native Register, a positive contribution has been made in the shape of proof that the existence of a shorter MTUL (Mean T-Unit Length) at the lower levels of proficiency does indeed imply less complex language because the lexical choices are made by the teachers at each level as a function of the student proficiency level. In other words, teachers generally choose the vocabulary they feel would be understood by the students, exhibiting a constant checking behaviour to ensure that communication is maintained throughout the interaction. If in the teacher's opinion, the lexical choice is such that it merits explanation or clarification, there may be restructuring, rephrasing and elaboration which could ultimately affect the length of the utterance or T-Unit (MTUL).

Arising out of the study of vocabulary, it has been shown that one could not really talk about <u>similarities</u> between Native Register and Foreigner Register at the Advanced level but, rather, of <u>less difference</u>, since Native Register was seen to be totally different from Foreigner Register with respect to idiomatic and other expressions, collocations, low-frequency items and socio-cultural allusions. The study does not claim to have provided definitive answers to the problems in the area of variation in Classroom Foreigner Register, where so relatively little has been done to date. In spite of its limitations, the study has produced results similar to those obtained in other studies, conducted under widely varying conditions, with respect to Mean T-Unit Length (MTUL). It has therefore provided further proof of the efficacy of the T-Unit as a measure of syntactic complexity in the speech of teachers and other individuals. (Cf. Gaies, 1980).

The study has only lightly touched on the issue of vocabulary, but <u>lexical choice</u> is shown to affect the manner of presentation of the message in the speech of the sixteen teachers observed: the lower the level of proficiency, the greater the amount of checking to ensure that new lexical items are understood as they are introduced. In this respect, however, the thesis is to be regarded only as a pilot that could provide help in the difficult search for empirical verification of aspects of this complex issue.

## APPENDICES

AND

## BIBLIOGRAPHY

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#### APPENDIX I

#### TRANSCRIPTION CONVENTIONS AND ABBREVIATIONS

Transcription of the audio tapes was done in minute detail including all hesitation phenomena but excluding suprasegmentals - all in standard orthography. Punctuation used: comma(,), colon(:), question mark(?) and exclamation mark(!).

#### Conventions

=	:	pause of one second (number of symbols indicates number of seconds).
00	•	indicates Change of Tack (COT) i.e. speaker is restructuring or rephrasing.
#	:	utterance boundary.
##	:	turn boundary (i.e. where there is a change of speaker).
•••	:	at end of speaker turn and beginning of next turn of same speaker indicates utterance has not ended but continues across the interrupting speaker.
•••	:	within the utterance indicates a pause for effect.
-	:	used between repeated words (e.g. the-the-the) when speaker is "stuck" or stutters.
(???)	:	unintelligible.
[]	:	(Square brackets) enclose all student utterances.
( )	:	(Parentheses) enclose on-going activity or feature e.g. (all laugh) (noise of train in background) (CUF).
< >	: <	<pre>(angle brackets) enclose speaker designates e.g. MS&gt;;<x t-5(e)-1=""></x></pre>

## HESITATION PHENOMENA were transcribed as:

UH, UHM, ER, ERM, EH, EHM (Scottish), AH, AHM

## ABBREVIATIONS

CUF	:	Checking for Understanding and Feedback.
CWT	:	Checks with Teacher (student on meaning/use of a word or expression).
IC	:	Induces student to correct (word or expression wrongly used or pronounced).
ISC	:	Inviting contribution by student (i.e. prompting).
LIH	:	Leaves item hanging (i.e. trails off/does not pursue idea).
MLG	:	Metalingual gloss.
NUP/UP	:	Non-use/use of pronoun(s).
PBB/WBB	:	Pulling/writing on, blackboard.
SBI/TBI	:	Student/Teacher breaks in.
SHO/THO	:	Student/Teacher holds on (to turn).
TSW/TSWC	:	Teacher supplies and/or corrects word(s) or expression in student's utterance.

#### STUDENTS IN EXAMPLES

MS/FS	:	Male/female student.
MSID/FS	ID:	Same male/female student (id=idem).
SS	:	All/several students at once.

NAME:

#### PUNCTUATION EXPERIMENT

The following are ten random selections from the speech of teachers in EFL classrooms. You will hear each selection THREE times.

You are asked to listen carefully and punctuate each one according to the sense, ignoring the odd student interjections on the table

For later reference, please give the equivalence of the symbols you use, eg: x= whatever you have used that particular symbol to indicate.

#### Selection 1

so I think for a minute or two we'll just give you time to think what what you'd like to say about it all right

#### Selection 2

right now I hope that you all know what has been going on recently in Britain you all know that there has been a lot of talk about the referendum do you know the result of the referendum

#### Selection 3

oh the wasp's nest now I'll tell you what hoo hoo hoo I'll tell you what eh little point to look out for when you're you which language do you speak

#### Selection 4

close your books for a moment now some of you were going to ask about what happened in Scotland a couple of weeks ago

#### Selection 5

I wonder if you have any thoughts about devolution remember devolution and you know that recently they have had uh a devolution referendum do you know what a a referendum is (The teacher writes on the blackboard (WBB)while saying "devolution referendum)

#### A.2.1 Selections for Punctuation Experiment

#### Selection 6

right now then I suppose you all saw in the newspapers last week that all the Scottish people had to vote in an election like an election OK it was called a referendum and it was about devolution OK devolution

#### Selection 7

now the idea is that you all do some toping talking toping the subject under discussion is devolution this is er what he thought would be an entertaining and er maybe an illustrative uhm vehicle to get you talking to to have something going in the classroom situation

#### Selection 8

I'm sure it's something that er we've talked about before I know we have it's about devolution and the referendum do you remember the referendum

(Students break in after "devolution" and during the uttering of "referendum" until the end of the selection)

#### Selection 9

I've been asked to speak to you for a few minutes about devolution which is a long and rather complicated word which which many people in this country don't really understand what it means either (WBB while uttering "word which which")

#### Selection 10

I mean this is the whole thing isn't it th that the yes people say well we don't get enough say and we they don't understand not that they don't listen but they just don't understand what makes us tick as a nation you know 'cause they see us a nation

Glossary of your symbols (continue overleaf)
0.6022 N( 10) SIG .065 0.8298 SIG .003 SIG .003 0.7961 SIG .006 0.2684 0.2684 N( 10) SIG .453 0.6396 N( 10) SIG .046 0.6528 N( 10) SIG .041 0.7598 N( 10) SIG .009 0.4619 N( 10) SIG 179 0.6050 N( 10) SIG .064 VARIABLE Pair J2 J4 J1 J10 J10 JJ JJ UTH J10 HI INI 0.9663 N( 10) SIG .001 0.6052 N( 10) SIG .054 0.9363 N( 10) SIG .001 0.5515 N( 10) SIG .098 0.7923 N( 10) SIG .006 0.9129 N( 10) SIG .001 0.5984 N( 10) SIG .068 0.3587 N( 10) SIG ,309 0.7149 N( 10) SIG .020 --- SPEARMAN CORRELATION COEFFICIENTS VARIABLE PAIR -----HTTH UTC J1 J6 J6 J6 HTTW HTIM 19 0.9513 N( 10) SIG .001 0.7165 N( 10) SIG .020 0.3519 N( 10) SIG .319 0.8684 N( 10) SIG .001 0.8647 N( 10) SIG .001 0.9513 N( 10) SIG .001 0.7283 N( 10) SIG .017 0.7165 N( 10) SIG .020 N( 1000 SIG .001 VARIABLE Pair 11 J5 J2 J8 J8 JI JA JA JA INU JB JB JB HIN HIN SU HIN 0.8742 N( 10) SIG .001 0.8742 N( 10) SIG ,001 0.7165 N( 10) SIG .020 0.5835 N( 10) SIG .077 0,9663 N( 10) SIG ,001 0.9129 N( 10) SIG .001 0.8579 N( 10) SIG .001 0.9507 N( 10) SIG .001 0.4982 N( 10) SIG .143 VARIABLE PAIR -----J2 J7H UTH U5 J6 HTTH INU HITH HIM J4 MITH UICH NICH HIN J10 J10 0.4816 N( 10) SIG 159 0.8567 N( 10) SIG 002 0.7698 N( 10) SIG .009 0.8372 N( 10) SIG .003 0.7185 N( 10) SIG .019 0.6633 N( 10) SIG .037 0.8052 N( 10) SIG .005 0.5980 N( 10) SIG .068 0.8911 N( 10) SIG .001 VARIABLE Pair J2 J6 J6 UA HITH HIM HIM HIM HITH HITH 19 J9TH J6 J10 HI IM 0.6316 N( 10) SIG .050 0.8159 N( 10) SIG .004 0.7703 N( 10) SIG .009 0.8567 N( 10) SIG .002 0.8567 N( 10) SIG .002 0.5134 N( 10) SIG.129 0,8684 N( 10) SIG ,001 0.7911 N( 10) SIG .006 0.6396 N( 10) SIG .046 0.9663 N( 10) SIG .001 1 1 1 VARIABLE PAIR J2 MITH J2 HT IN 19 J7 HITH U110

A.2.2 Results of Punctuation Experiment

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### Frequency Profile.

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3	7	97	129	94.17	81.13
4	2	99	137	96.12	86,16
5	3	102	152	99.03	95.60
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STANDARD DEVIATION		19.9729	28.3666	9.7639	14.3382	19.7581				
MEAN		143.7500	126.0000	150.0000	145.7500	141.3750	4.2		MPM	
COUNT		4	4	4	4	16			VARIABLE	
GROUP		GRP(1	6RP 02	6RP 03	6RPC4	0 TOTAL	••		CONTRASTS	

T PROB. 0.353 0.604 0.877 0.185 0.282 0.645 0.167 0.362 0.479 0.905 SEPARATE VARIANCE ESTIMATE 0. F. 4.5 4.4 5.3 6.3 6.3 6.2 4.4 5.4 T VALUE 1.023 -0.562 -0.163 -1.600 -1.243 0.490 -1.520 -0.747 0.124 S. ERROR 17.3463 11.15.3463 12.2933 15.0000 15.8922 6.6735 9.9527 11.2525 10.3752 9.0712 T PROB. 0.220 0.657 0.886 0.106 0.175 0.175 0.762 0.378 0.526 0.526 POOLED VARIANCE ESTIMATE 12.0 T VALUE -0.146 0.310 1.294 -0.456 -1.440 -1.274 -0.916 0.095 -0-653 S. ERROR 13.7136 13.7136 13.7136 11.8763 13.7136 13.7136 11.8763 11.8763 13.7136 11.8763 VALUE -6.2500 -10.8750 -7.7500 17.7500 -24.0000 -19.7500 4.2500 -15.1250 1.1250 10(E/A-NS) 0CONT 1(E - I) 0CONT 2(E - 4) 0CONT 3(E - NS) 0CONT 4(I - A) 0CONT 5(I - NS) 0CONT 5(I - NS) (SV-A/I)6 8(E/I-NS) 7(E/I-A) 0 CONT 0 CONT 0 CONT OCONT

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																	T PROB.	198	309	069	597	204	145	538	104	178	093
							CR FEAN	2.6963	2.6686	2.6691	3.2297	2.6808				MATE		•0	.0	• 0	•0	•	•0	•0	•		.0
							INT FO									1123 3.	D.F.	6	4	5	5	4	1	5	æ	3	8
	• a	(	. L4				CCNF	10	10	10	10	10				RIANC	UE	ю.	4	ى 1	ۍ ٩	m	5	9		5	5
	F PR01	9.0567	10-0				95 PCT	2.1087	2.4414	2.3759	2.3453	2.4529	e Ki ye			ARATE VA	T VAL	-1.541	-1.163	-2.308	0.558	-1.621	-1.810	-0-647	-2.093	-1.752	-2.193
	RATIO	3.322	8.070 0.948				M	00	00	00	0.0	00				SEP	RROR					•		•			
	ц.,						MAXIMU	2.570	2.600	2.650	3.030	3.030	34				S. E	0.0990	0.1032	0.1668	0.0583	0.1435	0.1464	0.0676	0.1475	0.1420	0.1482
E	AN SQUARES	0.1037	0.2520 0.0296	0.0312			MUMINIM	2.1700	2.4500	2.4500	2.4500	2.1730					T PROB.	0.246	0.356	0.010	0.799	0.087	0.055	0.693	0.015	0.040	0.011
VARIAN	MEJ		2 C 9 2	•			_									STIMATE	F.	0.	0	0	0	0	0.	0	0.	0	0
YSIS CF	SOUARES	0.3112	0.25	0.3747	0.6859		T ANDARD ERROR	0.0923	0.0357	0.0461	0.1389	0.0535				IANCE ES	UE D.	0 12.	0 12.	1 12.	0 12.	1 12.	1 12.	4 12.	3 12.	9 12.	3 12.
ANAL	SUM OF						5				-					LED VAR	T VAL	-1.22	-0-96	-3.08	0.26	-1.86	-2.12	-0+-0-	-2.85	-2.29	-3.00
5a	D.F.	£	1 1 2 2	12	15		STANDARD DEVIATION	0.1846	0.0714	0.0922	0.2779	0.2138				POC	ERROR	1250	1250	1250	1250	1250	1250	1082	1062	1082	1082
			LINEAR TEF Rom Linea				MEAN	2.4025	2.5550	2.5225	2.7875	2.5669			٨L		E S	• 0	•0	• 0	• 0	• 0	•	•0	•	• 0	• 0
	SOURCE	GROUPS	IATION F	ROUFS			5								art art		VALU	-0.1525	-0.1200	-0.3850	0.0325	-0.2325	-0.2650	-0.0435	-0.3086	-0.2488	-0.3250
		BETWEEN	DEV	WITHIN G	10TAL		COUN	4	4	4	4	16	1		VARIA			- 1	- A)	-NS)	( 4 -	(52-	CSN-	( Y - I ,	(SN-I)	(SV-A)	(A-NS)
							GROUP	GRP01	GRPC2	GRP03	6RP04	<b>JIOTAL</b>		0101010100	CUNIKASIS			OCONT 1CE	DCONT 216	OCONT 31E	0 CONT 4 ( I	OCONT 541	OCONT 61A	DCONT 71EA	DCONT BIE	OCONT 911	OCONT 10CE

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							DR MEAN	0.1231	9.7009	8.5308	7.0924	7.6518	6 ) K			MATE	TPF	0.824	0.718	0.208	0.468	0.077	0.142	0.508	0.043	0.039	0.083
					•		CNF INT FO	10	01	10	10	10				ANCE ESTI	D. F.	5.6	4.7	4.0	5.6	4.7	5.5	8.2	8.5	E.2	7.7
	F PROB.	0.2965	C.1065 U.5932				95 PCT C	4.5669	5.4991	5.3942	4.7575	6.2644				ARATE VARI	T VALUE	-0.233	0.382	1.500	0.774	2.218	1.689	0.693	2.349	2.459	1.978
	F RATIO	1.379	3.045 0.546				MUMIXAM	8.9500	9.0400	8.0530	6.5900	9.0400				SEP	S. ERROR	1.0945	1.0025	0.9469	0.8238	0.7552	0.6144	0.7364	0.6588	0.5516	0.6211
	EAN SQUARES	2.1721	. 4.7571 0.8595	1.5753	2011		MUMINIW	5.6600	6.0200	5.9300	5.2800	5.2800					T PROB.	0.779	0.674	0.136	0.466	0.084	0.265	0.520	0.067	0.103	0.136 .
	- SQUARES M	6.5162	4.7971 ·	18.9037	25.4198	a.".	STANDARD ERRCR	0.8730	0.6602	0.4928	0.3668	0.3254		1		RIANCE ESTIMATE	LUE D.F.	87 12.0	31 12.0	0.0 12.0	18 12.0	87 12.0	69 12.0	64 12.0	13 12.0	65 12.0	99 12.0
5.00	D.F. SUM OF	۰. ۲	1 0	12	15		STANDARD DEVIATION	1.7459	1.3203	0.9856	0.7337	1.3018				POOLED VA	ROR T VA	875 -0.2	575 0.4	375 1.6	875 0.7	875 1.8	375 1.1	686 0.6	686 2.0	686 1.7	686 1.5
			LINEAR TERM Rom Linear				VEAN	7.3450	7.6003	6.9625	5.5250	6.9581		ì		* *	S. 5	0.88	0.81	0.81	0.81	0.81	0.88	0.74	0.70	0.70	0.7
	SOURCE	N GROUPS	EVIATIÓN F	GROUPS		1940	UNT	4	4	4	4	16	147		LABLE MV		VALUE	-0.2550	0.3825	1.4200	0.6375	1-6750	1.0375	0.5100	1.5475	1.3563	1.2286
		BETLEE	٩	WITHIW	T01AL		GROUP CO	GRP01	GRF 12	GRP03	6 K P C 4	JTOTAL			CUNTRASTS VARI			0CONT 1(E - 1)	0 CONT 2(6 - 4)	DCONT 3(E -NS)	0 CONT 4 (I - A)	DCONT 5(I -NS)	OCONT 6(A -NS)	DCONT 7(E/I-A)	OCONT B(E/I-NS)	OCONT 9(1/A-NS)	OCONT 10(E/A-NS)

(See page 95 for Explanation of Contrasts)

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54		4	3	ANALYSI	S OF VARI	ANCE				
*)]		SOURCE	0.F.	SUM OF SQU	ARES	<b>'EAN SQUARES</b>	F RATIO	F PROB.		
	BETWEEN	GROUPS	r)	330.3	382	110.1127	3.810	0.0396		
	DEV	LINEAR VIATION FROM L	L TERM 1 INEAR 2	32	5.4636 4.8746	325.4636 2.4373	11.261	0.919 0	-	
	WITHIN C	GROUPS	12	346.8	149	28.9012	ŝ			
	TOTAL		15	677.1	531					
						5				
GROUP	C OUN	VT MEAN	STANDARD DEVIATION	ST ANI E RI	DAKD Ror	MUMINIM	MUYIYU	95 PCT (	ONF INT FO	JR MEAN
GRP.01	4	4 . 33.6475	5.6732	5 • C	836£	26.2500	38-2200	0003-40	10	9 4 2 4 6
GRP02	4	9 36.3050	6.0509	м. С	1255	31.3200	43.9700	26.6768	10	5.9332
GRPC3	4	4 41.6650	6.6162	Э	5081	33.2600	47.8300	31.1373	10	52.1926
		4 45.3075	1.7413		8706	43.2500	47.0100	42.5368	10 /	.8.6782
JUIAL	16	39.2312	6.7189	1.6	. 197	26.2500	47.8300	35.6510	10 4	2.8115
CONTRASTS	VARIA	1916 TV								
			POOL	LED VARIANC	E ESTIMAT	LI	SEP	ARATE VAR	IANCE ESTI	MATE
DCONT 165	- : -	-7 6576	2. LKKUK	I VALUE	D.F.	T PROB.	S. ERROR	T VALU	E 0.F.	T PROB.
DCCNT 24F		C/CO-7-	3.8014 4 2014	-0.699	12.0	0.498	4.1473	-0.641	6.0	0.545
DCONT 36F	(SN-	-11-500	2.0014	-2.109	12.0	0.057	4.3577	-1.840	5.9	0.115 '
0 CONT 4 CT	( 4 -	-5-3600		190.0-	12.0	0.010	2.9672	-3.930	3.6	0.017
DCONT 5 CI	(21-		2.0014	-1.41U	12.0	0.184	4.4829	-1.196	6.0	0.277
DCONT 61A	( 5N-	-3.6425	2-00-C		0.21	0.036	3.1482	-2.860	3.5	0.065
OCUNT 71E/	( V- I.	-6-6588	3.2921	020.01	0.01	100.0	5.4207	-1.065	3.4	0.365
O CONT & CL	(SN-I	-10.3313	3.2921	13.130	10.01	690° 0	5.9043	-1.713	5.4	0.147
OCONT 911/	A-VS)	-6.3225	3.2421	1001-0-	0 · v ·	500°0	2.2490	-4.594	7.8	0.002
OCGNT 10(F	( 2N-4/	-7-6513	1.0001	172.1-	0.21	670.0	2.4046	-2.629	7.5	0.030
			13, 300	+20.2	0.21	0.058	2.3464	-3.261	7.6	0.012

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F PROB.	0.3833	0.0959 0.9686			
F RATIO	1.110	3.266 0.032			
MEAN SQUARES	25.0385	73.6702 0.7227	22.5578		
SUM OF SOUARES	75.1156	73.6702 1.4454	270-6943	345.8098	
0.F.	<b>F</b> I	TERM 1 INEAR 2	12	15	
SOURCE	BETWEEN GROUPS	LINEAR DEVIATION FROM L	WITHIN GROUPS	TOTAL	

GROUF         COUNT         MEAN         STANDARD         STAND											ROB.					~	-				~
GROUF         COUNT         FEAN         STANDARD         MAXIMUM         95 PCT CCAF INT           GRP02         4         22:6675         5:20657         5:20633         16:5700         23:9000         14:2898         TC           GRP03         4         22:675         2:4056         2:4056         2:4051         1:4930         1:4:289         TC           GRP04         4         2:4:7910         4:8615         1:2034         15:5000         2:4900         1:4:289         TC           GRP04         4         2:4:1710         2:4:661         1:4:817         1:4:289         TC         1:4:4:289         1:4:4:171111111111111111111111111111111	FOR MEAN	06.906.90	20.202		6110.JC	21.9641				TMATE	-	0-675	0.234	0.132	0.473	0.296	0.710	0.285	0.155	0.405	0.283
GRUF         COUNT         FEAN         STANDARD         STANDARD         STANDARD         STANDARD         MINIMUM         95         FCT           GRP01         4         20.6375         5.9892         1.9946         15.5000         23.9000         14.2898           GRP02         4         20.6375         5.9892         1.9946         15.5000         23.9000         14.2898           GRP02         4         24.7700         5.2965         2.6633         16.5700         23.5300         17.0681           GRP02         4         24.7700         4.6641         2.45320         24.6500         23.5300         17.0681           GRP04         4         24.7700         4.6641         2.45320         24.6500         23.5300         17.0681           GRP04         16         26.4611         2.4651         1.2034         15.5000         32.55300         18.3817           GR017         16         26.4601         3.3564         1.2034         15.5000         32.55300         18.4011           C0NT REF         7         2.46501         1.2.034         15.5000         32.55300         18.4011           C0NT REF         2.46501         2.66601         23.5500         17.400<	CONF INT	TC				10	2			TANCE EST		5.6	5.8	5.8	6.0	6.0	6.0	5.7	5.7	6.2	5.5
GRUF         COUNT         MEAN         STANDARD ERROR         MINIMUM         MAXIMUM           GRP01         4         20.6375         5.9892         1.9946         15.5000         23.9000           GRP01         4         20.6375         5.9892         1.9946         15.5000         23.5000           GRP02         4         22.6633         16.5700         23.5000         23.5300           GRP03         4         23.4656         5.4651         2.4320         21.6900         32.5300           GRP04         4         26.1275         4.6641         2.4320         21.6900         32.5300           GRP04         4         26.1275         4.6541         2.4320         21.6900         32.5300           GRP04         4         26.1275         4.6541         2.4320         21.6600         32.5300           GRP04         15         24.661         1.2034         1.2034         32.5300         32.5300           GRP04         15         24.661         1.2034         1.2034         32.5500         32.5500           GRU1         16         23.464         1.2034         1.2034         32.5500         32.5500           C011         1.101	95 PCT (	14.2895	13.7829	12.0681	1000.11	26-8471				SEPARATE VAR	T VALU	-0.436	-1.322	-1.745	-0.765	-1.140	-0.389	-1.174	-1.628	-0-896	-1.179
GROUF         COUNT         MEAN         STANDARD         STANDARD         MINIMUM           GRP31         4         20.6375         3.9892         1.9946         15.5000           GRP31         4         20.6375         3.9892         1.9946         15.5000           GRP03         4         20.6375         3.9892         1.9946         15.5000           GRP03         4         20.6375         3.9892         1.9946         15.5000           GRP03         4         24.7900         4.855         2.4603         16.5700           GRP04         4         24.7900         4.8515         2.4500         2.4500           GRP04         16         23.4664         4.8515         2.4500         2.4500           GRP04         16         23.4666         4.8515         2.4500         2.4500           GRP04         16         23.4666         1.235         2.4500         2.4500           GRP04         15         2.4010         2.4504         1.5.000         0.001           GRP04         1.4010         2.5584         1.2004         0.5600         0.128           GC0NT         2.6         1.4300         3.3584         -1.236	MUMIXAM	0009-55	27-6800	30.3000	30.5300	32.5300					S. ERROR	3.2795	3.1410	3.1454	3.5587	3.5625	3.4355	2.9286	2.9332	3.0135	2.8951
GROUF         COUNT         ME AN         STANDARD         STANDARD         ERROR           GRP01         4         20.6375         5.9892         1.9946         2.6033           GRP02         4         20.6375         5.2965         2.6033         2.6033           GRP03         4         20.6575         5.2965         2.6033         2.4320           GRP03         4         20.6575         5.2965         2.6033         2.4320           GRP03         4         20.6575         5.2965         2.6033         2.4320           GRP03         4         20.6575         5.23465         2.4320         2.4320           GGRP04         16         23.4656         4.8515         2.4320         2.4320           GGNTAL         16         23.4656         4.8515         2.4320         2.4320           CONTRASTS         VARIABLE         TT         VALUE         2.4431         2.4320           CONTRASTS         VARIABLE         TT         VALUE         2.44500         3.5584           CONT 2(E         A         -1.4300         3.5584         -1.226         12.0           OCONT 2(E         A         -5.4375         2.4375         2.4375 <td>MUMINIM</td> <td>15-5000</td> <td>16.5700</td> <td>18.7100</td> <td>21-6900</td> <td>15-5000</td> <td></td> <td></td> <td></td> <td></td> <td>T PROB.</td> <td>0.678</td> <td>0.240</td> <td>0.128</td> <td>0.433</td> <td>0.250</td> <td>0.697</td> <td>0.260</td> <td>0.127</td> <td>0.372</td> <td>0.263</td>	MUMINIM	15-5000	16.5700	18.7100	21-6900	15-5000					T PROB.	0.678	0.240	0.128	0.433	0.250	0.697	0.260	0.127	0.372	0.263
GROUF         COUNT         ME AN         STANDARD         STA           GRP01         4         20.6375         5.9892         1           GRP02         4         20.6375         5.9892         1           GRP03         4         20.6375         5.9892         1           GRP03         4         22.0675         5.9892         1           GRP03         4         22.0675         5.9892         1           GRP03         4         22.0675         5.2965         2         2           GRP04         4         26.1275         4.8015         1         1           GRP04         4         26.1275         4.8015         2         2           GRP04         4         26.1275         4.8015         2         2           GRP04         16         2         3.564         1         2           GROUT 1(E         1         2         3.564         1         2           GCONT 1(E         1         2         3.5564         1         2           GCONT 1(E         4         1         2         3.5564         1         2           GCONT 1         5         2	ND 4 RD R R G R	9466.	.6033	.4264	.4320	.2034				NCE ESTIMATE	D.F.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
GROUF         COUNT         ME AN         DEVIATIO           GRP01         4         20.6375         5.989           GRP02         4         20.6375         5.989           GRP02         4         20.6375         5.989           GRP03         4         22.06575         5.296           GRP03         4         22.06575         5.296           GRP04         4         20.6575         4.864           GRP04         4         26.1275         4.861           GRP04         4         26.1275         4.861           GRP04         4         26.1275         4.861           GRP04         4         26.1275         4.861           GONTAL         16         23.4656         4.861           CONTRASTS         VARIABLE         TTR         3.3584           CONT         2(E         4)         3.3584           OCONT         2(E         4)         3.3584           OCONT         2(E         4)         3.3584           OCONT         2(E         4)         3.3584           OCONT         2(E         3)         3.3584           OCONT         5(E         5)	KD STA DN E	1 1	in a	6	1.	5				OLED VARIA	T VALUE	-0.426	-1.236	-1.635	-0.911	-1.209	-0.398	-1.182	-1.642	-0.928	-1.174
GROUF         COUNT         ME AN           GRP31         4         20.6375           GRP02         4         20.6375           GRP03         4         20.6375           GRP03         4         20.6375           GRP03         4         20.6375           GRP03         4         24.7900           GRP64         4         25.4656           GRP64         4         26.1275           GRP64         4         25.4656           GRP64         4         26.1275           GRP64         4         26.1275           GRP64         4         26.1275           GOUTAL         16         25.4656           CONTRASTS         VARIABLE         TTR           VALUE         5         -4.1525           OCONT         2(E         -1.4300           OCONT         5(E         -4           OCONT         5(E         -1.3375           OCONT         5(E         -3.4375           OCONT         5(I         -4           OCONT         5(I         -4           OCONT         5(I         -4 <tr td="">         -5.4375      <tr td=""></tr></tr>	STANDAF DEVIATIO	3.989	5.206	4.852	4.864	4.891				ЬO	<ul> <li>ERROR</li> </ul>	3.3584	3.3584	3.3584	3.3584	3.3584	3.3584	2.9085	2.9085	2.9085	2.9085
GROUF       COUNT         GRP31       4         GRP32       4         GRP32       4         GRP32       4         GRP33       4         GRP34       16         GRP34       16         GRP34       16         GRP34       16         GRP44       16         CONTRASTS       VARIABLE         CONTRASTS       VARIABLE         CONT 2(E - 1)       -1.4         0CONT 2(E - A)       -4.1         0CONT 3(E - NS)       -5.4         0CONT 3(E - NS)       -3.4         0CONT 7(E / NS)       -3.4         0CONT 8(E / I - NS)       -3.4         0CONT 8(E / I - NS)       -3.4         0CONT 8(E / I - NS)       -3.4         0CONT 9(E / A - NS)       -3.4	MEAN	20.6375	22.0675	24.7900	26.1275	23.4056		•	TTR .		ALUE S	300	525	900	225	600	375	375	750	987	137
GROUF GRP31 GRP32 GRP32 GRP32 GRP33 GRP34 GRP33 GRP34 GRP33 GRP34 CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONTRASTS CONT CONT CONT CONT CONT CONT CONT CONT	C OUN T	4	4	4	4	16			VARIABLE	14	>	-1.4	() -4.1	5) -5.4	.) -2.7	4.0	.) -1.3	.) -3.4	13) -4.7	15) -2.6	-NS) -3.4
	GROUF	GRP 01	GRP02	GRP03	GRP64	0 TOTAL			CONTRASTS			0CONT 1CE - 1	0CONT 2(E - A	0 CONT 3 (E -NS	0CONT 4(I - 4	0 CONT 5 CI - WS	0 CONT 6 (A -NS	0 CONT 7 (E/1-4	0 CONT 8 (E/I-V	0 CONT 9 (1/A-1	DCONT 10(E/A-

(See page 95 for Explanation of Contrasts)

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ANALYSIS OF VARIANCE

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F PROH.	0.0122	0.0064 0.2076		
F RATIO	8•959	23.283 1.797		
MEAN SQUARES	7.0373	18.2882 ' 1.4118	0.7855	
SUM OF SQUARES	21.1118	18.2882 2.8236	9.4256	30.5374
D.F.	M	<del>ы</del> сл.	12	15
		LINEAR TERM From Linear		
SOURCE	BETREEN GROUPS	DEVIATION 1	WITHIN GROUPS	. T01AL

												PROB.	4	r u	) 4	- 1		4	0	4	4	0	0
MEAN	1010	0000	00400	3642	6774	1797					i.	۲	D DE					0.00	0.08	0.06	0.00	0.01	0.01
FCR	01	• •	• • •	14.	15.	13.		0		-	THA		-										
INI .											2	-0	6				•	•	••	•0	~	.8	•6
CCNF	JL		2 2	01	10	10		1			NATAN	UE	Ľ	0 10	) ur	2	2	n	9	S	5	S	S
5 PCT	-2504	0010	2010.	.1458	.6626	.6591		the same of			ALE	T VAI	- 192	.057	509	140			.106	.340	.047	.726	•679
5	J L	• •		=	12	11	•	t		0 4 0 3 0	LALIO		C	-	1		1	ſ	2	- 2	-5	ю <b>-</b>	- 3
мл	0.0			0 1	00	00						RROR							_	_		-	
MIXAM	12.29	10.15		16.01	15.10	15.10						s.	.5611	.6223	.6044	648	1.1.2.2.1		.6860	.5700	.5505	.5739	.5667
																	, _		0	0	0	0	0
MUM	400	R D D		201	000	803						PROB.	57	45	10	77		• •	0	50	00	02	12
INIW	10.6	10.3		••••	13.1	10.3				142	2	-	0.6	0.06	0.01	0.0	0-0		0.0	0.0	0.0	0.0	0.0
										LIMAT		•	0	-	~	-	-		_	~	_	-	~
DARD ROR	3754	4171	0000	2001	41514	3567				L F CI		-0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0
STAN	•0	• 0		•	•	•0				ARTAN	1	ALUE	172	142	548	214	020		906	<b>1</b> 5е	120	141	142
										ED VI		A	0.1	-2.0	- 4 -	-2.5	- 4 -			-2-	-5.1	5• E -	-3.6
NDARD ATION	.7508	.8342	9000		.145.	.4268				PODE													
STA	E.	0	c	- 5	5	-					0000	HUNN	267	267	267	267	267	1.10	197	427	427	427	427
-	0	10										•	0.6	0.6	0.6	0.6	0.6		•	0.5	0.5	0.5	0 • 5
MEAL	945	. 3379	201.0		1/1.	.4194			nr.														
	1	7	-		-	1.		С	LW		VALUE	VHLUC	1075	2500	7250	3675	£325	445.0		5551	7787	1388	0820
1 Nr	4	4	4		r	6			ABLE			3	•	;	-2-	÷	-2-	-	•	;	•••••••••••••••••••••••••••••••••••••••	•. •	-2-
COL						•		d.	VARI				1	4)	(5	4 <b>)</b>	(2)			A .	Cur N	15)	-uso
									TS						1 - U	:	N- I)	N- V			-12	- 4 / 1 )	J CE / B
ROUP	RP 51	RF02	RP03	0 0 0		OTAL			TRAS				I IN	NT 21	NT 30	NT 4	NT 5	NTA			N1 8	6 1 1	
9	9	و	9			-			CON				000	000	000	000	0000	0.00		000	000	0000	100

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								FCR MEAN	1.9620	1.6538	2.0132	1.8966	1.1361		TIMATE	T PROB.	0.209	0.887	0.963	0.382	0.114	0.847	0.708	0.385	0.364	0.874
		•		۲) ح				CCNF INT	10	10	10	10	10		RIANCE ES.	UE D.F.	3.7	5.7	5.5	3.4	4 • 2	4.8	4.0	5.7	6.2	в.3
		F PROB	0.5547	0.713				95 PCT	1.4279	1.4712	1.3368	1.5034	1.5796		PARATE VA	T VAL	1.494	0.148	-0-048	-1.022	-2.019	-0.203	-0.402	-0.937	-0.982	-0.164
		F RATIO	0.728	0.142				MAXIMUM	1.8300	1.6350	1.8900	· 1.8000	1.8900		SE	S. ERROR	0.0887	0.1354	0.1042	0.1101	0.0681	0.1229	0.1151	0.0760	0.0827	0.0917
	IANCE	MEAN SQUARES	0.0167	0.0235	0.0230			WUWINIW	1.4600	1.4900	1.4300	1.5200	1.4300		ATE	T PROB.	0.240	0.855	0.964	0.315	0.224	613-0	0.627	0.458	0.399	0.874
	LYSIS OF VAR	SQUARES	0.0502	6.3033 0.0469	0.2757	0.3255		STANDARD Error	0.0839	0.0287	0.1363	0.0618	0.0368		RIANCE ESTIM	LUE 0.F.	36 12.0	87 12.0	47 12.0	50 12.0	83 12.0	55 12•0	98 12.0	68 12.0	75 12.0	62 12.0
	ANA	SUM OF						RD	18	74	25	36	174		UOLED VA	T VAI	1.2	0.1	0.0-	-1-0	-1-2		-0-4	-0-1	-0-8	-0-
		D.F.	٤.	TERM 1 VEAR 2	12	15		STANDA DEVIATI	0.16	0.05	0.21	0.12	5.14		α.	S. ERROR	0.1072	0.1072	0.1072	0.1072	0.1012	2101.0	0.0926	0.0928	0.0928	0.0428
		Ę	ş	LINEAR IN FROM LI				MEAN	1.6953	1.5625	1.6750	1.7003	1.6581	SCI	•	1+LUE	525	200	090	125	010	002	453	713	113	150
VPLE SCI		SOURC	ILEEN GROUP	DEVIATIO	THIN GROUPS	LAL	÷	COUNT	4	4	4	4	16	VARIABLE		2	0.1		n-n- ()	-0-1 -0-1			-0-0	-0-0	-0-	1.0- (SN-
VARIA			ьEЛ			101		ROUP	3RP 01 -	SRP02	SRPu 3	SRPC 4	TOTAL	ITRASTS			NT 1(E - 1	JNT 21E - 4					INT / (E/I-A	NT B(E/I-N	V-BITIG INC	DNT 10CE/A-
													0	201			00	50	20	50			100	50	10	0

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	SOURCE		D.F.	S	UM OF	SGUARES	MEAN SOUDRES	F RATIC	L DDD		
							TLAN JAOARLO		יאי דאט	• ם	
BETW	EEN GROUPS		£			5.1766	1.7255	3.764	0.0409		
	DEVIATION	LINEAR FROM L	TERM Inear	<b>1</b> 0		5.1005 0.0761	5 • 1 0 0 0 • 0 3 8	11-12 1-11 - 1	25 0•00 33 6•92	59 (19	
HIIM	IN GROUPS		12			5.5019	0.4585				
T 0 T AI	_		15			10.6785					
10 E	COUNT	MEAN	STAN	DARD TION		STANDARD ERROR	MUMINIM	MUMIXAM	95 PCT	CCAF INT	FCR MEAN
10	4.	6.7925		6854		0.3427	. 5.9200	7.5700	5.7018	TO	7.8832
	t •	CZ12.1	• ¬	1605		0.3852	6.3800	8.1500	6.0625	10	8.4825
0.1	4	6169.1	•	8162		0.4CE1	6.4900	8.2900	6.3587	10	8.9563
<b>f</b> .	đ .	G1 45 • R	• 0	5459		0.1729	7.8900	8.6300	7.7972	10	8.8978
AL	16	1.5175	0.	8437		0.2109	5.9200	8.6300	7.0679	10	7.9671
8 1	4 6										
ASTS V.	ARIABLE A	101									
				POOL	ED VA	RIANCE ESTI	MATE	S	EPARATE VI	ARIANCE ES	TIMATE
10 M	VAL	.UE	S. ERKOR		T VA	LUE 0.F.	T PR0B.	S. ERROR	T VAL	UE D.F	. T PROB.
1(E - I)	-0.460	0.0	0.4788		-1.0	03 12.0	0.336	0.5119	-0.938	5.9	0.385
2(E - 4)	-0-£53	20	0.4788		-1.8	07 12.0	0.096	0.5329	-1.623	5.8	0.156
3(E -NS)	-1.555	20	0.4788		-3.2	48 12.0	0.007	0.3839	-4.051	4.4	0.015
4(I - V)	-0-365	00	0.4788		-0.8	04 12.0	0.437	0.5578	-0.690	6.0	0.516
5(1 - NS)	-1-075	00	0.4788		-2.2	45 12.0	0.044	0.4177	-2.574	4.2	0.062
6(A - NS)	-0.650	0(	0.4788		-1.4	41 12.0	0.175	0.4432	-1.557	4.0	0.195
7(E/1-A)	-0-625	20	0.4146		-1.51	07 12.0	0.158	0.4817	-1.297	5.4	0.251
B(E/I-NS)	-1.315	. 00	0.4146		-3.1	71 12.0	0.008	0.3089	-4.257	8.9	0.002
ISN-V/I)6	-0.852	55	0.4146		-2.1	28 12.0	0.055	0.3282	-2.689	a) • Ø	0.025
10(E/ 4-NS	-1.122	55	0.4146		-2.7	17 12.0	0.019	1.3177	- 3. 524	9 . 9	0 002

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		(Se	e pa	ge 95	tor	Expl	anat	:10n	of Con	tra	St	S)					20	.80										
									OR MEAN	32.6389	2.2735	4.6368	6.8000	8.3842			IMATE	T PRC	0.117	0.150	0.103	0.153	0.215	0.058	0.202	0.093	0.020	
									INT F								CE EST	0.F.	•	-	•	-	•	•	4.	•		
		•		5 0					C CNF	10	10	TC	10	10			IR I ANO	.UE	м	ŝ	ň	ŝ	ñ	m	m	Ň	n n	
		F FROE	0.0228	0.011					95 PCT	-5.1389	-0.7735	-0.1368	0.0000	-0.0592			ARATE VI	T VAL	2.183	1.922	2.317	-1.686	1.567	3.000	1.628	2.435	3.372 2.674	1
		110	10	.773 .529													SEP	æ										
		F RA	4 • 6	8 0				2	MUMIXAM	27.0000	2.0000	4.0000	0.0000	27-0000				S. ERRO	5.9547	5.9826	5.9354	0.8898	0.4787	0.7500	3.0704	2.9773	0.4449 2.9913	
		s	S	0125 0875	8													•		-			3					
	VC E	EAN SQUARE	166.062	316. 91.	36.020				MUMINIM	1.0000	0.0000	1.0000	0.000	0.000.0				T PROB	0.010	0.019	100.0	0.130	0.863	0.606	0.199	0.072	0.050	
	VARIA	W		10.12													TAMI	•	-	~	-	-	_	_	0	-		
	S OF	ARES	875	6.0125	864	370			DARD Ror	9354	7874	7500	0000	9650	142 112 122		CL ES1	0.1	12.(	12.(	12.(	12.	12.0	12.	12.(	12.	12.0	
	ANALYSI	OF SQUI	4 58.11	. 310	432.2	930.4			STANI	5.	• 0	.0	÷.	-1	а <sup>т</sup>		VARIANO	VALUE	3.063	2.710	3.240	565.0	0.177	0.530	1.360	1.973	0.408 2.177	
		SUM							C N N N	0.8	4 L	0.0	0	2.6			OCLED	-				•						
		D.F.	ю	ERM 1 EAR 2	12	15			STANDA DEVIATI	11.87	0.95	1.50	0.00	18.1		¥2	ď	<ul> <li>EKROR</li> </ul>	4.2439	4.2439	4.2439	4.2439	4.2439	4.2439	3.6753	5.6755	3.6753	
				LINEAR T From Lin					MEAN	13.7500	0.7500	2.2500	0.0000	4.1875	e	CUF		LUE	00	0.0	00	0.0	00	0.0	0.0	0.0	00	
JF		OURCE	soups	AT LON	SUPS											ш ш		VAL	13.000	1.50	13.75	100.1-	0.75	2.250	5.00	1.250	1.0018	
LE Cl		SC	EEN GF	DEVIA	IN GRC	-1			C OUN T	4	4	4	4	16		ARIAEL										_	s)	
AKIAF			BETW		HIIM	1011										>			2 : •	2	G22-	-	CSN-	Csz-	( H-I /	57-1	N-4/3	
~									OUP	100	505	5 C 3	P 0 4	IAL		RASTS			T 1(E	1 246	1 305			1 6 (A	1 / (E	1 8 1	1011	
									GR (	GRI	GRI	GRI	CR.	018		CONTI			0 CON	NOOD	NODO	n C UN	NOOD	NOOD	0 C O N	NOO N	0 C DN	

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						R MEAN	5.2522	5.8976	2.2735	0.000	2.4729		· · ·		MATE	T PROB.	C14•0	0.020	0.014	0.396	0.201	0.215	0.060	0.019	0.105	0.002
						CONF INT FO	10	10	10	10	10		1		IANCE ESTI	E D.F.	• • 0	5.6	3.0	3.9	3.0	3.0	7.3	4 • U	3.9	5.6
F PROB.	0.0387	0.0055 0.9322				95 PCT C	1.2478	-1.8976	-0.7735	0.000.0	6.5271	* * *			PARATE VAR	T VALU	0.908	3.162	5.166	0.951	1.633	1.567	2.236	3.813	2.091	5.060
F RATIO	3.843	11.388 0.071				MUMIXAM	5.0000	5.0000	2.0000	0.0000	5.0000				SEI	S. ERROF	1.3769	0.7906	0.6292	1.3150	1.2247	0.4787	0.8385	0.6884	0.6575	0.3953
MEAN SQUARES	8.1667	24.2000 0.1500	2.1250			MUMINIM	2.0000	6.000	0.000	0.0000	0.0000				TE	T PROB.	0.249	0.032	0.008	0.249	0.076	0.481	0.058	0.012	0.149	0.045
SQUARES	1.5005	24.2000 U.3030	5.5000	00000		LANDARD Error	0.6292	1.2247	0.4787	0.0000	0.4564	ar N			ANCE ESTIMA	JE D.F.	12.0	12.0	5 12.0	12.0	12.0	3 12.0	1 12.0	12.0	12.0	12.0
SUM CF	Ň		25	5.		S NN S	33	95	14	0.0	57				OLED VARI	T VALI	1.213	2.425	3.153	1.213	1.94(	0.726	2.100	2.941	1.54(	2.24[
D.F.	£	2 AR 2	12	15		STANDAF DEVIATIO	1.256	2.445	0.957	0.000	1.825				PO	ERROR	0308	.0308	.0306	0308	0308	.0308	.8927	.8927	.8927	.8927
		LINEAR TE		æ		MEAN	3.2500	2.0000	0.7500	0.0000	1.5000			e		JE S.	Ä	1	ī	-	1	1	0	0	0	0
SOURCE	V GROUPS	EVIATION F	GROUPS			INU	4	4	. 4	4	16			ABLE ML		VALU	1.2500	2.5000	3.2500	1.2500	2.0000	0.7500	1.8750	2.6250	1.3750	2.0000
	BETWEEN	DE	NIHLIN	101AL		10 J		ł			07			IAAV S			(I - J)	IE - A)	LE -NS)	(A - I)	(SN- I)	( A -NS)	(E/I-4)	(SV-I/3)	(I/A-NS)	CELA-NS'D
						GROUP	GRP 01	GRPC2	GRPC3	GRP 04	JIOTAL			CONTRAST			DCONT 1	OCONT 21	DCONT 3	OCONT 4	DCONT 5	OCONT 61	OCONT 7	OCONT 8	OCONT 9	D CONT 10

(See page 95 for Explanation of Contrasts)

	ę	÷												T PROB.	308	633	084	700	063	218	925	025	
			27			FOR MEAN	11-2308	5.2560	10.6751	0.0000	4.5386	24 4 12	STIMATE	1	•0	•0	•0	•0	•0	•0	•	•0	
	٠		0 <b>4</b>			CCNF INT	10	10	10	10	10		RIANCE F	UE D.I	4.1	5.9	3.0	3.9	3.0	3.0	4.3	4.1	100 A 100
	F FROH	0.1958	0.519			95 PCT	-1-2308	-0.2560	-3.6751	0.6050	0.9614		ARATE VA	T VAL	1.168	0.502	2.554	-0.414	2.887	1.552	0.100	3.503	
	F RATIO	1.828	4.055 0.714			MUHIXAM	10.0000	4-0010	10.0000	0.0000	10.0000		SEP	S. ERROR	2.1409	2.9861	1.9579	2.4152	0.8660	2.2546	2.4958	1.0704	
IANCE	MEAN SQUARES	17.6667	39.2000 6.9010	9.6667		WOWINIW	1.0000	0.0000	0.0000	0.0000	0.0000		NTE	T PR08.	0.278	0.508	0.042	0.657	0.278	0.137	0.898	0.072	
SIS OF VAR	QUARES	.603.	39.2000 13.8000	.0000	0000	ANDARD ERROR	1.9579	0.8660	2.2546	0.00.0	6.8391		NUCE ESTIMA	D.F.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
ANALY	SUM OF S	53		116	169	15							ED VARIA	T VALUE	1.137	0.662	2.274	-0.455	1.137	1.592	0.131	1.970	
	D.F.	3	ERM 1 EAR 2	12	10 1	STANDARD DEVIATION	3.9158	1.7320	4.5092	0.0300	3.3566		POOL	<ul> <li>EEROR</li> </ul>	2.1985	2.1985	2.1985	2.1985	2.1985	2.1985	1.9039	1.9039	1 0020
	L.I	S	LINEAR 1 N FROM LIN			MEAN	5.0000	2.5000	3.5000	0.0000	2.75(0	TSW		ALUE S	000	000	000	000	000	000	200	500	
-	, SOURC	TWEEN GROUP	DEVIATIO	THIN GROUPS	1 Å L	C GUN T	4	4	4	4	16	VARIABLE		>	1) 2.5	1.5	20.0	A) -1.0	<b>2.5</b>	3.5	0.5	VS) 3.7.	10 2 10
		8 E		17	10	GROUP	GRPC1	GRP C2	GRPC 3	GRP 04	U TOTAL	ONTRASTS			CONT 1 (E - 1	CONT 246 - 4	CONT SCE -NS	CONT 4 (1 - 1	CONT DOL - N	CONT 6 CA -N	CONT 766/1-1	CONT 8(E/I-/	LANT OLT AND

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VARIAFLE TSW

						ι		a	CR MEAN	34.0343	60.4993	32.6631	16.0074	25.1606		IMATE	T PROB.	0.501	0.646	0.349	0.647	0.267	0.098	0.869	0.157	0.115	0.076
		~							CONF INT F	10	10	10	10	10		IANCE EST	E D.F.	4.4	5.5	3.6	3.8	3.1	4 • 0	7.1	5.0	4 • 4	7.7
		F PROB.	0.4520	0.373(			2 <sup>30</sup>		95 PCT C	-0.5043	-8-9993	7.3369	5.4926	11.4644		ARATE VAR	T VALU	-0.738	-0.483	1.059	0.495	1.358	2.147	0.172	1.663	2.007	2.035
		F RATIO	0.539	0.675 1.072					MUMIXAY	32.0000	48.0000	31.0000	14.0000	48.0000		SEP	S. ERROR	12.1912	6.7253	5.6679	11.6216	11.0435	4.3084	7.2794	6.3155	6.0411	3.7465
	ANCE .	MEAN SQUARES	157.0625	112.8125 179.1875	167.1875				MUMINIM	9.0000	7.0003	12.0006	7.0000	7.0000		TE	T PROB.	0.344	0.728	0.524	0.541	0.127	0.332	0.877	0.209	0.152	0.355
	YSIS CF VARI	SQUARES	1.1875	112.8125 358.3750	<b>16.24</b> 95	17.4368			ST ANDARD ERROR	5.4218	10.9152	3.9791	1.6520	3.2129		IANCE ESTIMA	UE - D.F.	4 12.0	5 12.0	6 12.0	9 12.0	1 12.0	2 12.0	8 12.0	6 12.0	1 12.0	3 12.0
	ANAI	SUM OF	ब		200	24			RD 0N	36	84	82	4 0	16		OLED VAR	T VAL	-0.98	-0-35	0.65	0.62	1.64	1.01	0.15	1.32	1.53	0.96
		0.F.	3	TERM 1 VEAR 2	12	15			STANDA	10.84	21.83	1.95	3.30	12.85		PC	<ul> <li>ERROR</li> </ul>	9.1430	9.1430	9.1430	9.1430	9.1430	9.1430	7.9180	7.9180	7.9180	7.9160
		E	S	LINEAR T			1		MEAN	16.7500	25.7500	20.0000	10.7500	18.3125	COT		ALUE S	000	500	000	500	000	500	500	000	250	250
LE COT		SOURC	EEN GROUF	DEVIATIC	IN GROUPS				TNUG	4	4	4	4	16	RIABLE		>	0.6-	-3.2	6.0	5.7	15.0	9.2	1.2	10.5	12.1	) 7.6
VARIAE			BETW		WITH.	10141			۵ ۵	1	5	3	4	<b>.</b>	STS VA			1(E - 1)	2(E - A)	3(E -NS)	4(I - 4)	(SN- I)9	SIA -NS)	7(E/I-4)	8(E/I-NS)	(SN-V/I)6	10(E/A-NS
									GROU	6RP ()	GRP()	GRPC	GRP 0	0 TOTA	CONTRAS			O CONT	0 CONT	0 CONT	OCONT -	0 CONT	O CUNT 6	DCONT	0 CONT	OCONT S	OCONT

(See page 95 for Explanation of Contrasts)

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### ANALYSIS OF VARIANCE

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SOURCE	D.F.	0)	SUM	OF. SQUARES	MEAN SQUARES	F RATIO	F PROB.	
UFS	3			473.6875	157.8958	2.755	0.0885	
LINEAR TERM TION FROM LINEAR		5 1		0•3125 473•3750	236.6875	0.005	0.9424 0.0432	
JPS	12			687.7498	57.3125			
	15			1161.43.70				

IMATE T PROF 0.053	IANCE EST E D.F. 3.3	PARATE VAR T valu -3.101	S. ERROR 9.0311	T PROB.	E ESTIMATE D.F. 12.0	ED VARIANC T VALUE -2.335	ERROR 5532	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-12-50
and the second se								SS	IABLE
					44-10-10-10-14	1			
47.0013	2	1-1-1					*		
55.1010	10	37.6236	53.0000	27.0000	998 	2.1	9661 • 8	G710.24	
53.2271	10	30 • 3990	52.0000 53.0000	33.0000 27.0000	810 998	3.8 2.1	7.7621 8.7994	42.7500 42.3125	ar 00
	000	20.7729 30.3990 37.6236	51.0000 52.0000 53.0000	27.0000 33.0000 27.0000	990 810 998	5.0 7.0 7.0 7.0	10.1980 7.7621 8.7994	51.0000 42.7500 42.3125	( n
53.9051	0000	48.0949 20.7729 30.3990 37.6236	53.0000 51.0000 52.0000 53.0000	49.0000 27.0000 33.0000 27.0000	129 990 810 998	0.000 0.000 0.000	1.8257 10.1980 7.7621 8.7994	51.0000 37.0000 42.7500 42.3125	1,-
50.9954 53.9051	00000	26.0046 48.0949 20.7729 30.3990 37.6236	49.0000 53.0000 51.0000 52.0000 53.0000	22.0000 49.0000 27.0000 33.0000 27.0000	264 129 810 998	₩000₩0 ₩000₩0	7.8528 1.8257 10.1980 7.7621 8.7994	36.5000 51.0000 37.0000 42.7500 42.3125	1

		21	1								
ATE	T PR08.	0.053	0.823	0.471	0.074	0.130	0.404	0.230	0.667	0.799	0.354
NCE ESTIM	0.F.	3.3	5.6	6.0	3.2	3.3	5.6	3.9	4.5	5.3	6.8
EPARATE VARIA	T VALUE	-3.101	0.233	-0.770	2.703	2.069	-0.897	1.413	0.457	0.268	-0.992
s	S. ERROR	4.0311	6.4356	5.5208	5.1801	3.9870	6.4080	5.4829	4.3732	4.6659	5.0415
	T PROB.	0.038	0.784	0.443	0.023	0.149	0.304	0.120	0.674	0.792	0.302
E ESTIMATI	D.F.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0 .	12.0
POOLED VARIANC	T VALUE	-2.335	0.280	+61.0-	2.615	1.541	-1.074	1.672	0.431	0.270	-1.079
	S. ERROR	5.3532	5.3532	5.3532	5.3532	5.3532	5.3532	4.6360	4.6360	4.6360	4.6360
	VALUE	-12.5000	1.5000	-4.2500	14.0000	8.2500	-5.7500	7.7500	2.0000	1.2500	-5.0000
×		DCONT 1(E - I)	JCONT 2(E - A)	DCONT 3(E -NS)	JCONT 4(I - A)	DCONT 5(I -NS)	DCONT 6(A -NS)	DCONT 7(E/I- A)	DCONT B(E/I-NS)	JCONT 9(I/A-VS)	DCONT 10(E/A-NS)

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(See page 95 for Explanation of Contrasts)

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						FOR MEAN	73.3167	49.8102	63.9142	62.6407	10101
F PROB.	1.1877	0.8135 0.1017				95 PCT CONF INT	7.1833 10	8.1898 TO	2.5858 10	4.3593 T0	
F RATIO	1.874 0	0.058 2.782				5 MUMIXAM	67-0000 37	48.0000 38	62.0000 42	57.0000 44	
MEAN SQUARES	103.1667	3.2000 153.1500	55.0416			MUMINIM	42.0000	40.0000	48.0000	45.0000	0000 04
OF SQUARES	309.5000	3 • 2000 306 • 3000	660.4997	969.9995		STANDARD ERROR	5.6771	1.8257	3.3510	2.8723	0100
D.F. SUM	3	Π Q Σ a:	12	15		STANDARD DEVIATION	11.3541	3.6515	6.7020	5.7446	1140 0
	ŝ	LINEAR TER N FROM LINEA				MEAN	55.2500	44.0000	53.2500	53.5000	COOD CO
SOURC	BETWEEN GROUP	DEVIATIC	WITHIN GROUPS	TOTAL		COUNT	4	4	4	4	1.2
						GROUP	CRP 01	6nP02	GKP 03	GKP04 -	10111

ntr	as	ts	)						21	2										
167	102	142	407	850	· ·				TE .	T PROB.	0.132	0.774	197.0	0.060	0.038	0.957	0.450	0.380	0.207	0.868
73.3	49.8	63.9	62.6	55.7	1	,		ø	VCE ESTIMA	D.F.	3.6	<b>6.</b> 4	4-4	4.6	5.1	5.9	5.3	5.6	5.5	7.8
10	10	10	10	10	e Te	2.2			ARIAN	-UE			•					Ū		
37.1833	38.1898	42.5858	44.3593	47.2150				-	SEPARATE VI	T VAL	1.886	0.303	0.275	-2.424	-2.791	-0.057	-0.808	-0.936	-1.414	0.172
67.0000	48.0000	62.0000	57.0000	67.0000		and a second sec				S. ERROR	5.9634	6.5923	6.3623	3.8161	3.4034	4.4135	4.4855	4.1401	3.4483	4.3720
42.0000	40.0000	48.0000	45.0000	40.0000					TE	T PROB.	0.053	0.710	0.744	0.103	0.095	0.963	0.440	0.410	0.304	0.872
771	257	510	723	104	E			æ	CE ESTIMA.	D.F.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5.6	1.8	3.3	2.8	2.0					ED VARIAN	T VALUE	2.144	0.381	0.334	-1.763	-1.811	-0-048	-0.798	-0.853	-1.073	0.165
11.3541	3.6515	6.7020	5.7446	8.0416					POOL	S. ERROR	5.2460	5.2460	5.2460	5.2460	5.2460	5.2460	4.5432	4.5432	4.5432	4.5432 -
55.2500	44.0000	53.2500	53.5000	51.5000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CX			ALUE	500	0000	1500	500	0000	2500	250	2750	5750	1500
4	4	4	4	16			VARIA3LE			-	11.6	2.(		-9-5	3-6-	-0-	-3.6	-3-6	3.4- (1	IS) 0.1
CRP01	6nP02	GKF 0.3	GKP04 -	DIDIAL			CONTRASTS		84		0 CONT 1 (E - 1)	0 CONT 24E - A)	DCONT 3(E -NS)	0CONT 4(I - A)	0-CONT 5(1 -NS)	OCONT 6(A -NS)	0 CONT 7 (E/I- A	OCONT BIE/I-NS	OCONT 9CI/A-NS	DCONT 10(E/A-N

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F PROB.	0.6560	0.5275 0.5556			
F RATIO	0.553	0.423 0.617			
MEAN SQUARES	11-8958	9.1125 13.2875	21.5208		
SUM OF SQUARES	35.6875	9.1125 26.5750	258.2500	293.9373	
D.F.	ю	INEAR TERM 1 Om Linear 2	12	15	
SOURCE	BETWEEN GROUPS	L Deviation Fr	WITTIN GROUPS	TOTAL	

GROUP	COUNT	MEAN	DEVIATION	STANDARD	MINIMUM	MAXIMUM	95 PCT	CONF INT F	OR MEAN	
GKF01	4	6.2500	4.5000	2.2500	0.0000	10.0000	-0.9104	10	15.4104	
6RP02	4	5.0000	4.0825	2.0412	0.000.0	10.0000	-1.4960	10	11.4960	
6kP03	4	7.2500	5.1881	2.5941	1.0000	12.0000	-1.0053	10	15.5053	
6KP 04	4	3.2500	4.7170	2.3585	0.0000	10.0000	-4.2557	TO	10.7557	
0 TOTAL	16	5.4375	4.4267	1.1067	0.0000	12.0000	3.0787	10	7.7963	
147	A PARANCE I	· · · · · · · · · · · · · · · · · · ·					2	1	TANK .	
•	1 Transie	A + 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		· ·			•			
CONTRASTS	VAR IABLE	CD			¢					
		/ALUE S	POOLEC	T VARIANCE ESTIMATI T VALUE D.F.	E 👌 T PROB.	S. ERROR	SEPARATE VA	RIANCE EST	TIMATE T PI	R 08 -

ATE	T PROB	0.695	0.781	0.393	0.521	0.595	0.297	0.612	0.430	0.356	0.275
IANCE ESTIM	D.F.	5.9	5.9	6.0	5.7	5.9	5.9	5.1	5.5	5.9	6.1
EPARATE VAR	T VALUI	0.411	-0.291	0.920	-0.682	0.561	1.141	-0.541	0.847	0.999	1.200
S	S. ERROR	3.0380	3.4339	3.2596	3.3009	3.1192	3.5059	3.0061	2.8053	2.8786	2.9173
	T PROB.	0.710	0.766	0.378	0.506	0.603	0.246	0.578	0.419	0.331	0.242
E ESTIMAT	D.F.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
<b>OULED VARIANC</b>	T VALUE	0.381	-0.305	0.915	-0.686	0.533	1.219	-0.572	0.836	1.012	1.232
	S. ERROR	3.2803	3.2803	3.2803	3.2803	3.2803	3.2803	2.8408	2.8408	2.8408	2.8408
	VALUE	1.2500	-1.0000	3.0000	-2.2500	1.7500	4.0000	-1.6250	2.3750	2.8750	3.5000
		0 CONT 1 (E - I)	0CONT 2(E - A)	OCONT 3(E -NS)	0CONT 4(I - A)	DCONT 5(I -NS)	DCONT 6(A -NS)	DCONT T(E/I- A)	OCONT B(E/I-NS)	DCONT 9(I/A-NS)	DCONT 10(E/A-NS)

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						MEAN	.8434	. 6575	.4139	.3141	.6289				ATE	T PR(	0.831	0.647	0.354	0.571	0.587	0.222	0.551	0.396	0.293	0.216
			1	,		NF INT FOR	0 74	0 81	0 8.3	0 6.8	0 62				ANCE ESTIM	D.F.	5.2	5.7	5.9	5.8	5.5	5.9	6.0	6.7	7.3	6.1
F PR08.	0.6351	0.5596 0.5156				95 PCT C0	39.6565 1	28.3425 T	39.5861 T	29.6859 T	48.7460 T				ARATE VARI	T VALUE	0.224	-0.481	1.005	-0-599	0.580	1.362	-0.631	0.905	1.137	1.382
F RATIO	0.587	0.360				MUMIXAM	70.0000	65.0000	78.0000	60.0000	78.0000			+	SEP	S. ERROR	0.0364	8.8306	8.2095	0.8436	0.3441	9.1788	8.5205	7.8750	8.1381	7.5052
AN SQUARES	108.5625	. 66.6125 129.5375	184.9791			MUMINIW	43.0000	30.0000	45.0000	38.0000	30.0000					<b>T PROB.</b>	0.819 1	0.666	0.408	0.512 1	0.544 1	0.218	0.531	0.409	0.288	0.237
JARES ME	.875	.6.6125 .9.0750	493	368		IDARD	5283	3765	8860	0690	2567	1. J. J. J.			VCE ESTIMATE	0.F.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
SUM OF SQL	325.6	25	2219.7	2545.4		STAN Ef	<b>ئ</b>	8.	• g	ا ق	<b>3</b> .				LED VARIA	T VALUE	0.234	-0-442	0.858	-0.676	0.624	1.300	-0.645	0.855	1.111	1.246
D.F.	3	ERM 1 EAR 2	12	15		STANDARD DEVIATION	11.0567	16.7531	13.7719	12.1381	13.0267				P 00	S. ERROR	9.61/1	9.61/1	9.6171	9.6171	9.6171	9.6171	8.3287	8.3287	8.3287	8-5281
		LINEAR T From Lin				MEAN	57.2500	55.0000	61.5000	4.9.0000	01 29.00	N. Station .	MON	•		LUE	0.0	0.0	00	00	00	00	50	50	00	09
SOURCE	LEEN GROUPS	DEVIATION	IIN GROUPS	1		COUNT	4	4	4	<b>t</b>	10	$1 \le 1$	VARIABLE			AV C	5.2	-4-21	8.25	-6-JU	6.00	12.50	4) -5.37	.1.12	S) 9.25	IC.NT ISN
	851.	-	LIM	101		GROUP	68P01	64F02	6KP03	GKFU4	0 I U I AL		CONTRASTS				DOUT DEL - T	UCUNIZIE - A	DCONT SEE -NS.	ncon 411 - 4	SN- I) G INCON	D CONT 6 A -NS	0 CONT 7 (E/I-	DCUNT BIE/I-N	UCONT 901/A-N	UCUNI TUIEVA-I

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SOURCE D.	SOURCE D.	•0	å		е . З	UM OF SGL	JARES JOOD	MEAN SQUARES 74.6667	F RATIO 0.513	F PROR.		
LINEAR TERM 1 Deviation from Linear 2	LVIATION FROM LINEAR TERM 1 2	LINEAR TERM 1 V FROM LINEAR 2	TERN 1 NEAR 2	5 1		3	01-2000	51.200 86.400	0.554	0.5639		
WITHIN GROUPS 12	6 £00PS 12	12	12	12		1744.9	2665	145.4166				
T0TAL 15	15	15	15	15		1968.9	5666					
COUNT MEAN DEVIATION	UNT MEAN DEVIATION	STANDARD MEAN DEVIATION	STANDARD DEVIATION	TANDARD /IATION		STAR	4DARD Kror	MUMINIM	MAXIMUM	95 PCT C	ONF INT	FOR MEAN
4 21.7500 9.3586	4 21-7500 9-3586	21.7500 9.3536	9.3536	9.3536		4.	6793	13.0000	35.0000	6.8586	10	36.6414
4 19.7500 14.5230	4 19.7500 14.5230	19.7500 14.5230	14.5230	14.5230		7.	2615	6.0000	40.0000	-3.3589	10	42.8589
	4 17.7500 9.9121	17.7500 9.9121	9-9121 17 5004	9-9121		4	9561	8.0000	31.0000	1.9779	10	33.5221
16 21-7500 11-4572	16 21.7500 11.4572	21-7500 11-4572	11.4572	11.4572			8643	00000.9	43.0000	15.6449	10	27.8551
			¢	C								
TS VARIABLE REL	RIABLE REL	REL .								•	Į	
POOLED	POOLED	POOLED	POOLED	POOLED	3	VARIA	NCE ESTIM	ATE	15	PARATE VAR	ANCF F	CT I M A TF
VALUE S. ERROR T	VALUE S. ERROR T	ALUE S. ERROR T	S. ERROR 1	OR T	+	VALUE	D.F.	T PROB.	S. ERROR	T VALU	JE D.	F. T PI
(E - I) 2.0000 8.5269	2.0000 8.5269	000 8.5269	8.5269	6		0.235	12.0	0.819	8.6386	0.232	5.1	0.826
(E - A) 4.0000 8.5269 0	4.0000 8.5269 0	000 8.5269 0	8.5269 0	9 0	0	.469	12.0	0.647	6.8160	0.587	6.0	0.579
(E -NS) -6.0000 8.5269 -0	-6.0000 8.5269 -0	000 8.5269 -0	8.5269 -0	0- 6	î	•704	12.0	0.495	8.2538	-0.727	5.3	0.500
(I - A) 2.0000 8.5269 0.	2.0000 8.5269 0.	000 8.5269 0.	8.5269 0.	.0	•	235	12.0	0.819	8.7916	0.227	5.3	0.829
(I -NS) -8.0000 8.5269 -0	-8-0000 8-5269 -0	000 8.5269 -0	8.5269 -0.	6	-	938	12.0	0.367	9.9478	-0.804	6.0	0.452
(A -NS) -10.0000 8.5269 -1	-10-0000 8-5269 -1	000 8.5269 -1	8.5269 -1	<b>1</b>	7 '	.173	12.0	0.264	8.4138	-1.189	5.5	0.288
			7 3845	۵		.406	12.0	0.692	6.5741	0.456	6•9	0.662
				<b>ו</b> ה ש		948	12.0	0.362	8.0551	-0-869	5.4	0.425
						412.I.	12.0	0.296	8.0964	-1.112	5.5	0.317
- C+00+1 _ ON 2010	10+00+0 0100+0-		1.0040	•	1	1.000	12.0	00000	1.600 C	-1.052	4.6	0.341

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(See page 95 for Explanation of Contrasts)

VARIABLE REA

### AMALYSIS OF VARIANCE

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E ESTIMATE D.F. A.	LUE	EPARATE V T VA D.286	S. ERROR B. 7417	MATE T PROB. 0.732	T VALUE D.F.	ERROR	LUE S.	VA VA VA	. I	JI TUOJU
							REA	VARIABLE	s	CONTRAST
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14.8666	10	4.6334	37.0000	0.0000	2.4005	9.6021	9.7500	16		0 TOTAL
17.0910	10	-2.5910	15.0000	0.0000	3.0923	6.1847	7.2500	4		6RP04
19.0044	10	-6.5044	18.0000	0.0000	4.0078	8.0156	6.2500	4		6 K P 0 3
24.7812	10	-1.7812	23.0000	4.0000	4.1733	8.3467	11.5000	4		64P02
38.4445	10	-10.4445	37.0000	5.0000	7.6811	15.3623	14-0000	4		GRP01
NT FOR MEAN	CONF 1	95 PCT	MAXIMUM	MUMINIM	STANDARD ERROR	STANDARD DEVIATION	MEAN	COUNT		GROUP
					7					
			1. a. a.		1382.9995	15		. 14	TOT	
				102.0416	1224.4997	12		THIN GROUPS	TIW	
	10	0.281 0.671	1.274 0.139	130.0500 14.2250	130.0500 28.4500	RМ 1 АК 2	LINEAR TE Fron Line	DEVIATION		
		0.6779	0.518	52.8333	158.5000	3		ALEN GROUPS	85.1	
32		F PROF	F RATIO	MEAN SQUARES	N OF SQUARES	D.F. SU		SOURCE		

T PROB. .786 .412 0.461 0.399 0.4444 0.850 0.334 0.334 0.711 0.815 0.907 0.818 -0.196 1.096 1.096 1.027 0.384 0.540 8.2802 5.7861 5.1941 5.0621 5.9541 4.2347 5.3224 0.363 0.476 0.563 0.563 0.891 0.314 0.314 0.391 0.797 0.550 12.0 12.0 12.0 12.0 12.0 12.0 0.945 0.735 0.595 1.051 0.889 0.263 0.263 7.1429 7.1429 7.1429 7.1429 6.1859 6.1859 6.1859 6.1859 6.7500 5.2500 5.2500 5.2500 1.25000 5.5000 5.5000 5.5000 5.5000 5.5000 5.5000 5.5000 5.5000 0CONT 4(I - A) 0CONT 5(I -NS) 0CONT 6(A -NS) 0CONT 7(E/I- A) 0CONT 8(E/I-VS) 0CONT 9(I/A-NS) 0CONT 10(E/A-NS) 3(E -NS) 0 CONT 0 CONT 0 CONT 0 CONT 0 CONT 0 CONT

### (See page 95 for Explanation of Contrasts)

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A W

O N E

									8								.801										
								4EAN	345	9283	1297	945	6411			TE .	TPF	0.195	0.198	0.087	0.888	0.619	0.771	0.410	0.170	0.639	0.216
								FOR P	17.6	23.0	27.1	25.0	16.5			ESTIMA											
*								NF INT	C	0	0	0	0	¢ 3		IANCE	с ш	6.0	5.8	5.9	5.7	5.9	. 5.5	5.1	6.8	7.3	7.4
F PROB.	0.2899	0.0901		Ċ.				95 PCT CO	-3.6345 1	3.5717 1	1.8702 7	6.9055 7	9.0835 1			ARATE VAR	T VALU	-1.459	-1.446	-2.047	-0.147	-0.525	-0.307	-0.898	-1.530	-0.490	-1.360
F RATIO	1.403	3.399						MUN	0.0	00	00	0.0	0.0			SEF	ERROR	56	81	10	. 01	. 06	05	34	64	06	95
								MAXIP	16.00	21.00	24.00	22.00	24.00				°s.	4.62	5.18	4.39	5.09	4.28	4.89	4.59	3.67	3,82	3.85
EAN SQUARES	63 • 5625	154.0125 18.3375	45.3125					MUMINIM	0.0000	7.0000	7.0000	0000.6	0.0000			щ	T PROB.	0.182	0.141	0.083	0.877	0.645	0.758	0.337	0.197	0.657	0.227
ž		25 50										1			•	STIMAT	г.	••	•	•	•	•	•	•	•	•	••
F SQUARES	190.6875	154 • 01: 36 • 67	543.7500	734.4373			STANDARD	ERROR	3.3417	3.1983	3.9686	2.8577	1.7493			VARIANCE E	VALUE D	•418 12	.576 12	.891 12	.158 12	.473 12	.315 12	•001 12	.365 12	•455 12	.274 12
SUM 0							0	7	~	10	~	0	2			OLED	-	7	7	7	0	01	0	7	7	î	7
D.F.	3	M 1 R 2	12	15			STANDAR	DEVIATION	6.683	6.3966	7.9373	5.7155	6.997			ЪО	ERROR	•7599	•7599	•7599	•7599	•7599	•7599	.1222	•1222	.1222	.1222
		LINEAR TER FROM LINEA						MEAN	7.0000	13.7500	4.5000	.6.0000	12.8125		TIME		UE S.	6	4	4	4	4	4	4	4	4	4
JRCE	DUFS	TION F	sdn			÷				-	-	-	-	7	BLE		VAL	-6.750	-7.500	-9-000	-0-750	-2.250	-1-500	-4.125	-5.625	-1-875	-5.250
SC	BETWEEN GR	DEVIA	WITHIN GRO	TOTAL	27			COUNT	4	4	4	4	. 16		VAR IA		R	1	- A)	-NS)	- A)	-NS)	CSN-	(N - 1/	(SN-I)	(SN-N)	E/A-NS)
	0							GROUP	6RP 01	GRP02	6RP03	6RP04	DTUTAL		CONTRASTS			DCONT 1 (E	DCONT 21E	DCONT 3CE	DCONT 4 CI	OCONT 5CI	DCONT 66A	DCONT 7 (E	DCONT BCE	DCONT 911	0 CONT 100

### (See page 95 for Explanation of Contrasts)

APPENDIX V

<b>FBRIH</b>	E J = TEACE		11) · [ ]	FRENTARY,	1 1 1 1	1 - T E	I S	1	1	1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1
	1 7 1 FRU		11117	ICNNEDTHIE/				# POOLED	VARIANCE E	STIMATE #	SEPAKATE	E VARIANCE E	STIMATE
VARI	ABLE	OPUBBEES	MEAN	DEJANPABR	STERRER	VALUE	2-FRABL	VALUE	DEPREESOPF	2-FABIL	VALUE	DEPREESOOF	2pk0BL
Hem	GROUP 1	4	143.7500	19,973	9,986								
	GROUP 2	4	126,0000	28,357	14.183	70.7	6/510	1.02	ø	0.546	1.02	5,59	0.333
PUL	GROUP 1	4	2.6075	0,557	0.279								
	<b>GROUP 2</b>	4	3.4875	0.702	0.351	AC*T ¥	0./14	-1.76	٥	140.0	-1.76	1/10	140*0
MV	<b>GROUP 1</b>	4	7,3450	1.746	0.873		V (E0						
	GROUP 2	4	7.6000	1.320	0.660	C/-T	800+0	F710-	•	678.0	-0.23	2.54	0.824
LD L	GROUP 1	4	39.7200	1.110	0.555		011 0	, , , , , , , , , , , , , , , , , , ,			i c		
	<b>GROUP 2</b>	4	40,9925	3.179	1.589	A2+8 <b>★</b>	811.0	0/10-	0	0.4/8	9/10-	3.12	0.472
r n	<b>GROUP 1</b>	4	33.6475	5.673	2.837		A 010						
	GROUP 2	4	36,3050	6.051	3.025	¥ 1.14	0+718	-0.04	9	C+C+0	-0.64	3.78	0.945
TIR	<b>GROUP 1</b>	4	20.6375	3,989	1.995		0C/ V	~	· · · · · · · · · · · · · · · · · · ·				
	GROUP 2	4	22,0675	5,207	2.603		7/010	-0.44	•	8/010	-0.44	79.0	8/9*0
MTUL	<b>GROUP 1</b>	4	11.4450	0.751	0.375		L10 V		,	A 06 4		E 01	V DE V
	<b>GROUP 2</b>	4	11.3375	0.834	0.417	C7•1	198+0	41.0	0	0.634	1110	54.0	0.834
SCI	<b>GROUP 1</b>	4	1.6950	0.168	0.084	12 0	A 111	*	7	A 101	04 4	07 1	
	GROUP 2	4	1.5625	0.057	0.029		111.0	1 1 1 1 1	•	0.100	1+47	3.07	11210
ACL	GROUP 1	4	6.7925	0.685	0.343								
	<b>GROUP 2</b>	4	7,2725	0.760	0.380	1.43	0.868	-0-74	•	C95.0	-0.74	44°C	585.0
HAP	<b>GROUP 1</b>	4	156.5000	17.137	8,568	~~~			, ,	A 750		7 5 4	
	<b>GROUP 2</b>	4	186,0000	56.833	28.417	00.11	000110	* - 0. 77	0	100.0	-0.77	+r••	1/510
CUF	GROUP 1	4	13,7500	11.871	5.935	× 17 77			'	0 0 0 0	0, 0	10 F	C++ V
	GROUP 2	4	0,7500	0.957	0.479	c/.cc1	70010	81.2	•	7/010	81.2	3+04	/1110
MLG	GROUP 1	4	3,2500	1.258	0.629		LVT V	~	,				
	GROUP 2	4	2+0000	2.449	1.225	1.0	CUC+U	1410	0	140+0	1410	4,46	01410
ns+	GROUP 1	4	5,0000	3.916	1.958	-	C 16 V		,	LOC V			0 7 00
	GROUP 2	4	2+5000	1,732	0.866	11.0	C1710	* 1.1/	•	10710	/1+1/	· · · ·	000.00
102	GROUP 1	4	16.7500	10.844	5.422	V V *	V06 V	AC 0.	7	000 0	V 7 A	01 V	0 501
	GROUP 2	4	25,7500	21,838	10.919		107+0		•	001-10	1.10	1011	100+0
12564350													

A.5.1 Results of T-Test: Elementary-Intermediate, WPM to COT

ARIANCE ESTIMATE	FREESOF 2-LAN		4.36 0.604		4.95 0.245		4./4 0./18	A DO A 706	C7C'N 88'F		CII'0 98.C		D./8 U.234		CON+0 40+0		/88'N 60'C		00110 0010	7 EO A A07	740.0 46.6	7 40 0 4EV	00110 0110		070.0 09.6	E 00 A 177	00010 001r		04010 1010
SEPAKATE	VALUE DE		-0.56		-1.52		0.38	1 00	40.1-		-1.84		-1.32	10 0	-4.00	2 10	CT+0		70.1-	10.0	1717-	1 0.1	1.72		3.10	0 CV	AC*A		-0.46
TIMATE #	2-FK081.	*	0.594 ¥	*	0.236	*	n•/10	×	112.0	*	¥ 011.0	*	1.234	A 005	*	* CO3 4	0.88/	×	# 0CT+0	**	1.007 ¥	A 107 K	* cot•o	**	1 070 M	× 117	*	<b>X X</b>	0+0+0
ARIANCE ES	EPREESopr		ø		•		0	,	٥		٥		٥	,	•	-	٥	,	0	,	0	1	•		٥	,	•		0
POOLED V	VALUE D		-0.36		-1.52		00	1 00	-110		-1+84		-1.32	10 6	0/17-	A 45	CT.0	<b>v</b> / •	-1.02		17+7~	- CO +	1172		3.10	A EA	0010		0+10-
, ¥ , , ⊢	2pk081		0.2.0		0.428		0.5/2		+1+*0		108.0		nn/•0	A LEO		00L V	0.108	104 V	10/10		***		100.0	×		000	770.0		A+20+7
I - T E S	k vaľue		4.18		C/17		5+14	10 0	10.7		1:30	-	I.48	1 75	1.1.1	1 10	1.00		1.42	10 10	01.01	10 11	C0+70	FC 4	1./3	1 77	····	10.1	1+00
	STERRORD	9.986	4.882	0.279	0.462	0+873	0.493	0.555	0.936	2.837	3,308	1.995	2.426	0.375	0.496	0.084	0.106	0.343	0.408	8,568	27,235	5.935	0.750	0.629	0.479	1,958	2,255	5,422	1 070
KRUEBRYJ -	DEJANABR	19.973	9.764	0.557	0.924	1.746	0,986	1.110	1.872	5.673	6.616	3.989	4.853	0.751	0.992	0,168	0.213	0.685	0.816	17.137	54.470	11.871	1.500	1.258	0.957	3.916	4.509	10.844	7 050
3:(Ēbē	MEAN	143.7500	150.0000	2,6075	3,3175	7.3450	6.9625	39.7200	40.9075	33.6475	41.6650	20.6375	24.7900	11.4450	12,7250	1.6950	1.6750	6.7925	7.6575	156.5000	219.5000	13.7500	2,2500	3,2500	0,7500	5.0000	3,5000	16.7500	0000 00
- <u>-</u>	OPUEREES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	V
- <u>7</u> = TERT	BLE	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	<b>GROUP 1</b>	<b>GROUP 2</b>	<b>GROUP 1</b>	GROUP 2	GROUP 1	GROUP 2	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	GROUP 2	GROUP 1	GROUP 2	GROUP 1	C alload
BBBB	VARIA.	MAN		, VL		NA N		10		rv-		TTR		HTUL		SCI		ACL		HAP		CUF		ALG.		rsu		101	

A.5.2 Results of T-Test: Elementary-Advanced, WPM to COT

EEE	F <u>3</u> = TEAG	HG EQ -	1:(64	FFERTSPEAKER		ы 1 - 1 Е			UARTANCE F	STINATE 3	SFPARAT		STIMATE
VARI	ABLE	OPUPAGES	HEAN	DELANPABA	STERRORD	× value	2pk084	value	DEPREESOR	2pk084	VALUE	DEGREESOOF	2pk084
A PH	GROUP 1	4	143.7500	19.973	9.986		007.0						
	<b>GROUP 2</b>	4	145.7500	14.338	7.169	¥ 1.74	0.001	-0.10	0	9/8.0	-0.16	5+44	//8.0
PUL	GROUP 1	4	2,6075	0.557	0.279								
	GROUP 2	4	3,5250	0.567	0.283	1.03	8/4.0	-2131	٥	0.060	-2.51	6.00	0.060
M	<b>GROUP 1</b>	4	7,3450	1.746	0.873								
	GROUP 2	4	5,9250	0.734	0.367	00.0	091.0	001	0	1184	001	4.03	807'0
11	<b>GROUP 1</b>	4	39,7200	1.110	0+555			FA 4					
	<b>GROUP 2</b>	4	39.7400	0.490	0.245	***	717.0	-0.03	0	C/4.0	-0.03	4.13	C/4.0
2	GROUP 1	4	33.6475	5.673	2.837								
	GROUP 2	4	45,3075	1.741	0.871	10.62	0.084	-3.43	ø	800.0	-3.93	3.56	0.01/
TIR	GROUP 1	4	20.6375	3,989	1,995	*							
	<b>GROUP 2</b>	4	26.1275	4.864	2.432	¥ 1.47	70/10	C/1-	ø	0.152	c/·1-	8/.5	0.152
MTUL	GROUP 1	4	11.4450	0.751	0.375	-	0 11 V						
	GROUP 2	4	14,1700	0.947	0.474	1.11	71/10		0	400.0	IC++- ]	0/•0	0.04
SCI	GROUP 1	4	1.6950	0.168	0.084	* •	LC1 V	20	,	200			
	GROUP 2	4	1.7000	0.124	0.062	1.04	/7010	CA10-	٥	1.703	cn•n-	10.0	0.703
ACL	GROUP 1	4	6.7925	0.685	0.343	1 0 1	100 V	A 05	1	CV0 0	A AF	74 A	2 V VIE
	GROUP 2	4	8,3475	0.346	0.173	0110 ¥	112710	C0+4-	0	////	CO +-	. 4,43	c10.0
HAP	GROUP 1	4	156.5000	17.137	8,548	E-1 A0	0000		1	A 151	· · ·	++	
	GROUP 2	4	258.2500	124.141	62.070	01.170	100.0	70+1-	0	00110	701-	11.0	0.203
C UF	GROUP 1	4	13.7500	11.871	5.935		~~~~						
	GROUP 2	4	0,0000	0.000	0.000	nn.n	1.000	2012	0	0.00	7127	3,00	0.103
MLG	<b>GROUP 1</b>	4	3,2500	1.258	0.629	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~				5		
	GROUP 2	4	0,0000	0.000	0.000	*	1.000	11.0	0	70010	11.0	2.00	0.U14
135	GROUP 1	4	5,0000	3.916	1.958	~~~~	000	20	7	TAA A	2 2 2	7 20	10V V
	GROUP 2	4	0.0000	0.000	0.000	**	1.000	3	•	C+0+0	CC+7	00.00	0.004
10,	<b>GROUP 1</b>	4	16.7500	10.844	5.422	TC 01	v vov	1 07	7	171 A	1 1/	7 66	OVL V
	6k0UP 2	4	10.7500	3.304	1.652	1/1/1	70/10	1+10	0	10010	1+00	0010	140.0

A.5.3 Results of T-Test: Elementary-Native Speakers, WPM to COT

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185	e 3 : Feacua	œ	3: (AB	JARCEBJATE)		-	-	# POOLED	UARTANCE F	STIMATE #	CEPARATE	UAPTANCE F	CTIMATE
VARI	ABLE (	OPUBREES	MEAN	DELANDABA	STERRORD	🗱 vaEu	E <sup>2</sup> PKOBL	VALUE	DEPREESOOF	2pK0BL	VALUE	DEFREESOOF	2-IOH
S FM	GROUP 1	4	126.0000	28,367	14,183	-	T 1 1 1	· · ·			~ ~ ~		
	GROUP 2	4	150,0000	9.764	4,832	α.4 2.4	4 0.115	-1.60	9	0.161	-1.60	5./0	0.185
PVL	GROUP 1	4	3.4875	0.702	0.351		V 1 V	*					
	<b>GROUP 2</b>	4	3,3175	0.924	0.462	*	4 V+002	17·0 ¥	٥	× × ×	0+24	2.60	6/1.0
MA	GROUP 1	4	7.6000	1.320	0.660	**	LV7 V 0	LL V	7	× 074 V			074 V
	GROUP 2	4	6.9625	0.986	0.493	*	CF0+0 1	*	•	**	11.0		00++0
11	GROUP 1	4	40.9925	3.179	1.589	с ж	0 0 0 000	2 VC **	,	2 0 0	A 05	70 V	2/0/0
	GROUP 2	4	40,9075	1.872	0.936	* *	0 41400	*	0		CO.O	4.80	C04.0
LU L	GROUP 1	¥	36,3050	6.051	3,025		C 00 0 0	**	7		<b>VC F</b>	20	LCC V
	<b>GROUP 2</b>	4	41.6650	6.616	3,308	*	10010 0	17.1- *	0	1/710	N711-	0440	117.0
Ë	GROUP 1	4	22,0675	5.207	2.603	- -	E A 011	* 0 77	7	2 LLV V	CC V -	E 07	TTA A
	GROUP 2	4	24,7900	4.853	2.426	*	11110 0	//•∩- ¥	0	C/410	//•∩-	14.0	0.4/3
MTUL	6KOUP 1	4	11,3375	0.834	0.417			***				6 01	
	GROUP 2	4	12,7250	0.992	0.496	1.4	79/10 7	*1.2- *	0	0/0·0	-2+14	0,83	01010
SCI	GROUP 1	4	1.5625	0.057	0.029	ו	2 A AFO	~	,		5		101 V
	GROUP 2	4	1.6750	0.213	0.106	12./	40010 7	-1.02	0	0+2+0	7011-	3+43	0+382
ACL	GROUP 1	4	7.2725	0.760	0.380	- -	E A 01A	\$ V 10	7	A 511	07 0	E 07	A E14
	GROUP 2	4	7.6575	0.816	0.408	*	0T2+0 P	****	•		1010-	1110	01010
HAP	6KOUP 1	4	186.0000	56,833	28.417	**	0 V 0V 0		,		A 05	6 00	
	GROUP 2	4	219,5000	54.470	27.235	1.0	7 0+140		0	174.0	ra•n-	44.10	12410
S E E	GROUP 1	4	0,7500	0.957	0.479	, c	E A 40A	• • •	1	A 1 A 7	0/ 1	E 10	A 457
	GROUP 2	4	2,2500	1.500	0,750	* *	00+•0 P	¥ -1:07	0	C+110	1011-	01+C	CC1+0
MLG	GROUP 1	4	2,0000	2.449	1.225	х х	5 A 157	* 0 OF	1	0 770	0.05	00 Z	70L V
	GROUP 2	4	0,7500	0.957	0.479	•	10110 0		•	1/010	F2+0	0110	01010
151	GROUP 1	4	2,5000	1.732	0.866	r , *	0 0 150	× 0	7	£ 107 0	-A 44	CO T	00L 0
	GEOUP 2	4	3,5000	4.509	2,255	10	ACTIA 0		•	* C/O+A	1410	1010	00/10
50	GROUP 1	4	25,7500	21.838	10.919	ں ۲	121 A 171	~	7	* 0L7 V	0 40	02 2	CA1 0
	GROUP 2	4	20,0000	7.958	3,979		10110 0	***	o	0.030	1+10	0/+0	1+0+1

LC

A.5.4 Results of T-Test: Intermediate-Advanced, WPM to COT

	OPF 2-FK0BL		14 0.282		0.436		110.0 %	LOV V	4 0.473		C00.0 41		11 0.278	100 C	10010 T	A11 0 A11	+11.0 +		70010 4	A TEA	00010 0	A 715	C17.0 0/		102.0 00		10 0.003		4 N.20/
	DEPREES		4.4		,.		4+0	T F	1.0		4.0		4+C		6 tr	C V	4.1		4.1		4.5		0.0		3.0		0.0		1.0
	VALUE	**	-1.24		BU.U-	×	77.7	**	a/•0	~	02.2-	+64	-1.14	**	-4,47	CV C- *	70.7-		/017- ¥	**	on•1-	÷**	10.1	*	1.63	*	48•7 ¥	12	1:00
	F 2pk08.		0+200		0.736		0108	V 111	004+0		470*0		847*0	100 V	••••	V 00 V	01010		74010	111 V	10010	074 0	01100		0.154		97010	THE V	C22+V
	DEGREESO		ø		٥		•	,	0	· · ·	0		•	,	a	7	•		•	,	•	,	a		•	,	0	,	•
*	VALUE		¥-1.24	~	n•n-	***	77+7	~ ~	* ^*/9		02.7-	***	-1.14	**	* -4.47	₩ <sup>1</sup> <sup>1</sup> <sup>1</sup>	70.7- *		/017-	× 10	00.1-				1.03	**	1017	1 1 1	0C+T 2
I S	2pk08t		76710		0+/34	01 F V	Nº5.1	C 10 0	71010	ATA A	010.0		414.0	010 0	0.037	040 0	04210		877+0	010 V	70710	1 000	1.000		1.000		11000	A 111	110.0
1 - T E	¥ VAEUE	· · · · · · · · · · · · · · · · · · ·	14.5	*	· · · · ·	**	¥ 3.24		11.24	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	80.•21 X	**	ci•i 🐇	••••	1211	¥ ^ 7	+0++	× • • •	4.03	**		× ×	*		0.00	× ×	n•n <b>*</b>	¥ 17 10	43+01
	STERRORD	14.133	7.169	0.351	0.283	0.660	0.367	1.589	0.245	3.025	0,871	2,603	2.432	0.417	0.474	0.029	0.062	0.380	0.173	28.417	62,070	0.479	0.000	1.225	0,000	0.866	0,000	10.919	1 450
FÖËEBËËËË	DEVANDABIN	28,367	14.338	0.702	0.567	1.320	0.734	3.179	0.490	6,051	1.741	5,207	4.864	0.834	0.947	0,057	0.124	0,760	0.346	56+833	124.141	0.957	0.000	2.449	0.000	1.732	0*00	21,838	ANT T
	MEAN	126.0000	145,7500	3.4875	3,5250	7,6000	5.9250	40.9925	39,7400	36,3050	45,3075	22,0675	26.1275	11.3375	14.1700	1.5625	1.7000	7,2725	8,3475	186.0000	258,2500	0.7500	0,000	2,0000	00000	2.5000	0.0000	25,7500	10.7500
	oPUTREES	4	4	47	4	4	4	4	4	4	4	4	4	4	4	A	4	4	4	4	4	4	4	4	4	4	4	4	V
- 1 - TEACH	BLE	GROUP 1	<b>GROUP 2</b>	GROUP 1	GROUP 2	GROUP 1	GROUP 2	GROUP 1	GROUP 2	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	<b>GROUP 1</b>	<b>GROUP 2</b>	GROUF 1	GROUP 2	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	GROUP 1	<b>GROUP 2</b>	<b>GROUP 1</b>	C diluga
6£00	VARIA	A PH		PUL		N.		<b>L</b> D		3		11		MTUL		SCI		ACL		HAP		CUF		MLG		TSW		C01	

Results of T-Test: Intermediate-Native Speakers, WPM to COT A.5.6

ERĐŪ	5 <u>2</u> = TEAC	16 E0 -		POCEBPEAKER		ш Г -	י י ד נו	* FOOLED	VARIANCE E	STIMATE A	SEPARAT	E VARTANCE F	STINATE
VARI	ABLE	OPUTASES	MEAN	DEJANDABN	STERRERD	k vaľue	2FK0BL	VALUE	DEGREESOOF	2pk084	VATUE	DEPREESOOF	2pkm.
Mam	GROUP 1	4	150.0000	9.764	4.882								
	GROUP 2	4	145,7500	14.338	7.159	4 2.16	440.0	¥ 0.47	9	0.642	0.49	5.24	0.645
Pul	GKOUP 1	4	3,3175	0.924	0.462		7 4 4 7			275 0			
	GROUP 2	4	3,5250	0.567	0.283	QQ • 7	0.445	-0-28	o	CT/10	-0.38	4, 48	81/1 <b>8</b>
NV.	GROUP 1	4	6.9625	0.986	0.493			-					
	GROUP 2	4	5,9250	0.734	0.367	1.80	0+040	¥ 1.67	۰	0.142	1.69	2.24	0.142
2	GROUP 1	4	40.9075	1.872	0+936	1 1 11	A AGA	-		C V			
	GROUP 2	4	39.7400	0.490	0.245	10++1	+0.10	17.1	0	0.2/3	1.11	14.0	0.314
LV L	GROUP 1	4	41.6650	6.616	3,308				,	004 0			111 V
	<b>GROUP 2</b>	4	45.3075	1.741	0.871	14.44	CC0.0	-1.00	•	875.0	-1.06	3.41	C95.U
TTR	GROUP 1	4	24,7900	4.853	2.426	~~ ,							
	GROUP 2	4	26.1275	4.854	2.432	1.00	144.0	45.0-	•	01/10	-0.39	6.00	01/10
MTUL	GROUP 1	4	12,7250	0.992	0.496			-	,			00 0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	<b>GROUP 2</b>	4	14.1700	0.947	0.474	1.10	N*741	11.2- *	•	0.080	1117-	44.0	09010
SCI	GROUP 1	4	1.6750	0.213	0.106	10 0	COT A			, 10 V			
	GROUP 2	4	1.7000	0.124	0.062	2120	11210	n7•n-	0	0+0+0	N7+N-	7816	0.84/
ACL	GROUP 1	4	7.6575	0.816	0.408			- -				~~~~	
	<b>GROUP 2</b>	4	8.3475	0.346	0.173	10.0	741+0	00-1-	•	1/110	00-1-	4.04	C4110
4 AP	<b>GROUP 1</b>	4	219.5000	54.470	27.235		000 0		,	V 500			V 600
	GROUP 2	4	258,2500	124.141	62.070	1110	0.207		0	00010	10.0-	11.4	840.0
C IF	GROUP 1	4	2,2500	1.500	0.750	000	1 000	1 00	7		7 00	70.7	A AFO
	GROUP 2	4	0,0000	0.000	0.000		1.00	3	•	170.0	M•c 1	00.0	0110
MLG	GROUP 1	4	0.7500	0.957	0.479		~~~ •						
0	GROUP 2	4	0,0000	0.000	0.000	0.00	1*000	/01	•	R91.0	/01	3.00	C12.0
1 Su	GROUP 1	4	3.5000	4.509	2,255		~~~						
	GROUP 2	4	0,0000	0.000	0.000	0010	1.000		0	7/1.0	CC+1	3,00	B12.0
C 01	GROUP 1	¥	20,0000	7,958	3.979	6 00	701 V	- - -	,	A 076	2 4 6	00 4	V 000
	GROUP 2	4	10,7500	3,304	1.652		1100	C1+7	•	r/010	C1+7	4.00	0+078

A.5.6 Results of T-Test: Advanced-Native Speakers, WPM to COT

6R01	JP 1 - TEACH	99 99 99	1.(EL	EMENTARY) Itermediate)	1 1 1 1 1	-	 	1	1 1 1 1	1 1 1	1	1 . 1 1	1 1 1 1 1	-
		£						* P001	ED VARIA	ANCE EST	I MATE	<b>SEPARAT</b>	E VARIANCE E	STINATE
VARI	<b>ABLE</b>	NUMBER OF CASES	HEAN	STANDARD DEVIATION	STANDARD ERROR	* * * VALI	DE PROB.	***	UE DEGRE	EES OF	PROB. 1	k J VALUE	DEGREES OF FREEDOM	2-TAIL PROR.
S5	GROUP 1	4	38.5000	7,853	3.926	*								
	GROUP 2	4	51,0000	1.826	0.913	* * I8	50 0.039	**	10	۶ و	.021	1 -3.10	3.32	0,053
ŭ	GROUP 1	4	55,2500	11.354	5.677	×.		*						
	GROUP 2	4	44.0000	3.651	1.826	**	C40.0 /9	 * *	69	9	.108	( 1.89	3.61	0.132
C D	GROUP 1	4	6.2500	4.500	2+250	*		*						
	GROUP 2	4	5+0000	4.082	2,041	**	7/8*0 17	• **	41	9	• 695	0.41	5.94	0.695
N OM	GROUP 1	4	57,2500	11.057	5,528	*		*						
	GROUP 2	4	55,0000	16.753	8,377	**	516.0 05	。 **	22	8 0	•830	0.22	5.20	0.831
REL	GROUP 1	4	21.7500	9,359	4.679	*		*						
	GROUP 2	4	19,7500	14.523	7.261	* 2"*	1 0.489	• **	23	8	.825	0.23	5.13	0.826
REA	GROUP 1	ъ	14.0000	15,362	7.681	**		*						
	GROUP 2	4	11.5000	8.347	4.173	•*	14.343		67	9	* *	0.29	4.63	0,786
TIME	GROUP 1	4	7,0000	6.683	3.342	**		**			-			
	GROUP 2	4	13.7500	6,397	3.198	**	17 0.744		15	9	.195	-1.46	5.99	0.195
		A	-5.7 R	esults of	T-Test:	Ele	nentary	-Inte	rmedia	te, S	s to	LIME		

1 1 1	STIMATE	2-TAIL	· anvi	0.823		0.774		0,781		0.647		0.579		0.412		0.198
1 1	VARIANCE E	DEGREES OF		5,63		4,86		5,88		5.73		5.98		4.52		5,83
1 1 1	SEPARATE	T		0.23		0*30		-0,29		-0.48		0.59		0.89		-1.45
1 1 1 1	STINATE *	2-TAIL *	*	0.823 *	*	0.772 *	*	0.781 #	* *	0.647 *	*	0.579 *	*	0.405 *	*   *	0.198 *
1 1 1 1	ARIANCE E	EGREES OF		ę		9		9		9		9		9		9
1 1 1	FOOLED V	T D VALUE		0.23		0*30		-0,29		-0.48		0.59		0.89		-1.45
i . I	**		*	**	*	**	*	**	*	**	*	**	*	<b>* *</b>	*	**
-		2-TA PRO	-	9.0		0.41		0.82		0.72		0.92		0.31		0.78
-		F		1.69		2.87		1.33		1.55		1.12		3.67		1.41
	*	* *	*	* *	*	* *	*	* *	*	* *	*	* *	*	* *	*	* *
		STANDARD ERROR	3.926	5.099	5.677	3,351	2.250	2+594	5,528	6.886	4.679	4.956	7.681	4.008	3.342	3,969
EMENTARY) JANCED)		STANDARD DEVIATION	7.853	10.198	11.354	6.702	4.500	5,188	11.057	13.772	9.359	9.912	15.362	8,016	6,683	7.937
1.(ELI 3.(AD		MEAN	38.5000	37,0000	55.2500	53,2500	6.2500	7.2500	57.2500	61.5000	21.7500	17,7500	14.0000	6.2500	7,0000	14.5000
88		NUMBER OF CASES	4	4	4	4	4	4	4	Ą	4	4	4	4	4	4
1 - TEACHG	1	BLE	GROUP 1	GROUP 2	GROUP 1	GROUP 2										
GROUP		VAKIA	Ss		сх		CD		MON		Rel		REA		TIME	

A.5.8 Results of T-Test: Elementary-Advanced, SS to TIME

VARIABLE NUMBER 5 5 GROUP 1 A 6 GROUP 2 4 C 6 GROUP 1 4 C 6 GROUP 1 4 C 6 GROUP 1 4 C 6 GROUP 2 4	HEAN 38.5000 42.7500											
VARIABLE         NUMBER           0         0         CASES           5         6         0         0         4           5         6         0         1         4           6         6         0         1         4           7         6         1         4         4           6         6         1         4         4           0         6         1         4         4           0         6         1         4         4           0         6         1         4         4           0         6         1         4         4           7         6         2         4         4           6         6         1         4         4           6         6         2         4         4           6         6         1         4         4	HEAN 38.5000 42.7500			*		**	FOOLED	VARIANCE E	STIMATE	<b>*</b> SEPARAT	E VARIANCE E	STIMATE
5 5 6 6 0 0 P 1 4 6 6 8 0 U P 2 4 C 7 6 8 0 U P 1 4 6 8 0 U P 2 4 0 M 6 8 0 U P 2 4 6 8 0 U P 2 4	38.5000 42.7500	STANDARD DEVIATION	STANDARD Error	***	F 2-T LUE PR	AIL *	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.	* T * VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
CX 6R0UP 2 4 CD 6R0UP 1 4 CD 6R0UP 1 4 GR0UP 2 4 VOM 6R0UP 1 4 GR0UP 2 4 KEL 6R0UP 2 4 KEL 6R0UP 2 4	42,7500	7,853	3.926	**		*				*		
C X 6K0UP 1 4 6K0UP 2 4 C D 6K0UP 1 4 VOM 6K0UP 1 4 6K0UP 2 4 KEL 6K0UP 1 4 KEL 6K0UP 2 4		7.762	3,881	 **	•0 70•	**	1/10-	9	0.471	* -0.77	6.00	0.471
CD 660UP 2 4 VDM 660UP 1 4 VDM 660UP 1 4 670UP 2 4 KEL 670UP 1 4 KEL 670UP 2 4	55,2500	11.354	5.677	**		**				*		
CD 6K0UP 1 4 6K0UP 2 4 VOM 6K0UP 1 4 6K0UP 2 4 KEL 6K0UP 1 4 6K0UP 2 4	53,5000	5,745	2.872	•*	• 1 14•	* 642	87.0	9	26/10	* 0.28	4.44	0.797
GROUP         2         4           VOM         GROUP         1         4           GROUP         2         4           KEL         GROUP         1         4           GROUP         1         4         4	6.2500	4.500	2.250	**		*				*		
VOM GROUP 1 4 GROUP 2 4 Rel GROUP 1 4 GROUP 2 4	3,2500	4.717	2,358	**	•0 01•	**	0+72	ø	0.395	* 0.92	5.99	0.393
GROUP 2 4 KEL GROUP 1 4 GROUP 2 4	57,2500	11.057	5.528	**		**				*		
Rel Group 1 4 Group 2 4	49.0000	12.138	6,069	 + **	1.0 12.	* * 795	1.00	Q	955.0	** 1.00	5+95	0.354
6R0UP 2 4	21.7500	9.359	4.679	**		*		····· ,				
	27,7500	13.598	6•799	√i +++		**	-0./3	Q	644.0	-0.73	5+32	0.500
KEA GROUP 1 4	14.0000	15.362	7.681	**		**						
GROUP 2 4	7,2500	6,185	3.092	•**		**	0.82	٥	0.446	<b>*</b> 0.82	3.95	0.461
TIME GROUP 1 4	7.0000	6+683	3,342	*-	0 0 62	**	7 VE	、				
GROUP 2 4	16.0000	5,715	2,858	•*	··· /··	**	M+7-	a	19010	C0.7- ¥	3.86	180.0

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A.5.9 Results of T-Test: Elementary-Native Speakers, SS to TIME

	2-TAIL PROB.		0.0/4		0.000		175.0		1/0.0		67810	OOF V	0.377	000 V	1
	DEGREES OF FREEDOM		5.19		4,04	L	3.67		9''C		0510		2410	V L D	+/+0
	SEPAKALE T VALUE		21/0		7617-	*	-0.68		-0.60		0.23		14.0	4	r1•n-
	****	*	**	*	**	**	**	**	* *	**	**	** +	**	* •	•*
114477	2-TAIL PROB.	120 0	c:0.0		700+0	1	17010		1/0.0		878*0	005 0	1.377	000 V	01000
I TANCT C	VAKIANCE E DEGREES OF FREEDOM		٩		٥	•	٥		٥	19	٥		a		•
41 1000 0001	ruulen T VALUE		21/0		7417-	, , ,	-0.68		-0.50		6210		0.71	2 7	n.
,	****		- <del>.</del>	~	-	-	**	*	* *	**	**		**	*,	
•	2-TAIL PROB		0.018		V. 34		20/10		E/*0	V E V	04010		0.747	+LL 0	16/10
	F		51.20	F	10.0		1.01		1.40	ç	CT+7	4	1.08	13	5
- 2 T	***	**	**	**	**	<b>*</b> ∙,	**	**	•*	*;	* *	<b>≁</b> ,	**	**	• <b>*</b>
	STANDARD ERROR	0.913	5,099	1.826	3,351	2.041	2.594	8.377	6.886	7.261	4.956	4.173	4.008	3.198	3,969
TERMEDIATE) VANCED)	STANDARD DEVIATION	1.826	10.198	3.651	6+702	4.082	5,188	16.753	13,772	14.523	9.912	8,347	8.016	6.397	7.937
2.(IN 3.(AD	MEAN	51.0000	37,0000	44.0000	53,2500	5.0000	7,2500	55,0000	61.5000	19.7500	17,7500	11.5000	6.2500	13.7500	14.5000
EQ	NUMBER JF CASES	4	4	4	4	4	4	4	4	4	4	4	4	4	4
P 1 - TEACHG P 2 - TEACHG	) JBLE	GROUP 1	GROUP 2	GROUP 1	GROUP 2	<b>GROUP 1</b>	GROUP 2	GROUP 1	GROUP 2	GROUP 1	GROUP 2	GROUP 1	GROUP 2	GROUP 1	GROUP 2
22	RI							Ŧ				æ		¥	

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A.5.10 Results of T-Test: Intermediate-Advanced, SS to TIME

2. (INTERMEDIATE)	2.(INTERMEDIATE)	TERMEDIATE)		1	-	-	י י ח	1	1 1 1	1 1 1 1	1	1 1 1 1	1 1 1 1 1	1 . 1 . 1
-		4. (NA	IIVE SPEAKEKS	~	*			**	FOOLED	VARIANCE E	STIMATE	SEPARATI	E VARIANCE E	STIMATE
AER ISES MEAN	MEAN		STANDARD DEVIATION	STANDARD Error	* * *	VALUE	2-TAIL PROB.	***	T	DEGREES OF FREEDOM	2-TAIL PROB.	K T K VALUE	DEGREES OF Freedom	2-TAIL PROB.
1 51.0000	51.0000		1.826	0.913	*			*				*		
42+7500	42,7500		7.762	3,881	**	18.07	0.040	**	2,07	9	0.084	k 2.07	3+33	0.130
44.0000	44,0000	12	3.651	1.826	*			*						1
53,5000	53,5000		5.745	2,872	* *	2.47	0.476	**	-2,79	9	0.032	K -2.79	5.03	0.038
5.0000	5.0000		4,082	2.041				*						
3,2500	3,2500		4.717	2,358	**	1.54	0.818	**	0.56	9	0.595 #	t 0,56	5,88	0.595
55,0000	55,0000		16.753	8,377	*			*						
49.0000	49,0000		12.138	6.069	**	1.40	0.610	**	0.58	9	0.583	0.58	5.47	0.587
19.7500	19,7500		14.523	7.261	*			*						
27.7500	27,7500		13.598	6.799	**	1.14	014.0	**	-0.80	9	0.452	-0*80	5.97	0.452
11.5000	11.5000		8.347	4.173	** •			*						
7.2500	7.2500	e - 1	6.185	3,092	**	1+82	C24.0	**	0.82	9	0.444 *	0.82	5.53	0.444
13.7500	13.7500		6.397	3.198	×.			*			*			
16.0000	16.0000		5.715	2,858	* *	1.53	0.858	**	-0,52	9	0.619 *	-0.52	5.93	0.619

A.5.11 Results of T-Test: Intermediate-Native Speakers, SS to TIME

	STIMATE	2-TAIL PROB.		0.404		154.0		147.0		0.222		0.288		008.0		1//•0
	VARIANCE E	DEGREES OF FREEDOM		09.0		3,86	je L	cc	č	14.5	L	5149	-	+0°C	1	c+•c
	SEPARATE	T VALUE		06.0-		-010	-	1.14	, ,	1.36		41.1-		n7•n-	F V	16+0-
	STIMATE *	2-TAIL * PROB. *	**	0.404 <b>*</b>	**	* /04.0	**	* 14710	**	* 777*0	**	* 082.0	**	* 058.0	**	**
	ARIANCE E	EGREES OF FREEDOM		٥		٥		a		٥		o		o	,	0
	FOOLED V	T D VALUE		04.0-	74.4	-0.06	ļ	1.14	12. •	4.10	, ,	41+1-		N7 . U-	te v	10.0-
	* *	вн. ***	**	** 0	**	**	**	**	**	**	**	•*	**	**	**	2
		2-TA PRO	~	9.0	<	R*N		210	4	2.7	Ż	0.0	~	010	1	010
		F	F F	1./3	12 4	1.30	-	17.1	92 •	1.42	4	1,88	-	1.08	1 07	1.73
	•	***	*•	**	<b>≁</b> ,	**	*,	•*	*,	**	*,	**	**	**	*;	**
(0		STANDARD ERROR	5,099	3,881	3.351	2,872	2.594	2,358	6.886	6.069	4.956	6•799	4.008	3.092	3.969	2,858
JANCED) LIVE SPEAKER		STANDARD DEVIATION	10.198	7.762	6.702	5,745	5.188	4.717	13.772	12.138	9.912	13.598	8.016	6.185	7.937	5.715
3. (ADI 4. (NA		MEAN	37,0000	42,7500	53,2500	53,5000	7.2500	3.2500	61.5000	49.0000	17.7500	27.7500	6.2500	7.2500	14.5000	16,0000
88		NUMBER OF CASES	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2 - TEACHG		ABLE	GROUP 1	GROUP 2	<b>GROUP 1</b>	GROUP 2	GROUP 1	GROUP 2								
GROUF		VARIA	55		٢X		CD		NON		REL		REA		TINE	

A.5.12 Results of T-Test: Advanced-Native Speakers, SS to TIME

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- I - I E S I -

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APPENDIX VI



NS T; 7.27 A: 7.65 ±: L.79 NS: 8.34 4 ACL щ A.6.3 Histogram showing group means for Variables MTUL, SCI and ACL B.00 -7.00 -1 00.7 8.50 7.50 6.50 • \$2 I: 456 d: 1.68 ns: 1.70 E: 1.70 4 SCI 2.00 -1.00 -1.50 -190 180 1.60 1.40 1.30 1.20 1.10 130 SN5 E: 11.45 I: 11.34 A: 12.73 NS: 14.17 MTUL ٩ H щ 14.0D--0007 14.5 -12.00-13.00-13.50 14.00 -13,50 11.50 10:50

F. 135	3: :-	I: 7.60	A: 6.99	N5: 5.93					-								A NS		
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			07 Z		04.	3	7002	Ş	Q9.	-40	07:	6.00.	08.	Ş	Q <del>4</del> .	07.	500- NS		r Variables WPM, PVL and MV
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A.6.5 Histogram showing group means for Variables LV, LD, TTR and HAP

# <Z 2> T5ELP

<X T-5(E)-2> I'M SCOTTISH, YES, YES # AHM I DIDN'T WANT TO VOTE # (LAUGHTER) I VOTED "NO"= # AHM I DIDN'T WANT IT BECAUSE = I THOUGHT IT WOULD COST TOO MUCH MONEY = # AND I DON'T DELIEVE = THAT = BY = HAVING WHAT WAS CALLED A "DEVOLVED GOVERNMENT" THAT = MEANS = LIKE & DEPUTY = AS IT WERE (MLG) = A SMALL UNIT OF PEOPLE WHO COULD MAKE DECISIONS ON = CERTAIN ASPECTS OF SCOTTISH <P 2> LIFE MHM # I DIDN \*T BELIEVE = REALLY = THAT THOSE DECISIONS WOULD HONESTLY HELP US TO HAVE A BETTER SCOTLAND # I BELIEVE THAT IN A SMALL = COUNTRY LIKE = THE UNITED KINGDOM WE DUGHT TO BE = WHAT IT'S CALLED = A UNITED KINGDOM # AND I REALLY DO THINK WE- WE SHOULD BE = ALL ONE # I MEAN, THERE'S A LOT OF COUNTRIES IN EUROPE THAT HAVE A DEVOLVED GOVERNMENT = BUT THEN THERE'S A LOT OF STRUGGLES TOO THAT WE CAN SEE GOING ON AT THE MOMENT, FOR EXAMPLE IN IRAN = WITH- WITH THE KURDS # I MEAN I- I THINK = WE SHOULD BE AVOICING ALL SORTS OF = WARS AND SO ON # AND I THINK OFTEN WE CAN = MAKE A WAR COME ABOUT IF WE SAY = YOU KNOW, WE'RE WE'RE UP HERE AND THE ENGLISH ARE DOWN THERE # I DON'T KNOW WHAT YOU THINK ## <X T-5(E)-34> BUT = IT\*S ALWAYS TRUE, THOUGH, THAT YOU HAVE EXTREMISTS, ISN'T IT? === # DO YOU KNOW WHAT I MEAN BY AN "EXTREMIST"? ## (CUF) <P 12> <X T-5(E)-35> SOMEBODY WHO HAS = A VERY STRONG POINT OF VIEW IN ONE DIRECTION = THE STRONGEST = POINT IF VIEW = IN THE MOST === DIVERTED = WAY = # UHM THERE'S THE "YES" VOTERS AND THE "NO" VOTERS = OF BOTH OF THEM THERE WERE VERY STRONG POINTS OF VIEW = AND MAYBE ONE = OF THE "YES" VOTERS = WILL START = A REVOLUTION = NO? ## <F 24> <x T-5(E)-66> ACTUALLY, I\*M NOT SURE HOW MUCH THE FIVE PENCE PER DAY = UHM COVERS # IT COVERS THE COST OF THE ASSEMBLY = # SO I TAKE THAT TO MEAN = THE SALARIES PLUS THE RUNNING OF THE ASSEMBLY # UHM THE TRUTH IS THAT THE ASSEMBLY WILL COST US A FEW PENCE PER PERSON PER WEEK IN

SCOTLAND = # AND THE FIGURE MENTIONED = HAS BEEN = FIVE PENCE = # SO THAT MUST MEAN = I WOULD TAKE IT FROM THAT IT WOULD MEAN = SALARIES AS WELL AS = THE RUNNING OF THE THE BUILDING #

## <Z 3> T6ELP

<X T-6-30>BECAUSE WHAT? = YOU DON\*T KNOW VERY WELL (ECHOING) # BUT WHAT ABOUT=IN SCOTLAND IN THE DEVOLUTION=UH ASSEMPLY=REFERENDUM VOTE PIGHT? (CUF)CN MARCH THE FIRST # REALLY, IT WAS ABOUT A THIRD WHO VOTED=\*YES\*= A THIRD WHO VOTED \*NO\*, AND A THIRD WHO DID\*NT VOTE RIGHT? (CUF)# NON WHAT\*S YOUR OFINION OF THE PEOPLE WHO DIDN\*T VOTE? # DIS THEY FEEL THAT THEY DIDN\*T KNOW ENOUGH? ##

<X T+5-35>NO, IT MEANS THAT THEN YOU\*D% IT IS- IT'S NOTHING # IF PEOFLE DON'T VOTE, IT SHOULD BE NOTHING,

RIGHT? (CUF) # BUT THE INTERESTING THING IS THE DIVISION. RIGHT? (CUF) # THE WAY IT'S DIVIDED (MLG) THAT IN FACT IT'S THE THIRD = AND = THE THE BETWEEN A "YES - NO" ANSWER YOU FIND THAT YOU GET A DIVISION OF THREE: "YES "AND "NO" AND "DON 'T KNOW", OR OR OR "DON 'T KNOW ENCUGH" OR "NOT SURE "# LIKE YOU "RE SAYING THAT=PROBABLY YOU WOULDN'T VOTE BECAUSE YOU WOULDN'T=YOU WOULDN'T KNOW FNOUGH ## <X T-4-53>YES BUT TH% WE% =THERE IS A SYSTEM OF PARLIAMENT IN THIS COUNTRY WHERE # THERE ARE SEVENTY-ONE = ABOUT SEVENTY-ONE SCOTTISH = MPS IN PARLIAMENT WHG DECIDE ABOUT THE WHOLE COUNTRY= AS WELL # YOU KNOW IT IS NOT THAT SCOTLAND=DOES NOT HAVE ANY POWER = AT ALL THAT WAY # BUT YOU THINK THERE'S SOME JEALOUSY # WHAT WOULD YOU SAY ABOUT TALKING TO SCOTTISH PEOPLE, # DO YOU THINK THAT'S THE% = IN-IN-IN THE- IN YOUR EXPERIENCE IS THAT AT ALL TRUE THAT SCOTTISH PEOPLE ARE JEALOUS OF ENGLISH PEOPLE? ## <X T-6-R2>YES=BUT ANY GOVERNMENT NEEDS MONEY, RIGHT? # (CUF) WELL THIS = THIS ASSEMBLY WOULDN'T HAVE HAD = ANY POWER=TO RAISE MONEY, RIGHT? (CUF) # SO THAT WAS ONE OF THE THINGS ABOUT IT THAT SOME PEOPLE MIGHT HAVE THOUGHT ABOUT # THERE'S NO POINT IN HAVING AN ASSEMBLY UNLESS IT HAS=REAL FOWER AND IT HAS TO=TO HAVE ITS OWN MONEY 13C HAS TO RAISE ITS OWN MONEY, 13C HAS TO GETS ITS OWN MONEY,# THERE'S ANOTHER THING ABOUT IT ## <x T-6-93>WELL, I THINK THAT THERE\*LL ALWAYS BE ERM SOMETHING PECAUSE IT= IT'S NOT AIMED AT INTERNATIONAL POLITICS- THAT IS BEING LEFT TO THE=THE WHOLE OF GREAT BRITAIN AT THE MOMENT # =UHM IT'S ONLY FOR HOME=AFFAIRS=(MLG) FOR MATTERS WHICH CONCERN PEOPLE LIVING IN THIS COUNTRY THAT=DEVOLUTION WAS REALLY=UHM AN IMPORTANT ISSUE # NO, INTERNATIONAL AFFAIRS, AT THE MOMENT, SEEM AS THOUGH THEY WOULD ALWAYS BE=DONE FROM LONDON# AND YOU WOULD HAVE SCOTTISH REPRESENTATIVES FOR THAT AS WELL, BECAUSE=WHAT THE WHOLE COUNTRY DOES WILL ALSO AFFECT THE FARTS-ALL THE PARTS OF THE COUNTRY, NOT JUST SCOTLAND, BUT ALL=THE REST=OF THE BRITISH ISLES # ANYWAY IT'S INTERESTING TO KNOW THAT YOU WERE SURPRISED BY THE RESULT AND THAT YOU IN SOME <P 15> WAYS FEEL THAT=IT WAS =% THAT SCOTLAND HAS PERHAPS THROWN ITS CHANCE AWAY # I DGN\*T THINK IT HAS(CTT) SPECIALLY=BUT IF YOU CONSIDER IT TO BE LIKE # YCU THAT THINK IT IS A DEAD ISSUE NOW. IT'S FINISHED WITH= OR NOT? ## <7 4> TIGELP <x T-10(E)-18> YES, BUT ONE THING WHICH WOULD NOT BE

SEPARATE = AND THIS IS IMPORTANT = FOREIGN POLICY = WOULD NOT BE SEPARATE # YOU UNDERSTAND WHAT I MEAN BY FOREIGN POLICY? (CUF)THAT MEANS IF = IF ENGLAND WANTS TO SAY THEPE WILL <P 6> <X T-10(E)-18> BE WAR WITH = JAPAN AND% = # SCOTLAND HAS TO DO THE SAME(MLG) = THERE IS NO DIFFERENCE = IN

FOREIGN POLICY # THE ONLY DIFFERENCE IS IN = ER DOMESTIC = (WBE) = DOMESTIC AFFAIRS YOU UNDERSTAND? (CUF) <X T-10(E)-23> WELL ALRIGHT BECAUSE% = (LIH)OK LOOK, BECAUSE = IN SEVENTEEN\*FORTY = FIVE\* = THE PARLIAMENT IN LONDON PASSED LAWS = YOU UNDERSTAND? (CUF) ## THE LAWS SAID = YOU MUST NOT WEAR THE KILT = # YOU <x T-10(E)-23A> MUST NOT SPEAK = GAELIC = THE SCOTTISH LANGUAGE = (MLG)YOU MUST NOT = COME(EXPANSION) TOGETHER = IN MORE THAN THREE PEOPLE = # YOU MUST NOT = ORGANIZE YOURSELVES # <X T-10(E)-24> ALLRIGHT, YES. ALLRIGHT # YOU MUST DO WHAT WE TELL YOU = # WE NOW WILL <P 8> <X T-10(E)-244> GIVE YOU = THE LAWS WHICH WE SAY = ALLRIGHT? (CUF) # THAT WAS THE FIRST REASON = OK? (CUF) THE FIRST REASON WAS THAT THERE WAS NO POSSIBILITY = TO ORGANIZE PEOPLE = BECAUSE YOU COULD NOT SPEAK YOUR LANGUAGE = # YOU COULD NOT COME TOGETHER = # AND BECAUSE THERE WERE SOLDIERS = ALL OVER = THE HIGHLANDS OF SCOTLAND(RECAP) = ALLRIGHT? (CUF) # THEY STOPPED YOU = THEY % YOU WERE PUNISHED IF YOU = DIDN T = FOLLOW THE LAW # THEN THERE WAS ANOTHER REASON: AFTER SEVENTEEN FORTY = FIVE = THAT IS THE FERIOD = OF THE BEGINNING = OF = (WBO)AND I SAY IT = VERY CAREFULLY = ENGLISH IMPERIALISM = # NOW, = THAT WAS THE PERIOD = WHEN AMERICA. CANADA, (SF; MHM) THEN NEW ZEALAND AND AUSTRALIA = AND ALL THE NEW COUNTRIES = WHERE THEY NOW SPEAK ENGLISH = ALLRIGHT? (CUF) = THAT WAS THE PERIOD WHEN = LONDON = BEGAN TO SEND PEOPLE = AND TO SUGGEST THAT PEOPLE WENT TO THE COLONIES # <P 9> <X T-10(E)-24B> NOW = WHAT HAPPENED? # DO YOU KNOW WHO WENT TO AUSTRALIA? # ESS:NOJ DO YOU KNOW WHO WENT TO AUSTRALIA? ALL THE PRISONERS(WBB) <X T-19(E)-24C> UHUH! ALL THE CONVICTS FROM LONDON = WENT TO AUSTRALIA # AND DO YOU KNOW WHO WENT TO CANADA? # I'LL TELL YOU(WBB)ALL THE PEOPLE = NOT ALL THE PEOPLE BUT = A LOT OF THE PEOPLE = FROM THE HIGHLANDS OF SCOTLAND # WHY? BECAUSE = LONDON DECIDES: IT IS IMPORTANT FOR US TO HAVE SHEEP IN THE HIGHLANDS = SHEEP = FOR WOOL = THAT'S WHY SCOTTISH WOOL IS GOOD # ALLPIGHT? (LAUGHS)(CUF)IT'S IMPORTANT UH US% FOR US TO HAVE SHEEP AND BECAUSE WE WANT THE SHEEP = WE WANT THE LAND = AND SO THE PEOPLE WHO ARE ON THE LAND = MUST GO # AND <P 1 (> <X T-10(E)-24C> SO THE PEOPLE WHO WERE ON THE LAND = HAD THEIR HOUSES BURNT = AND THEY WERE PUT ONTO SHIPS = AND THEY WERE SENT = TO CANADA = ALLRIGHT? (CUF) # 13A TO CANADA AND TO NOPTH AMERICA, MAINLY = TO CANADA # SO THAT UNTIL = THE END OF THE NINETEENTH CENTURY = YOU THE TH- THE ENGLISH GOVERNMENT WERE TRYING TO = SEND PEOPLE AWAY = YOU UNDERSTAND? (CUF) # AND THEREFORE 2E PEOPLE WERE GOING = BECAUSE THE LAND WAS POOR AND THEY HAD NO LAND = BECAUSE THE LAND WAS TAKEN FROM THEM # AND = BECAUSE = EVERYTHING GOT POORER AND POORER AND FOORER = ALLPIGHT? (CUF) # AND THE HIGHLANDS ARE STILL VERY FOOR = VEFY POOR INDEED- SOME PARTS OF THE HIGHLANDS IF

YOU'VE BEEN THERE OK? (CUF) # AND THAT IS THE REASON = BECAUSE 2E PEOPLE ONLY NOW = ARE A LITTLE BETTER = AND CAN = ORGANIZE THEMSELVES = AND BECAUSE 2E OF = COMMUNICATIONS, TELEVISION, RADIO ALLRIGHT? (CUF) # WHEN PEOPLE ARE = SEPARATE AND DON'T KNOW WHAT'S GOING ON. THEY DON'T ARGUE AMONGST THEMSELVES = # YOU <P 11> <X T-10(E)-24D> UNDERSTAND? (CUF)YES MAKTAB WHAT IS IT? # # <X T-10(E)-28> I AGREE, YES (WBB)FORTY- FOUR PERCENT DIDN'T VOTE # = NOW DO YOU THINK THAT THE FORTY- FOUR PEPCENT DIDN\*T VOTE BECAUSE THEY WANTED "NO" OR BECAUSE THEY WEREN .T SUFE? # <P 12> <X T-10(E)-29> THEY WEREN\*T SURE = YES # AND A LOT OF PEOPLE = I KNOW = VOTED LIKE THAT = BECAUSE% = NOT BECAUSE THEY DIDN T WANT = DEVOLUTION = BUT BECAUSE THEY DIDN\*T LIKE THE ACT = YOU UNDERSTAND? (CUF) # DIFFERENCE = BECAUSE YOU WERE VOTING ON (WOBB) THE ACT = WHICH = THE GOVERNMENT = WANTED = TO BECOME LAW = # THEY DIDN'T LIKE THE ACT = BUT THEY STILL WANT = DEVOLUTION - YOU UNDERSTAND? (CUF) # THERE'S A- THERE'S A SLIGHT DIFFERENCE HERE = BUT = THAT'S NOT ALL OF THEM = THAT'S ONLY SOME OF THEM # YES, FARID, YES ## <X T-10(E)-38> SCOTLAND YES YES BECAUSE I THINK THAT IS VERY IMPORTANT AND WILL STOP # THIS IS = THE MAIN REASON WHY THIS HAS HAPPENED NOW, AND THAT ANSWERS MARIAN'S QUESTION, I HOPE, IS THAT = FOR INSTANCE WHEN I WAS AT SCHOOL = RIGHT? = (CUF)<P 15> <X T-10(E)-38> EVERYTHING SCOTTISH = WE THOUGHT EVERYTHING SCOTTISH WAS BAD(WOB) # THIS THIS = THIS WAS ONLY TWENTY YEARS AGO = # EVERYTHING WE HAD A SENSE OF-YOU UNDERSTAND (CUF) = A FEELING (MLG) THAT = WE WEREN'T = VERY GOOD OR VERY INTELLIGENT OR VERY ANYTHING = BUT EVERYTHING THAT WAS ENGLISH WAS VERY VERY GOOD # (?) AND THIS IS = PSYCHOLOGICAL(MLG)THIS IS IN THE MIND, OK? (CUF) # THAT IS WHY I SAY TO YOU THAT = I LEARNT ENGLISH LIKE YOU = AS A FOREIGN LANGUAGE = BECAUSE = TWO HUNDRED YEARS AGO = ENGLISH WAS NOT THE LANGUAGE OF MY FAMILY = YOU UNDERSTAND? (CUF) # MY FAMILY TWO HUNDRED YEARS AGO DID NOT SPEAK ENGLISH (RESTATE)OKAY? (CUF) # SO I LEARNED ENGLISH = BECAUSE I HAD TO LEARN ENGLISH BECAUSE IT WAS IN SCHOOL = BUT REALLY I DON'T THINK IT IS MY LANGUAGE ##

<2 8> T13ELP

<P 1>

<X T-13(E)-1> PIGHT # NOW THEN # I SUPPOSE YOU ALL SAW IN THE NEWSPAPERS LAST WEEK THAT ALL THE SCOTTISH PEOPLE HAD TO = VOTE IN AN ELECTION, LIKE AN ELECTION, OK? (CUF) #IT WAS CALLED A REFERENDUM AND IT WAS ABOUT = DEVOLUTION OK?(CUF) DEVOLUTION #BECAUSE = IN THIS COUNTRY WHICH IS CALLED GREAT BRITAIN WE HAVE ENGLAND, IRELAND, SCOTLAND AND WALES, OK? (CUF)AND THE GOVERNMENT

IS IN = LONDON #THE GOVERNMENT OF ALL GREAT BRITAIN IS IN LONDON, OK? (CUF) # BUT = THE WELSH PEOPLE. THE IRISH PEOPLE AND THE SCOTTISH PEOPLE WANT TO HAVE GOVERNMENTS IN THEIR COUNTRIES, SEPARATE GOVERNMENTS WHICH ARE SPECIALLY, ESPECIALLY FOR =UHM SCOTTISH = PUSINESS OR IRISH BUSINESS OR WELSH BUSINESS #AND SOME PEOPLE FEEL VERY = ANGRY THAT THE GOVERNMENT IN LONDON DOESN'T DO ANYTHING FOR THE PEOPLE IN SCOTLAND # THEY THINK THAT THE GOVERNMENT IN LONDON FORGETS ABOUT PEOPLE IN SCOTLAND, JUST AS IF THEY WEREN T THERE, OK? (CUF) # AND NOW, BECAUSE OF ALL THE OIL -YOU KNOW THE OIL? (CUF) - THAT'S BEEN COMING IN = FROM ABERDEEN ALL ALONG THE COAST OF THE NORTH SEA (SBI) <X T-13(E)-2> YEAH IN THE NORTH SEA - SCOTLAND IS EEGINNING TO FEEL QUITE = IMPORTANT AND SCOTLAND HAS GOT SOME MONEY #SO THE S - SCOTTISH PEOPLE WANT TO BE ABLE TO SAY: "WE WANT TO DO THIS WITH OUR MONEY #OR WE WANT TO BUILD A FACTORY WITH OUR MONEY # OR WE WANT TO = HAVE NEW HOSPITALS WITH OUR MONEY" # BUT NOW ALL THE MONEY FROM THE OIL GOES DOWN TO LONDON - TO THE GOVERNMENT IN LONDON # AND IT'S THE GOVERNMENT (NUP) <P 2> IN LONDON WHO DECIDE WHAT HAPPENS IN SCOTLAND = YOU SEE?# (CUF) # SO =OVER THE LAST =THREE YEARS IN PARLIAMENT = THEY HAVE BEEN DISCUSSING = DEVOLUTION # AND "DEVOLUTION"MEANS(MLG) TO = % INSTEAD OF HAVING ALL THE GOVERNMENT IN ONE PLACE WHICH IS A CENTRAL. A CENTRAL GOVERNMENT, THEY WANT TO HAVE === BRANCHES, DIFFERENT PARTS OF THE GOVERNMENT, ONE IN SCOTLAND FOR EXAMPLE AND ONE IN WALES # D YOU SEE? (CUF) # AND THAT'S CALLED "DEVOLUTION" ## (MLG) <X T-13(E)-3> YES. TO SEPARATE % NOT TO SEPARATE THE COUNTRIES COMPLETELY. NOT TO SAY THAT THIS IS A DIFFERENT COUNTRY FROM ENGLAND, AND "BUT% TO KEEP THE UNITED KINGDOM OF GREAT BRITAIN TOGETHER = BUT TO GIVE = SCOTLAND AND WALES SOME POWER = SOME, SOME, SOME = CONTROL, SO THEY CAN CONTROL = THEIR OWN BUSINESS, YOU SEE? (CUF) # SO ANYWAY THEY = SPENT ABOUT FOUR YEARS, THREE OR FOUR YEARS IN PARLIAMENT DISCUSSING IT, THIS AND CHANGING IT AND TALKING ABOUT IT AND ON AND ON AND ON AND ON #AND EVENTUALLY, THEY DECIDED TO HAVE A REFERENDUM AND A REFERENDUM IS WHAT YOU HAVE IN SWITZERLAND, ISN'T IT REGINA? # A "REFERENDUM" IS THAT = ALL THE PEOPLE IN THE COUNTRY VOTE \*YES\* OR \*NO\*,(MLG) = OK? (CUF) # IN FACT -SO IN COUNTRIES LIKE SWITZERLAND = YOU DO THIS ALL THE TIME. DON'T YOU? # # <x 1-13(E)-4> THERE'S NO -THE P -THE -THF THE PARLIAMENT DOESN'T DECIDE THE LAW, THE PEOPLE IN SWITZERLAND DECIDE THE LAW (NUP) # AND EVERY TIME =UHM THE GOVERNMENT WANTS TO CHANGE A LAW IT MUST ASK THE PEOPLE = AND ALL THE PEOPLE VOTE "YES" OR "NO" # <P 3> THIS ISN'T THE SYSTEM IN BRITAIN. IN BRITAIN WE DON'T HAVE THAT SYSTEM USUALLY, BUT FOR THIS = SUBJECT "DEVOLUTION", = THE GOVERNMENT DECIDED TO ASK THE PEOPLE, CK? (CUF) # TO ASK THE PEOPLE WHAT THEY THOUGHT, NOT TO ASK THE = THE PEOPLE IN THE GOVERNMENT, NOT TO ASK THE FRIME MINISTER AND THE M% =AND

THE MPS, BUT TO ASK THE PEOPLE WHAT THEY THOUGHT # AND THE SAME IN WALES: ON THE SAME DAY THERE WAS A - A REFERENDUM AND PEOPLE HAVE TO GO AND = VOTE, HAVE TO WRITE DOWN "YES" OR "NO" (MLG) # "YES" IF THEY WANTED = DEVOLUTION AND \*NO\* IF THEY DIDN T WANT DEVOLUTION (NUP) OK? (CUF) # AND THE SAME IN WALES # BUT THE PROBLEM = REALLY = WAS THAT THEY NEEDED A VERY LARGE PERCENTAGE = OF VOTERS TO SAY \*YES\* BEFORE THEY COULD PASS THE BILL # YOU ALL KNOW WHAT A PERCENTAGE IS, DON'T YOU? (CUF) # <x T-13(E)-5> FOR EXAMPLE = (WBB) & HUNDRED - THAT'S A HUNDRED PERCENT, OK? (CUF) # BUT THE - THE GOVERNMENT SAID THAT IN SCOTLAND THERE MUST BE (WBB) FORTY PERCENT OF THE POPULATION, FORTY PERCENT OF ALL THE PEOPLE WHO CAN VOTE. CK? (CUF) = HAD TO VOTE "YES". === OK? (CUF)# THEY WANTED FORTY PERCENT OF THE PEOPLE TO VOTE \*YES\* # IF, SAY, THIRTY - NINE PERCENT(WBB) OF THE PEOPLE VOTED "YES" THEN = IT WOULD BE = IT WOULD BE FINISHED -THERE WOULD - THERE WOULD NOT BE DEVOLUTION . CK? (CUF) # FOR DEVOLUTION TO HAPPEN YOU HAD TO HAVE FORTY PERCENT VOTING "YES" AND IT WASN'T = % # YOU KNOW IN A COUNTRY YOU HAVE SOMETHING WHICH IS CALLED "AN ELECTORATE" # (WBB) NOW IN ANY COUNTRY, AN ELECTORATE. OR AN ELECTORAL ROLE. ARE ALL THE PEOPLE WHO ARE GUALIFIED TO VOTE IN AN ELECTION (MEG) # AND IN THIS COUNTRY = TO QUALIFY TO <P 4> VOTE IN AN - IN AN ELECTION YOU MUST BE =OVER =EIGHTEEN YEARS OLD AND YOU MUST LIVE = IN THE = IN THE - IN THE COUNTRY = OF THE ELECTION, OK? (CUF) # YOU MUST BE EIGHTEEN YEARS OLD # SO OF ALL THE PEOPLE IN SCOTLAND WHO WERE OVER EIGHTEEN, THEY HAD TO HAVE FORTY PERCENT OF THOSE PEOPLE VOTING "YES", WHICH IS A LOT OF FEOPLE, REALLY, OK? (CUF) # BECAUSE USUALLY = WHEN THERE IS AN ELECTION ONLY SAY =SEVENTY = (WBB) SEVENTY PERCENT OF THE = SEVENTY PERCENT OF THE ELECTORATE ACTUALLY VOTE # SOME PEOPLE = WHEN THERE IS AN ELECTION THEY - THEY SIT AT HOME AND WATCH THE TELEVISION # THEY ARE NOT INTERESTED # DO YOU SEE WHAT I MEAN? (CUF) ## <X T-13(E)-6> I MEAN, YOU DON'T HAVE TO VOTE # IF YOU DON'T WANT TO VOTE, THEN YOU CAN SIT AT HOME AND = WATCH THE TELEVISION OR GO OUT TO THE CINEMA # NOT EVERYBODY VOTES.YOU SEE # ANYWAY.IN THE END THEY DIDN'T HAVE FORTY PERCENT # THERE WAS NOT FORTY PERCENT OF THE PEOPLE = THERE WASN T A FORTY PERCENT VOTE OF "YES" OK? (CUF)# SO NOW =IT'S A V - IT'S A VERY.VERY DIFFICULT SITUATION BECAUSE IT WAS NEARLY FORTY PERCENT, THE DIFFERENCE WAS NOT VERY BIG # = BUT UHM =THE - THE - THE IN LONDON THE GOVERNMENT SAYS: "WE SAID FORTY PERCENT AND YOU PIDN T GET FORTY PERCENT SO - NO" # BUT THE = POLITICAL PECPLE IN SCOTLAND SAY "WELL, COME ON, YOU KNOW IT WAS NEARLY FORTY PERCENT AND MOST OF THE PEOPLE IN SCOTLAND WANT DEVOLUTION" # SO THIS IS = A BIG PROBLEM FOR THE PRESIDENT% FOR THE PRIME MINISTER, OK? (CUF) # THE FRIME MINISTER IN = UH ## (SBI) <P.5> <X T-13(E)-6A> IN LONDON YES # BUT I WONDERED IF ANY OF YOU ER = WHAT% DO YOU - DO YOU THINK THAT THE PEOPLE OF

SCOTLAND WANT DEVOLUTION OR DO YOU THINK THEY DON®T WANT IT? = # WHAT DO YOU

THINK? === HAS ANY - ANY OF YOU EVER TALKED TO ANY = UHM SCOTTISH PEOPLE ABOUT IT?##

<X T-13(E)-23> SO IT\*S% YEAH, WELL I SEE WHAT YOU MEAN, SO YOU THINK THAT UHM THI% WELL THIS IS EXACTLY HOW SCOTLAND FEELS # IT FEELS THAT IT IS BEING NEGLECTED. THAT UH THAT WHILE IN ENGLAND YOU HAVE BIG FACTORIES AND INDUSTRY AND = THERE IS % =UHM =PEOPLE HAVE JOBS, HERE IN SCOTLAND THERE IS = UNEMPLOYMENT, AN AWFUL LOT OF UNEMPLOYMENT, PEOPLE WITHOUT JOBS, (MLG) BECAUSE =THE GOVERNMENT IN LONDON HAS NOT THOUGHT ABOUT SCOTLAND # AND THEY SAY "OH WELL SCOTLAND, YES, WELL WE'LL TALK ABOUT SCOTLAND TOMORROW AND THEN THEY TALK ABOUT, WELL WE'LL TALK ABOUT SCOTLAND NEXT WEEK" # THE SCOTTISH PEOPLE FEEL THAT # DO YOU UNDERSTAND? (CUF) ## <X T-13(E)-24> THEY FEEL THAT UH = THAT IN LONDON THEY ARE ONLY INTERESTED THAT THE PU% = THE B% THE = GOVERNMENT IN LONDON IS INTERESTED IN ENGLAND AND MAYBE WALES AND IRELAND BUT NOT IN SCOTLAND =# AND SO THEY WANT TO BE A LITTLE BIT INDEPENDENT # THEY WANT TO BE INDEPENDENT OF ENGLAND # THEY WANT TO HAVE THE POWER TO DECIDE THEIR OWN = BUSINESS # DO YOU SEE WHAT I MEAN? (CUF) # THEY WANT TO BE ABLE TO - THE <P 9> SCOTTISH PEOPLE SAY THAT THEY WANT TO BE ABLE TO -WHAT IS GOOD FOP THEM # NOT = PEOPLE IN DECIDE = ENGLAND DECIDE WHAT IS GOOD FOR THEM # BUT DOES = DOES ANYBODY KNOW WHAT THE POWERS OF THE% DO YOU KNOW WHAT THE NAME OF THE = GOVERNMENT IN = IT WAS GOING TO BE EDINBURGH # DO YOU KNOW WHAT IT WAS CALLED? # = DO YOU KNOW WHAT IT WAS GOING TO BE CALLED? # = NO? # DO YOU NOT READ THE NEWSPAPERS? ## <X T-13(E)-25> IT WAS GOING TO BE CALLED AN ASSEMBLY, THE SCOTTISH ASSEMBLY # DO YOU REMEMBER. REGINA? #YOU REMEMBER THAT? # BUT THE POWERS OF THE SCOTTISH ASSEMBLY WERE GOING TO BE VERY =LIMITED. =VERY LIMITED = SO THAT THEY COULDN'T DEC% THEY COULD ONLY DECIDE CERTAIN THINGS = FOR SCOTLAND # = YOU KNOW THEY COULD ONLY DECIDE ABOUT ER = EDUCATION AND ER UHM = TN GENERAL, THEY HAD TO DO THE SAME AS THE LONDON GOVERNMENT = BUT THEY WOULD HAVE MORE LOCAL POWER, # THEY WOULD HAVE MORE POWER TO DECIDE ABOUT LOCAL THINGS # DO YOU SEE WHAT I MEAN? (CUF) # IT WOULD HAVE MORE POWER TO DECIDE ABOUT THE OIL, # IT WOULD HAVE MORE UHM = THEY WOULD BE ABLE TO DECIDE ABOUT = BUILDING A FACTORY = IN SCOTLAND = WITHOUT HAVING TO ASK THE PEOPLE IN UHM =## (LIH) <X T-13(E)-47> BECAUSE I THINK = WHEN % PEOPLE SAID

"OH WELL, YOU KNOW IF - IF YOU HAVE A - A GOVERNMENT IN SCOTLAND YOU HAVE TO PAY MORE MONEY TO PAY THE PEOPLE TO WORK IN THE OFFICES" #DO YOU SEE WHAT'I MEAN? # (CUF)TO - TO WORK IN THE OFFICES, TO DO ALL THE ADMINSTRATION # BUT I THINK THAT ER OK MAYBE THAT IS TRUE BUT UHM =I THINK THAT SCOTLAND IS ER = IS VERY = NEGLECTED BY THE BRI% THE ENGLISH PARLIAMENT # I THINK IT IS TRUE #I THINK THAT THEY - = YOU KNOW THEY ARE A LONG WAY AWAY AND PEOPLE FORGET ABOUT THEM # I THINK

THAT THE - THE BRITISH, THE - THE PARLIAMENT IN ENGLAND TENDS TO FORGET ABOUT THEM #THERE IS =MORE A B% LARGER PERCENTAGE OF UNEMPLOYMENT IN SCOTLAND THAN ANYWHERE IN THE WHOLE OF BRITAIN # IRELAND, ENGLAND = IRELAND, WALES LESS UNEMPLOYMENT AND ENGLAND HAS = THAN SCOTLAND # DO YOU -DO YOU UNDERSTAND WHAT I MEAN ?# (CUF) THAT THERE ARE MORE PEOPLE IN SCOTLAND WHO HAVE NO JOBS, WHO CANNOT FIND WORK, THAN THERE ARE IN ENGLAND = AND WALES BECAUSE SCOTLAND IS NOT = THERE ISN'T - THERE IS NOTHING! ##I MEAN YOU LOOK AT A MAP OF SCOTLAND AND YOU SEE ABOUT THREE OR FOUR = CITIES, BIG CIT% EDINBURGH, GLASGOW, ABERDEEN AND - AND THEN = THERE'S NOTHING # THERE'S JUST THE HIGHLANDS. THERE'S ALL UP. COUNTRYSIDE, THERE'S NOTHING ON IT, THERE'S NO ANIMALS ON IT, THERE'S NO INDUSTRY, THERE'S NOTHING. AND THEN YOU GO UP JUST NOTHING # NORTH, THEN YOU HAVE ALL THESE LITTLE ISLANDS, WITH SMALL FISHING INDUSTRY AND = THE OIL NOW COMING IN OFF ABERDEEN BUT YOU .VE A THIRD OF # = THERE'S <P 16> BEEN NO MONEY = THE THE PARLIAMENT IN ENGLAND HAS NOT SPENT ANY MONEY ON SCOTLAND #DO YOU SEE WHAT I MEAN? # BUT SCOT - THE SCOTTISH PEOPLE HAVE TO (CUF) PAY THE SAME TAXES AS THE ENGLISH PEOPLE AND YET IN ENGLAND = IF THEY DO = THEN, THEY HAVE TO PAY THE SAME # I MEAN I PAY HERE EXACTLY THE SAME AMOUNT OF TAX AS I PAID WHEN I WAS WORKING IN ENGLAND, JUST THE SAME # AND YOU HAVE TO PAY THE SAME - THE SAME AMOUNT OF MONEY TO GO TO SCHOOL AND ER = TO TO BUY # EDINBUPGH I THINK IS ONE OF THE MOST EXPENSIVE CITIES AFTER LONDON BECAUSE ER WHEN I CA -FIRST CAME HERE, I WAS VERY VERY SURPRISED HOW EXPENSIVE EDINBURGH IS AS A CITY TO LIVE IN ## <X T-13(E)-48> IT\*S THE SAME AS LONDON (TSWC) # LONDON\*S EX -WELL, OK, LONDON'S EX -## (SBI) <X T-13(E)-49> THE SAME YES # YES EXACTLY BECAUSE THERE ISN'T = YOU KNOW THERE - IT'S ONE I MEAN -IT'S THE PROBLEM OF = SUPPLY AND DEMAND # THERE IS A - A LIMITED NUMBER OF ER = HOUSES, FOR EXAMPLE IN EDINBURGH AND THERE ARE MANY PEOPLE WHO WANT TO LIVE IN EDINBURGH SO THE = UP - THE PRICE GOES UP # BUT IT IS VERY EXPENSIVE HERE AND I THINK THAT UH = = I DON\*T =YOU KNOW I THINK I THINK THAT UHM THE IT \* S = BRITISH GOVERNMENT THINK THE SCOTTISH PEOPLE ARE THE SAME AS THE ENGLISH PEOPLE AND THAT THE ENGLISH FEOPLE ARE THE SAME AS THE WELSH PEOPLE. <P 17> THAT WE ARE ALL THE SAME SORT OF PEOPLE, BUT WE ARE NOT AT ALL # AND I THINK THAT SCOTTISH PEOPLE ARE VERY VERY DIFFEFENT FROM ENGLISH PEOPLE IN THE SAME WAY THAT GERMAN FEOPLE ARE DIFFERENT FROM FRENCH PEOFLE AND THAT ER BASGLE PEOPLE ARE DIFFERENT FROM SPANISH PEOPLE THEY ARE DIFFERENT = I MEAN THE% # PEOPLE TALK ABOUT IRELAND AND THE PROBLEMS IN IRELAND AND THEY DON'T UNDERSTAND BECAUSE THEY THINK "I DON'T UNDERSTAND BECAUSE IF IT WAS ME I COULDN'T = DO THESE THINGS" # BUT THEY DON'T UNDERSTAND THAT IRISH PEOPLE ARE = DIFFERENT FROM ENGLISH PEOPLE # THEY HAVE A DIFFERENT HISTORY, =THEY HAVE A DIFFERENT CULTURE, THEY

HAVE DIFFERENT TRADITIONS # THE SCOTTISH PEOPLE HAVE A DIFFERENT HISTORY = THAN ENGLAND. THEY HAVE DIFFERENT IDEAS, THEY HAVE DIFFERENT WEATHER, THEY HAVE DIFFERENT COUN% UHM ENVIRONMENT, THEY HAVE DIFFERENT COUNTRYSIDE = AND ER THEY ARE JUST DIFFERENT # AND I THINK THAT IF YOU ARE GOING TO ER = IF YOU\*RE GOING TO % I THINK IT IS BETTER = THAT PEOPLE SHOULD BE DIFFERENT # I MEAN IT WOULD BE AWFUL BORING IF EVERYBODY IN THE WORLD WAS THE SAME. I MEAN, NOT INTERESTING AT ALL (MLG) # AND I THINK THAT THE DIFFERENCES BETWEEN THE ENGLISH = AND ER = AND THE SCOTTISH, AND THE ENGLISH AND THE IRISH ARE IMPORTANT AND WE SHOULD KEEP THE DIFFERENCES BUT AT THE SAME TIME KEEP =UNDERSTAND THAT THEY ARE DIFFERENT # AND WHEN =WHEN GOV% WHEN THE GOVERNMENT IN ER = IN ENGLAND = MAKES A LAW, PASSES A LAW, THAT LAW IS FOR ALL THE COUNTRY, FOR ENGLAND, IPELAND, SCOTLAND AND WALES RIGHT? (CUF) # AND UH THEY DON T THINK THAT MAYBE = <P 18> YOU COULD CHANGE IT A LITTLE BIT TO SUIT SCOTLAND TO = UHM TAKE SOMETHING OUT OR TO ADD SOMETHING WHICH WOULD BE BETTER FOR THE IRISH PEOPLE. IT'S JUST = FOR EVERYBODY # AND THEY DON \*T. THEY DON \*T UNDERSTAND THAT FEOFLE ARE DIFFERENT HERE # SCOTLAND NEEDS SPECIAL = THINGS: IT NEEDS SPECIAL LAWS, IT NEEDS MORE =MONEY, IT NEEDS MORE INDUSTRY. IT NEEDS MORE JOBS # THERE IS =I MEAN SCOTLAND ALTHOUGH THE WEATHER IS PRETTY HOPRIBLE (FS LAUGHS) (???)ENJOY, I MEAN FOR TOURISTS, THERE ARE MANY TOURISTS COME TO EDINBURGH IN THE FESTIVAL IN THE SUMMER TIME # EDINBURGH IS JUST FULL REALLY OF TOURISTS, TOURISTS, TOURISTS EVERYWHERE! # AND ER =YOU KNOW IF - IF THE GOVERNMENT SPENT MORE (KNOCK ON DOOR) MONEY = THEY COULD MAKE = AN INDUSTRY FROM = FROM TOURISM REALLY ## EI THINK IT'S STOPPED ACTUALLY] (TO INTERVIEWER WHO'D JUST COME IN)

#### <Z 9> TIINTP

<X T-1(I)-5> ARMANDO, WELL HE SAYS CALL - HIM ARMANDO ER HE IS DOING RESEARCH AT THE UNIVERSITY AND ER HE IS FINDING OUT THE RELATIONSHIP [ER IS THIS THE THE IDEA?] OF THE - THE CLASS TO TEACHER AND HOW DISCUSSIONS GO, HOW THE LANGUAGE IS USED. ALL THIS TYPE OF THING # EIS THAT A CORRECT PICTURE ARMANDO. I'M GIVING?] AND HE IS GOING NOT ONLY TO ASK, WE ARE NOT SPECIAL, SO DON'T THINK THAT YOU ARE ANYTHING IN PARTICULAR # YOU'RE JUST ONE OF ALL THE OTHER CLASSES # (ALL LAUGH) <P 2> S0 HE IS GOING ROUND THE DIFFERENT CLASSES AND = TAPING = TO = YOUR VOICES AND MY VOICE. THE TEACHERS. VOICES AND GETTING AN ER AN IDEA OF THE USE OF THE LANGUAGE, HOW THE STUDENTS REACT, HOW THE TEACHER \*PEACTS, HOW THE STUDENTS REACT TO SOMETHING THE TEACHER SAYS AND SO CN # THIS TYPE OF THING # PURELY FROM THE POINT OF VIEW OF LANGUAGE = REALLY # NOT, NOT TO CRITICISE YOUR - YOUR ## (SBI) <X T-1(I)-19> WELL, WHY SHOULD IT% LONDON IS THE CAPITAL

CITY OF BRITAIN = # YOU SEE IF YOU THINK OF YOURSELF AS BRITAIN, THEN YOU DON'T HAVE ANY FEELING OF DOMINATION OF ENGLAND # YOU SEE THIS IS ER THIS IS SOMETHING THE SCOTTISH NATIONALISTS HAVE BEEN = PUSHING LET US SAY. AS NATIONALISTS ALL OVER THE WORLD ARE ALWAYS DOING # THEY ARE CREATING = A- A- A STATE OF UHM MIND FOR THE PEOPLE == WHICH REALLY HAS NOT EXISTED PERHAPS # THERE ARE A FEW PEOPLE WHO SAY 'OH YES. WE SHOULD' THIS. THAT AND THE OTHER = THAT- THAT THEY ARE DOMINATED = THESE ARE NATIONALISTS # NOW THE NATIONALISTS ARE A SMALL MINORITY # NOW = HOW MANY OF YOU SAW THE RESULTS OF THE DEVOLUTION REFERENDUM? ## <X T-1(I)-39> YOU SEE HAVE YOU BEEN TO LIVERPOOL? # HAVE YOU BEEN TO SOME OF THE PLACES WHERE THERE WERE THE-MINES? (CMLG) # WHERE THERE WERE BIG FACTORIES = WHICH HAVE HAD TO CLOSE DOWN? # = YOU SEE THIS IS THE THING. = I MEAN PEOPLE ARE ALWAYS % IN SCOTLAND TOO, THEY PE ALWAYS SAYING: "OH CLYDEBANK, IT'S - IT'S SO DERE(LICT) -BUT THERE ARE PLACES IN ENGLAND, ALSO, YOU SEE = THAT ARE HAVING THESE PROBLEMS # LIVERFOOL IS HAVING A VERY BIG PROBLEM # ANOTHER POINT IS = ER HAVE - ER DO ANY OF YOU THINK % WHY IS THIS? # DO ANY OF YOU HAVE ANY THOUGHTS = OR = WHAT IS THE REASON FOR THIS? #=== WHY IS THERE SO MUCH = PERHAPS UNEMPLOYMENT IN GLASGOW? # NOW YOU SEE GLASGOW WAS A VERY BIG = SHIPBUILDING = CITY # IT DEPENDED% MUCH OF THE LABOUR FORCE WAS IN THE SHIPBUILDING YARDS = NOW = ANY IDEAS ON THIS? # <X T-1(I)-42> BECAUSE THEY GET ON WITH IT AND THEY DO IT # WHAT HAPPENED AT CLYDESIDE WAS = THEY WERE% THEY HAD THE ORDERS THEY WERE DELIVERING THEM TWO AND THREE YEARS LATE! # SO OF COURSE PEOPLE ARE NOT GOING TO ORDER SHIPS IF THEY ARE NOT GOING TO GET THEM DELIVERED ON THE DATE THAT IT'S PROMISED! # THIS I AM NOT SAYING IS THE WHOLE ANSWER DUT IT HAS A GREAT DEAL TO DO WITH IT # THEY WEPE GOING ON STRIKE, THEY WERE- THE THE TRADES% THE MEN WERE SAYING "THAT'S NOT MY JOB, THAT'S HIS JOB" # THIS BUSINESS WITH THE TRADE UNIONS NOT ALLOWING ONE MAN TO WORK, TO DC ANOTHER MAN'S WORK, SO WHAT HAPPENED?= # IT TOOK TWO MEN TO DO THE JOB THAT ONE MAN USED TO DO AND WHICH HE GOT ON WITH AND DID # SO OF COURSE JAPAN STEPPED IN, TOOK THE OPDERS AND FULFILLED THEM AND DELIVERED THEM ON TIME # THIS ORDER THAT CLYDESIDE GOT FROM POLAND = IT\*S BEEN SUBSIDISED BY THE GOVERNMENT #= THE GOVERNMENT PAID SO MUCH TOWARDS THAT POLISH ORDER (CMLG)(LAUGHS) SO THAT CLYDESIDE WOULD HAVE # (LIH) = THIS IS NO WAY = REALLY TO RUN A BUSINESS, LET'S FACE IT! # = ER<P 10> I MEAN I'M NOT UH S% RUNNING DOWN NATIONALISATION - I DON'T APPROVE OF IT MYSELF # I DON'T THINK NATIONALISATION IS A GOOD IDEA - BUT ONCE ER ANYTHING IS

NATIONALISED, IT JUST GOES BOOM! IT DROPS (CMLG) # THIS WAS PROVED IN FRANCE = THIS HAPPENED IN FRANCE = A LONG TIME AGO BEFORE THE WAR WHEN I WAS LIVING THERE # THIS HAPPENED, THERE WERE STRIKES, EVERY DAY THERE WEPE STRIKES FOR THIS AND STRIKES FOR THAT # THEY HAD NATIONALISED LOTS OF THINGS AND THE REST OF THE PEOPLE WERE - WERE NOT = ER PLEASED WITH IT, YOU SEE, THIS IS

HAPPENING # JAPAN HASN\*T NATIONALISED YET, HAS IT? ## <X T-1(I)-43> THAT\*S RIGHT, YES # THEY THEY- THERE ARE TO % THERE ARE = JOBS AND PEOPLE ARE GLAD TO HAVE THE JOBS # THEY CAN\*T JUST SAY "OH WELL WE\*LL GO ON STRIKE" # THEY KNOW THEY\*VE GOT TO KEEP THEIR JOB, THAT\*S REALLY IT # AND ER = WHAT WE REALLY WANT IS A HAPPY MEDIUM BETWEEN THESE TWO = BETWEEN THE - ON THE ONE HAND PEOPLE HAVING TO WORK AT LOW

<P 11> wAGES AND LONG HOURS AND PEOPLE = IN A
NATIONALISED INDUSTRY STRAIGHT LET'S FACE IT - LAZING
THROUGH THE DAY, AS MANY DO! ## (SBI)

<X T-1(I)-46> BECAUSE SO MANY ER = THINGS HAVE BEEN NATIONALISED # CUR RAILWAYS HAVE BEEN NATIONALISED # OUR = ER DOCKYARDS HAVE BEEN NATIONALISED # MOST OF CUR INDUSTRIES, THE STEEL INDUSTRY HAS BEEN NATIONALISED # THE MOTOR INDUSTRY = IS = HALF AND HALF, WE'RE POURING % = THE GOVERNMENT IS POURING MONEY - INTO LEYLAND AND GETTING NOTHING BACK FOR IT # THEY VE PUT MILLIONS OF POUNDS INTO LEYLAND AND THEY HAVE NOT HAD THAT MONEY BACK, YOU SEE? (CMLG) # SO THAT THIS IS FARTLY THE ANSWER ##

<X T-1(I)-53> IT- IT\*S A GENERAL THING ALL OVER THE WORLD; OF COURSE # AND HERE = THERE = APE MORE = OFPORTUNITY FOR PEOFLE TO = TO LET THEMSELVES BE HEARD # I-IN THIS COUNTRY THERE ALWAYS HAS BEEN THIS IDEA THAT PEOPLE CAN ER = ARE = I-INDEPENDENT THEY- THEY WANT% THEY ARE MORE INDIVIDUAL AND PARTICULARLY IN SCOTLAND # AND THIS IS GETTING BACK TO THE- THIS = ER FEELING OF UHM INDEPENDENCE # THE- THE SCOTS HAVE ALWAYS HAD THIS FEELING THAT THEY- THEY ARE INDIVIDUALS; THEY- THEY ARE APART YOU SEE AND = IT- IT CAN BE A GOOD THING BUT AGAIN IT CAN BE A BAD THING ## (SEI)

<X T-1(I)-59> YOU SEE THE% = NOW THAT'S ANOTHER FOINT # YOU SEE, THIS IS WHAT THE 'NO' PEOPLE ARE SAYING; THAT THERE WAS A LOT OF PUBLICITY PUT OUT BY THE 'YES' PEOPLE = SAYING IF YOU DON'T VOTE IT IS A 'NO' ANSWER # <X T-1(I)-59A> YOU SEE, # = SO THAT MANY SAID WELL, "I WON'T VOTE AND MY ANSWER IS 'NO'" # THIS ER = OF COURSE IS ER ## (SBI)

<X T-1(I)-64> YES NOW GOING BACK FROM THAT POINT- THAT THE PEOPLE = DIDN\*T KNOW = WHY DO YOU THINK THEY DIDN\*T KNOW? # IS THERE ANY REASON PERHAPS FOR THIS, APART FROM THE FACT THAT THEY DIDN'T FIND OUT? # THEY MAY HAVE BEEN WATCHING TV, THEY MAY HAVE BEEN READING PAPERS. THEY MAY HAVE BEEN LISTENING TO THE RADIC, THEY MAY HAVE BEEN LISTENING TO DISCUSSIONS, BUT MANY OF THEM, THEY DIDN'T KNOW = BECAUSE THEIR% THE GOVERNMENT, WHEN IT EVOLVED THIS DEVOLUTION IDEA, DID NOT PRODUCE A CLEAR-CUT = YE% THE = THE- UH- NOW THIS IS WHAT'S GOING TO HAPPEN AND THIS IS WHAT'S NOT GOING TO HAPPEN # THE WHOLE THING IS LIKE THIS, IT- IT'S NOT CLEAR, = # AND THIS IS WHY PEOPLE DIDN T KNOW VERY OFTEN # DO YOU THINK THIS IS WHY PERHAPS YOU COULDN \*T UNDERSTAND IT? ## <X T-1(I)-65> THAT'S RIGHT AND UH = ALSO YOU SEE THE = IT WASN 'T MACE CLEAR = WHAT IT % RIGHTS EXACTLY SCOTLAND WAS GOING TO HAVE # AND MANY PEOPLE ER WANTED

DEVOLUTION, THEY WANT SCOTLAND TO HAVE THEIR OWN

NATIONAL PARTY, THEY WERE WORKING VERY HARD # = AND ER = BECAUSE THEY- THEY WANTED DEVOLUTION JUST% IT'S FART OF THEIR- THEIR = PROGRAMME, I SUPPOSE YOU SEE # BUT, REALLY, I THINK THE NON-SUCCESS OF THE REFERENDUM WAS SIMPLY THAT THERE WAS NOTHING REALLY CLEAR-CUT # I KNEW WHAT I WAS VOTING = SOME TIME AGO WHEN THEY WERE DISCUSSING THIS IN PARLIAMENT # AND I SAID THEN, "WELL IF THAT'S WHAT THEY ARE GOING TO OFFER. US I DON'T WANT IT" YOU SEE AND I KNEW I WAS GOING TO VOTE \*NO\* # I THOUGHT, "WELL MAYBE I'LL CHANGE MY MIND, I'LL LISTEN" # BUT THE (LAUGHINGLY) MORE I LISTENED, THE MORE DECIDED I BECAME ON WHAT I WAS GOING TO VOTE BECAUSE THEY DIDN'T <P 17> REALLY = KNOW WHAT THEY WERE = TALKING = ABOUT -WHAT THEY WERE GIVING THE PEOPLE # IT WAS A KIND OF POLITICAL PACKAGE MADE UP TO SUIT DIFFERENT PEOPLE AND DIFFERENT PARTIES == # AND BUT IT WASN'T REALLY THINKING OF SCOTLAND = AND AND THIS WAS MY VIEW ## <X T-1(I)-74> OH THE PEOPLE THAT DIDN'T? 13C # YES, YES ## <X T-1(I)-75> WELL, YOU SEE THERE THAT'S A GOOD POINT BUT THERE WERE SOME INTELLIGENT PEOPLE WHO DIDN'T VOTE # <X T-1(I)-75A> ER I- I WAS SURPRISED ACTUALLY = BY SOME PEOPLE # I KNEW THAT THEY DIDN T VOTE # AND ER THEY SAID THEY DIDN'T WANT TO HAVE ANYTHING TO DO WITH THE REFERENDUM # <P 20> THEIR IDEA WAS THAT THERE- THAT ER IF NOBODY VOTED, IT WOULD BE SEEN THAT THE REFERENDUM WAS NOT, SHOULD NEVER HAVE BEEN OFFERED IN THE %= ON THE CONDITIONS THAT WERE OFFERED # SO YOU SEE, YOU GET THAT ER TYPE OF THING AS WELL #= GABY WHAT DO YOU THINK? ## <X T-1(T)-81> YES. WE DON'T REALLY KNOW PERHAPS(CHUCKLING) # THAT'S REALLY WHAT IT IS, ISN'T IT? # WELL IT \*S - IT \*S INTERESTING ANYWAY TO SEE, ISN \*T IT? # AND TO BE HERE WHEN SOMETHING LIKE THIS HAPPENED # BUT YOU SEE THE DIFFERENCE BETWEEN WHAT WALES VOTED AND HOW SCOTLAND VOTED? # AND ER I THINK ON THE WHOLE IT WAS A VERY BIG BLOW BECAUSE ALREADY THEY <P 21> WERE FREPARING = THEY'VE BEEN FREPARING THE ASSEMBLY = PLACE # THEY VE SS% ALREADY SPENT WHAT - WHAT = WHAT IS IT ABOUT TWO AND A HALF MILLION POUNDS, SO YOU SEE ## (SBI) <Y 13> TOINTP <P 1> <x T-9(I)-1> ER, NOW WE'RE GOING TO TALK ABOUT DEVOLUTION NOW ALL RIGHT? (CUF) NOW ER THE TAPE'S GOING ALL RIGHT? (CUF) # NOW, = MAYBE YOU ALL KNOW THAT EH SCOTLAND USED TO HAVE ITS OWN GOVERNMENT = AND FP, THERE USED TO BE A PARLIAMENT IN SCOTLAND, A SCOTTISH PARLIAMENT # AND ER IT USED TO BE HERE IN EDINBURGH, ALL RIGHT(CUF)? # A LONG TIME AGO NOW # PUT IN 1707. THERE WAS WHAT THEY CALL A TH% AN% THE ACT = OF UNION AND THAT MEANT = THAT EH ENGLAND AND = AND SCOTLAND = HAD JUST

PARLIAMENT, BUT THEY DIDN'T WANT THE TYPE OF THING THAT WAS BEING GIVEN TO THEM # THIS IS WHAT HAPPENED IN WALES = # NOW YOU SEE IN WALES YOU GOT A CLEAR-CUT 'NO' # THEY SAID THAT'S IT # IN SCOTLAND, YOU SEE, THERE WERE ALL THESE POLITICAL THINGS WITH THE NATIONAL, THE SCOTTISH

ONE GOVERNMENT # THEY HAD JUST ONE GOVERNMENT AND THAT GOVERNMENT WAS PLACED IN = LONDON, OF COURSE, IN WESTMINSTER # THE% AND IT WAS CALLED THE BRITISH PARLIAMENT # NOW, AND FROM = FROM 1707, TH% EH, IT'S JUST BEEN THE ONE PARLIAMENT FOR THE WHOLE OF THE = UNITED KINGDOM, ALL RIGHT (CUF)? # NOW, ON MARCH THE FIRST = THIS YEAR, THERE WAS A REFERENDUM IN SCOTLAND = TO DECIDE WHETHER THE SCOTTISH PEOPLE WANTED = MORE SELF-GOVERNMENT OF NOT, # AND WHAT WE COULD CALL- WE COULD CALL = EHM = DEVOLUTION, IS A KIND OF = SELF-GOVERNMENT. (MLC) ALL RIGHT (CUF)? # IT'S A WHAT WE COULD% WOULD CALL A MODIFIED = HOME RULE (MLG) # AND EF WHAT HAPPENED - THE OUTCOME = OF THE REFERENDUM WAS THAT = THIRTY- THREE = PERCENT OF THE SCOTTISH POPULATION = VOTED "YES" = TO THE SCOTLAND ACT # THEY, IN OTHER - EH IN OTHER WORDS, WANT = THEIR OWN GOVERNMENT, THEIR OWN DEVOLUTION = OR THE BEGINNING OF THEIR OWN GOVERNMENT, YOU COULD SAY # AND THIRTY- ONE PERCENT VOTED "NO" = TO THE DEVOLUTION BILL OR TO THE SCOTLAND ACT # AND IT'S STILL UNDECIDED = WHAT IS GOING TO HAPPEN = EVENTUALLY # AND IF THERE'S GOING TO BE = ER IF THEY'RE GOING TO HAVE THEIR = DEV % THE- THEIR OWN GOVERNMENT = AND% IT WOULD BE PLACED IN EDINBURGH AND IT WOULD BE CALLED THE SCOTTISH ASS - ASSEMBLY = AND WOULD BE PLACED IN THE ROYAL HIGH SCHOOL IN EDINBURGH IF IT - IF- IF IT COMES TO PASS # IT'S STILL UNDECIDED NOW # I WANT TO ASK YOU SOMETHING ABOUT DEVOLUTION NOW # EHM, IF YOU THINK% IS IT A GOOD = CR BAD THING FOR SMALL COUNTRIES = ER TO WANT TO BECOME INDEP% MAYBE NOT INDEPENDENT <P 2> BUT WANT TO = TO START TO GOVERN THEMSELVES MORE # WHAT D'YOU THINK, TAKASHI? ## <x T-9(I)-10> I THINK SOME OF THEM DID # IT'S = DIFFICULT TO SAY WHO ACTUALLY VOTED FOR DEVOLUTION # ACTUALLY, WHAT% THEY THOUGHT THAT THERE WOULD BE A STRAIGHT% A STRONGER "YES" VOTE THAN THERE WAS # EHR, YOU KNOW, YOL KNOW THE PERCENTAGE YOU'VE GOT TO HAVE REALLY = FOR THE SCOTTISH ASSEMBLY TO = TO ACTUALLY BE FORMED? # HOW- HOW- HOW- HOW STRONG = HAS THE "YES" VOTE GOT TO BE = REALLY FOR TH- FOR- A- FOP A SCOTTISH ASSEMBLY TO BE FORMED IN EDINBURGH? FR. MR PRIETO? # D.YOU REMEMBER HOW- HOW BIG A PERCENTAGE OF THE POPULATION WOULD HAVE TO VOTE "YES" = FOR THE SCOTL% = FOR DEVOLUTION TO TAKE PLACE? ## <X T-9(I)-19> IT WOULDN\*T - IT WOULDN\*T HAVE ITS OWN COMPLETE GOVERNMENT IT WOULD ONLY BE = PART GOVERN-<X T-9(I)-19A> MENT, YOU COULD CALL IT # TH- THAT'S RIGHT, YES THEY WOULDN'T BE COMPLETE ##(SBI) <X T-9(I)-19B> THEY WOULDN\*T BE COMPLETELY INDEPENDENT # NOW THEY = THE SNP OR THE SCOTTISH NATIONALIST PARTY, THEY = THEY WANT = COMPLETE INDEPENDENCE, OF COURSE # AND THEY SAY THAT = THEY WANTED TO VOTE = OBVIOUSLY FOR DEVOLUTION = BECAUSE THEY SAID = IF IT GETS = JUST A LITTLE BIT OF INDEPENDENCE WE CAN CET MM POSSIBLY GET MORE AND MORE # THIS IS JUST THE START, YOU SEE # WHAT DO YOU THINK ABOUT THAT, CLARA? ## <X T-9(I)-26> YES. THE GUALIFICATIONS YOU GET AT SCHOOL - THEY'RE DIFFERENT FROM WHAT% THE QUALIFICATIONS YOU

GET IN AN ENGLISH SCHOOL,YES # AND ER IN THE C\*N% IT CAN BE MORE DIFFICULT FOR A SCOTTISH PERSON TO GO TO AN ENGLISH UNIVERSITY THAN IT IS FOR AN ENGLISH PERSON TO GO TO A SCOTTISH UNIVERSITY # SO IT DOESN\*T ALWAYS % IT\*S NOT ALWAYS FAVOURABLE = TO HAVE A SEPARATE EDUCATIONAL SYSTEM # I - I DON\*T THINK IT = IS AND MANY A TIME IT ISN\*T # EH EUT% AND YOU KNON, IT\*S CALLED THE SCOTTISH OFFICE # THERE IS A SCOTTISH OFFICE = AT ST ANDFEW\*S HOUSE IN EDINBURGH, THAT DECIDE - THAT ALREADY DECIDES ALL SCOTTISH AFFAIRS # FOR INSTANCE, THE EDUCATIONAL SYSTEM IS DIFFERENT; AND, AS YOU SAY, THE LEGAL SYSTEM # EHM, WHAT DO YOU KNOW ABOUT THIS EH-ABOUT

<P 5>

THE EH SCOTTISH LEGAL SYSTEM? # DO YOU KNOW ANYTHING ABOUT THE SCOTTISH LEGAL SYSTEM? # <X T-9(I)-60> EHM, WELL, I SUPPOSE IT W% WELL, I- I\*M NOT QUITE SURE ABOUT HOW- HOW DIFFICULT IT WAS # EH EHM I THINK IT WAS VERY MUCH = THE SAME AS IN ENGLAND = WHEN THE UNION TOOK PLACE # IT WAS VERY MUCH A POLITICAL THING; # IT WASNOT SO MUCH THAT THEY NEEDED = ECONOMIC HELP IN THOSE DAYS # OH. IT WAS VERY MUCH ER- WELL, IT WAS A SORT OF% YOU COULD SAY IT WAS A RELI- GIOUS AND A POLITICAL THING BECAUSE ER. = IN SCOTLAND = UH THEY HAD A CATHOLIC = CATHOLIC DYNASTY = AND THE SCOTTISH PEOPLE DIDN'T WANT CATH% EH STUARTS - THE CATHOLICS - TO GOVERN SCOTLAND # THEY WANTED = A PROTESTANT TO GOVERN SCOTLAND = YOU SEE? # AND EHM = WELL, THE- THE- THE PROTESTANT KING ALREADY GOVERNED ENGLAND AND SCOTLAND AND THEY WERE FRIGHTENED IN CASE THE STUARTS WOULD TAKE OVER AGAIN -IN CASE IT BECAME CATHOLIC AGAIN, YOU SEE; # BECAUSE IT W% N IT'S EH% IT WAS STRONGER = AS A POLI% AS A PROT% EH THE

<P 11>

PRO- FROTESTANT RELIGION WAS STRONGER THAN THE CATHOLIC RE- RE- RELIGION, AND THEY WANTED IT TO STAY PROTESTANT # THEY WANTED = TO MAKE SURE THAT A STUART WOULDN'T = TAKE OVER ON THIS SIDE BECAUSE THE STU- THE STUAPTS WERE CATHOLICS, YOU SEE # AND IT WAS THAT SORT OF THING- IT HAD TO DO WITH RELIGION = 4 AND- UHM ALSO = SOME ER SCOTTISH POLITICIANS THEY = THEY REALLY = (DRAWING BREATH) THEY GAINED THEMSELVES BECAUSE THE- THE BRITISH - OR THE ENGLISH GOVERN- MENT. I SHOULD SAY -GA% SEN% EH MORE OR LESS = GAVE THEM SOME MONEY, YOU SEE # THEY WERE GIVEN MONEY TO SE% TO SELL THEIR COUNTRY, REALLY # IT WAS - IT WAS A% IT'S = ER IT WAS A VERY DIFFICULT EHR = THING REALLY, WHAT ACTUALLY HAPPENED # BUT I THINK THEY WERE - THEY WEREN'T ANY POORER IN SCOTLAND THEN THEY WERE IN ENGLAND # SO IT WASN'T REALLY ECONOMICAL, IT WAS POLITICAL AND RELIGIOUS, REALLY UHM ## (SRI)

<X T-9(I)-62> YES, THERE'S ALWAYS BEEN A DIFFERENT CULTURE HERE, YES # ER AND MAYBE ER THAT - THAT'S ONE OF THE REASONS TOO OF COURSE EHM WHY- WHY SCOTLAND WANTS TO BE INDEPENDENT BECAUSE THEY WANT TO FEEL THAT THEY ARE A NATION ON THEIR OWN, THAT THEY DON'T BELONG TO ENGLAND; # AND PARTIC- ULARLY FOREIGN PEOPLE, VERY OFTEN THINK

THAT SCOTLAND IS PART OF ENGLAND; # BUT SCOTLAND IS VERY MUCH A SS- A SEPARATE NATION FROM ENGLAND; # AND THEY WANT OTHER PEOPLE% OR THEY WANT THEMSELVES- TO- TO FEEL = THAT THEY HAVE NATIONHOOD, THAT THEY ACTUALLY = HAVE = THAT THEY HAVE THEIR OWN COUNTRY. THEY DON'T HAVE TO BELONG TO ANYBODY ELSE ## <X T-9(I)-65> THEY SAID DEFINITELY"NO" = TO DEVOLUTION. YES # ONLY THIRTEEN PERCENT SAID "YES" TO DEVOLUTION # BUT AGAIN, THAT IS IS A SEPARATE NATION FROM ENGLAND PEALLY, WALES TOG # AND PARTICULARLY WHEN IT COMES TO SS- EHM TO SFORTS = THEY- THEY PLAY AS SEPARATE COUNTRIES # THEY DON'T% YOU DON'T PLAY FOR BRITAIN, YOU PLAY FOR ENGLAND, FOR SCOTLAND, FOR WALES - PARTICULARLY FOOTBALL = # AND THAT'S I THINK MM THE WORLD KNOWS THEN THAT ACTUALLY THERE ARE THREE DIFFERENT COUNTRIES WHEN IT COMES WHEN IT COMES TO SPORT === # EHM = YES I THINK WE VE HAD A % = DOES ANYBODY WANT TO SAY ANYTHING ELSE ABOUT DEVOLUTION? DO YOU FEEL QUITE HAPPY?

## <Z 10> T12INTP

<X T-12(I)-3A> UHM = SCOTLAND HAS ALWAYS LIKED = TO THINK THAT IT'S = A LITTLE DIFFERENT FROM ENGLAND # AND = FOR = MANY HUNDREDS OF YEARS SCOTLAND HAS HAD THE SAME PARLIAMENT AS ENGLAND = BUT IT'S HAD A SEPARATE SYSTEM OF LAW, A SEFARATE SYSTEM OF EDUCATION = AND FOR THE LAST = I THINK = ABOUT FIFTY YEARS = A SEPARATE = LOT OF GOVERNMENT

<P 2> SERVANTS KNOWN AS "CIVIL SERVANTS" = WHO WORK HEPE IN EDINBURGH = # AND = THE IDEA WAS RECENTLY = BROUGHT FORWARD = THAT = SCOTLAND SHOULD HAVE A SMALL PARLIAMENT = OR ASSEMBLY OF ITS OWN # NOW SCOTLAND% WITH THIS% SCOTLAND WOULD NOT BE COMPLETELY SEPARATE = # IT WOULD SIMPLY HAVE = AN ASSEMBLY = IN EDINBURGH = THAT WOULD DEAL WITH \*SOME SCOTTISH AFFAIRS =# AND = WHAT DID WE HAVE ON MARCH THE FIRST? ##

<X T-12(I)-6> ER WHAT'S THE DIFFERENCE? # ER,AN ELECTION IS TO ELECT PEOPLE TO A BODY LIKE A PARLIAMENT = LIKE A PARLIAMENT # A REFERENDUM IS TO COLLECT PEOPLE'S <P 3> OPINIONS = AND WE DON\*T = HAVE REFERENDUMS VERY OFTEN IN THIS COUNTRY = # IN FACT, THIS IS THE SECOND ONE == # THE FIRST WAS ON WHETHER WE SHOULD JOIN THE COMMON MARKET OR NOT = AND THIS IS THE SECOND # = AND THERE HAVE BEEN SOME PROBLEMS = BECAUSE THE VOTING IN THE REFERENDLM FOR = THE ASSEMBLY IN SCOTLAND WAS VERY CLOSE # = THERE WAS JUST TW% SOMETHING LIKE TWO PERCENT DIFFERENCE = BETWEEN THE PEOPLE WHO WANTED AN ASSEMBLY = THE PEOPLE WHO DIDN'T = AND THEN THE REMAINING THIRD DIDN'T VOTE AT ALL # = SO THAT ONE THIRD = WANTED IT ONE THIRD DIDN'T WANT = THE REMAINING THIRD DIDN'T KNOW = BECAUSE THEY STAYED AT HOME # AND AT THE MOMENT WE DON'T KNOW WHAT'S GOING TO HAPPEN = ##

<X T-12(I)-15> WHAT WERE THE ADVANTAGES AND THE (TSWC)
DISADVANTAGES? # THE ADVANTAGES WERE HAVING SOMEBODY UP
WHAT W% YOU'C CAL AN"ELECTED BODY" = WHICH IS NOT A BODY

LIKE = THIS ONE (POINTING TO HERS) BUT JUST A GROUP OF PEOPLE(MLG) ACTUALLY IN SCOTLAND = IN EDINBURGH THEREFORE MUCH CLOSER THAN LONDON WHO'D BE ABLE TO UNDERSTAND SCOTTISH THINGS = MUCH BETTER THAN THE PEOPLE IN LONDON CAN UNDERSTAND SCOTTISH THINGS (NUP) == TREMENDOUS ADVANTAGE = VERY BIG ADVANTAGE # ER = DISADVANTAGE = IS THAT- I THINK IT WOULD MAKE = A LOT OF PEOPLE WHO WANT TO BE IMPORTANT = RATHER TOO IMPORTANT = AND THIS ALWAYS WORRIES ME ## <x T-12(I)-16> THERE WERE ASO DISADVANTAGES IN THIS PARTICULAR = IN THIS PARTICULAR FORM OF ASSEMBLY = IN THAT = THERE WERE NO POSSIBILITIES TO COLLECT MONEY # = THE MONEY WOULD STILL COME FROM LONDON == # AND = IT WASN'T A VERY WELL == THOUGHT- OUT = ASSEMBLY # (SNEEZE) ER ALSO I VOTED AGAINST BECAUSE FOR = MANY YEARS I VE BEEN LIVING IN ENGLAND == # AND TO ME IT LOOKS VERY SMALL = ALL THE ARGUMENTS THAT HAVE BEEN GOING ON WITH SCOTLAND ## <X T-12(I)-26> NO, IT'S CONNECTED WITH% IT'S RATHER A COMPLICATED THING TO EXPLAIN # UHM THE ISLANDS = WHERE = WHICH ARE NEAREST TO MOST OF THE OILFIELDS = DON'T = MIND BEING = BRITISH = BUT THEY DON'T WANT = TO BE = SCOTTISH ONLY # THE REASONS FOR THIS = ARE = IN = THE HISTORY = OF THESE ISLANDS \*COS THEIR CUSTOMS AND THEIR CULTURE ARE NOT SCOTTISH = THEY ARE CLOSER TO THE NORWEGIAN ## <X T-12(I)-27> THE SHETLANDS AND THE ORKNEYS # = AND FOR THIS REASON THEY VOTED AGAINST = A SCOTTISH ASSEMBLY = BECAUSE THEY DON'T WANT = TO HAVE = THE POWER FROM = GLASGOW OR EDINBURGH = BECAUSE THAT IS = STRANGE FOR THEM = IN THE SAME <P 11> WAY THAT POWER FROM LONDON IS STRANGE FOR THEM = AND THAT IS WHERE MOST OF THE OIL IS # = IT ISN'T REALLY SCOTLAND'S GIL IT'S SHETLAND AND ORKNEY OIL # = SO THE PROBLEM IS VERY COMPLICATED ## <X T-12(I)-33> YES # DO YOU KNOW WHICH- UHM IN = THE REFERENDUM = DOES ANYBODY KNOW = WHICH IS THE ONLY PART = OF SCOTLAND WHICH VOTED = VERY CLEARLY = FOR A <P 13> A REFERENDUM? # THERE WAS ONLY ONE PART WHICH VOTED CLEARLY = FOR AN ASSEMBLY # DOES ANYBODY KNOW # NOT EDINBURGH, NOT THE LOTHIANS ## <X T-12(I)-34> NO, NOT THE NORTH = THEY WERE AGAINST ##

<Z 11> T17INTP

<P 1>

<X T-17(I)-1> ER (SIGH) RIGHT! # I VE BEEN ASKED TO TELL YOU = JUST A LITTLE BIT ABOUT DEVOLUTION = WHICH IS A LONG WORD === AND IT'S RATHER = COMPLICATED === # SCOTLAND = HAS = FOR NEARLY ALL ITS HISTORY = FELT THAT IT'S RATHER DIFFERENT FROM ENGLAND == # BUT = FOR = THE LAST TWO HUNDRED AND FIFTY = YEARS = OR A LITTLE LONGER THAN THAT = WE'VE HAD THE SAME = KING OR QUEEN = AS ENGLAND = AND ALSO THE SAME PARLIAMENT # BEFORE THAT WE HAD THE SAME KING OR QUEEN = FOR ABOUT A HUNDRED YEARS = BUT A DIFFERENT PARLIAMENT # BUT SCOTLAND HAS DIFFERENT

= EDUCATION = DIFFERENT SYSTEM OF EDUCATION = AND = A DIFFERENT SYSTEM OF LAW # AND FOR A LONG TIME = PEOPLE = SOME PEOPLE HAVE FELT = THAT SCOTLAND SHOULD ALSO HAVE SOMETHING LIKE A PARLIAMENT = # THAT THERE SHOULD BE A PARLIAMENT IN LONDON = AND SOMETHING LIKE A MINI-PARLIAMENT = CALLED THE ASSEMBLY = IN SCOTLAND = # AND ON MARCH THE FIRST = WE HAD A REFERENDUM # DOES-ANYBODY KNOW WHAT THE RESULTS OF THE REFERENDUM WERE? ## <X T-17(I)-21> YES, THAT'S A VERY GOOD QUESTION # AND I THINK SOME PEOPLE WANT ONE, AND SOME PEOPLE WANT IT BECAUSE OF THE OTHER # RIGHT, SOME PEOPLE FEEL SCOTLAND = IS DIFFERENT FROM ENGLAND = ENGLAND IS DIFFERENT FROM SCOTLAND # OTHER PEOPLE = YOU KNOW = FEEL THAT = THE ECONOMIC DEVELOPMENT HAS BEEN TOO MUCH = IN ENGLAND = THE POLITICAL = ALSO = HAS BEEN TOO MUCH IN ENGLAND = RIGHT? (CUF) AND NOT ENOUGH = NOT ENOUGH HERE # I THINK EVERY FERSON HAS A DIFFERENT REASON WHY = THEY\*RE INTERESTED ## <X T-17(I)-25> DO YOU KNOW ER DO YOU KNOW A HUNDRED YEARS AGO = ERM ENGLAND, A BIG RICH COUNTRY, HAD TWO UNIVERSITIES - AND SCOTLAND, A SMALL POOP COUNTRY, HAD <P 9> FOUR = # AND MANY MANY SCOTS = EDUCATED SCOTS == WENT TO ENGLAND = AND HAVE BEEN GOING TO ENGLAND = FOR A VERY LONG TIME == # AND, YOU KNOW, THEY GET POSITIONS OF POWER THERE # I DON'T THINK IT'S ALWAYS THE FEELING OF = YOU KNOW PUTTING PEOPLE UNDER = # IT'S NOT ALWAYS TRUE ## <X T-17(I)-28> THERE IS ALREADY A MM = SS% # ERANCH OF THE CIVIL SERVICE = YOU KNOW = GOVERNMENT SERVANTS = IN SCOTLAND = FOR SCOTLAND = # THEY SIT IN A BIG OFFICE CALLED ST ANDREWS HOUSE WHICH IS NEAR THE MAIN STATION = RIGHT? # AND THAT IS DONE IN SCOTLAND FOR SCOTLAND # THERE IS% ARE ALSO A LARGE NUMBER OF PEOPLE IN THE EDUCATIONAL SYSTEM = TOO MANY, I THINK # THERE ARE ALSO A LARGE NUMBER OF PEOPLE IN THE LEGAL SYSTEM == ## <X T-17(I)-3(> NOW LISTEN = IT'S ER = THE = OIL = BUSINESS = IS RATHER COMPLICATED = # AND = THE% IT DEPENDS ON THE QUALITY OF THE CIL = WHETHER IT'S THICK = OR THIN = OIL = # WHETHER THEY CAN = DEAL WITH IT IN THIS COUNTRY, OR WHETHER THEY SEND IT ABROAD TO ANOTHER COUNTRY # SO. JUST BECAUSE WE HAVE OIL FOR A FEW YEAPS == IS NOT A LOT OF OIL ## <X T-17(I)-49> RIGHT = SO STRIKES AREN'T IMPORTANT, NOT FOR THIS ARGUMENT = OK FINE ## <X T-17(I)-50> UHM = IS IT IMPORTANT IF A COUNTRY WANTS TO FEEL = OR PART OF A COUNTRY WANTS TO FEEL SEPARATE = IS IT IMPORTANT FOR THAT = COUNTRY TO HAVE = A PARLIAMENT? # = BECAUSE IF YOU LOOK AT == (CLICKS) THE\_ WHOLE OF GREAT BRITAIN == EACH PART = IS A LITTLE DIFFERENT = IN CULTURE = IN CUSTOM # THE NORTH OF SCOTLAND IS DIFFERENT FROM THE SOUTH OF SCOTLAND = # THE NORTH OF ENGLAND = I CAN DIVIDE INTO TWG: THE NORTHEAST AND THE NORTHWEST # THE MIDLANDS ARE VERY INDUSTRIAL AND THEY ARE = DIFFERENT # THE SOUTH I CAN DIVIDE INTO TWO: THE SOUTHWEST == AND THE SOUTHEAST WHICH IS NEAR LONDON # AND EACH == EACH IS DIFFERENT IN CHAPACTER = # IF

SCOTLAND HAS A SMALL PARLIAMENT = DO YOU THINK THESE = SMALL PLACES WILL ALSO WANT = PARLIAMENT?=== WHY NOT? # <X T-17(I)-53> NO IF YOU LOOK AT THE RESULTS IN THE DEVOLUTION = REFERENDUM = THE <P 19> NORTH OF SCOTLAND AND THE ISLANDS VOTED "NO" = # GLASGOW AND STRATHCLYDE VOTED VERY STRONGLY FOR "YES" = VERY STRONGLY # EVERYWHERE ELSE = WASN'T SURE # AND THE PEOFLE IN THE NORTH % IN THE ISLANDS AT THE NORTH OF SCOTLAND = DON\*T FEEL SCOTTISH ## <X T-17(I)-54> MM? N-NO = THEY ARE = ORCADIANS = FEOPLE FROM THE SH% ORKNEYS = OR THEY ARE FROM THE SHETLANDS # THEY HAVE THEIR OWN - CUSTOMS == # AND THEY FEEL CLOSER TO NORWAY THAN THEY DO TO SCOTLAND = IN MANY WAYS # THERE IS A STORY TOLD (RALLENTANDO) OF A SOLDIER = WHO = WHEN HE JOINED THE ARMY = HAD TO FILL IN A FORM = # AND ON THE FORM IT PUT = CLOSEST = RAILWAY STATION = NEAREST <P 20> RAILWAY STATION =# AND HE CAME FROM THE SHETLANDS SO HE PUT "BERGEN, NORWAY" ##

### <Z 15> T4ADVP

<X T-4(A)-75> WELL, I - I THINK THERE'S THE - THE HISTORY IS THAT FOR A LONG TIME PEOPLE HAVE BEEN ASKING FOR UH DEVOLUTION # IN THE PAST IT WAS CALLED "HOME RULE" # YOU REMEMBER THERE WERE PROBLEMS IN IRELAND = THAT GOES PACK A LONG TIME - A HUNDRED YEARS # AND SINCE THE BEGINNING OF = THIS CENTURY PEOPLE HAVE BEEN ASKING FOR HOME RULE OR SOME DEVOLUTION IN SCOTLAND AND WALES # AND OTHER ATTEMPTS HAVE BEEN MADE THIS CENTURY # SO IT \*S NOT THE FIRST TIME IT'S HAPPENED <P 13> BUT THERE WERE REAL PROBLEMS THIS TIME BECAUSE IN THE 1974 GENERAL ELECTION, YOU REMEMBER, THAT WAS WHEN. THE SNP WERE VERY SUCCESSFUL # = AND IF YOU EXAMINE THE UHM - WHERE THE LABOUR PARTY = MEMBERS OF PARLIAMENT COME FROM = YOU WILL SEE THAT A LOT OF THEM CAME FROM SCOTLAND # AND IN 1974 EVERYBODY = SAW THAT THE SNP WAS BECOMING VERY POWERFUL # AND IT LOOKED AS IF - IF THERE WAS ANOTHER ELECTION, THEN A LOT OF THE LABOUR MPS WOULD LOSE THEIR SEATS, WOULD NO LONGER BE MPS AND SO THE GOVERNMENT = WOULD = THE LABOUR GOVERNMENT = WOULD NO LONGER BE IN POWER # SO IT WAS PARTLY DONE NOW, BECAUSE IT WAS A WAY OF, IF YOU LIKE, FIGHTING AGAINST = THE SNP ##

<X T-4(A)-86> OH YES! IT WAS % A LOT OF PEOFLE SAID IT WAS RIDICULOUS # THEY SAID THAT THE = THE - THE PARLIAMENT WAS MAKING ONE RULE FOR SCOTLAND = AND THAT WAS FORTY PERCENT AND ANOTHER RULE = FOP PAPLIAMENT = WHERE THERE MUST SIMPLY BE A MAJORITY # AND THEY WERE MAKING ONE RULE FOR SCOTLAND IN A REFERENDUM AND ANOTHER FOR A GENERAL ELECTION ##

<X T-4(A)-92> THEY DIDN\*T - THEY COULD - THEY COULDN\*T VOTE "YES" = ALL RIGHT? (CUF) BECAUSE THEY % PEPHAPS THEY = THEY SUS- % THEY ARE SUSPICIOUS OF SOMETHING = BUT IN THEIR HEARTS IT WAS IMPOSSIBLE <P 16> FOR THEM = TO VOTE "NO" BECAUSE THAT SEEMS TO BE VOTING AGAINST THE INTERESTS OF THEIR COUNTRY - AGAINST SCOTLAND ## (SAID WITH SCOTTISH ACCENT) (CHUCKLES) <<X T-4(A)-95> IF WE HAVE A REFERENDUM IN THIS CLASS -HOW MANY ARE WE? - THREE, SIX, NINE # OH, WE CAN % YES! WE\*LL BE THREE, THREE, THREE, I EXPECT # IF WE HAD A VOTE HERE, HCW MANY OF YOU WOULD VOTE "YES"? # IF YOU WERE SCOTTISH AND YOU COULD VOTE, HOW MANY OF YOU WOULD VOTE "YES"? # WELL. YOU SAID YOU WOULD, GUSTAVO, THAT'S TWO # YOU WOULD VOTE "YES"? # AND HOW MANY OF YOU WOULD VOTE "NO"? # THAT'S FOUR - FOUR AND TWO IS SIX # AND HOW MANY FEOPLE WOULD ABSTAIN? # HOW MANY PEOPLE WOULD NOT VOTE? # ONE - THAT STILL LEAVES SOME MOPE PEOPLE -THAT'S A "FOR" ##

<X T-4(A)-125> AND MEDICINE # YOU SEE, AT THE MOMENT YOU HAVE A SITUATION WHERE ONE MAN, THAT IS, THE SECRETARY OF STATE, HAS A LOT OF POWER # IT IS A VERY EXTRAORDINARY SITUATION WHERE HE REPRESENTS ALL THE INTERESTS OF SCOTLAND AND YOU HAVE IN SCOTLAND A SCOTTISH OFFICE WHICH IS LIKE THE CI- THE CIVIL SERVICE ##

<X T-4(A)-126> WELL, THERE IS 13B, BUT THERE ARE NO POLITICIANS TO QUESTION AND TO CONTROL THE CIVIL SERVANTS # THAT IS THE ARGUMENT = = # WE HAVE THE CIVIL SERVANTS, BUT WE DO NOT HAVE THE - THE DEMOCRATIC CONTROL OVER THE CIVIL SERVANTS (NUP) AND THAT'S WHAT DEVGLUTION WOULD HAVE DONE ##

# <Z 16> T7ADVP

<X T-7(A)-61> WELL DO YOU THINK - DO YOU THINK JCSE; THAT POSSIBLY SCOTLAND IS IN THE SAME POSITION? # DO YOU REMEMBER WHEN I TOLD YOU WHEN YOU F% OH; LAST TERM PROBABLY - A LITTLE BIT ABOUT THE BACKGROUND? - # THAT=SCOTLAND UP TO=THE BEGINNING OF THE SEVENTEENTH CENTURY-(SCMEONE SNEEZES) SIXTEEN HUNDRED AND THREE -WERE SEPARATE KINGDOMS # DO YOU REMEMBER? (CUF) AND THEN = JAMES THE = SIXTH OF SCOTLAND

<X T-7(A)-61A> CAME DOWN AND BECAME JAMES THE FIRST OF ENGLAND#

<X T-7(A)-61B> BUT THE GOVEPNMENT WAS KEPT SEPARATE UNTIL= THE BEGINNING OF THE EIGHTEENTH CENTURY, THAT'S SEVENTEEN HUNDRED AND SEVEN, WHEN THE TWO GOVERNMENTS WERE COMBINED IN WESTMINSTER IN LONDON # NOW THAT IS HOW MANY YEAPS AGO? # TWO HUNDRED AND (SBI)

<X T-7(A)-61C> TWO HUNDPED AND SEVENTY YEARS AGO# ER = AND WE ARE, AS YOU KNOW, = THE UK# WHAT DOES "THE UK"STAND FCR? ##

<X T-7(A)-61D> UNITED KINGDOM OF ## (IC)

<X T-7(A)-65> YES WELL = UHM BENNY IS A BRITISH CITIZEN
<X T-7(A)-65A> BECAUSE ORIGINALLY WE HAD A- THING KNOWN
AS "EMPIRE" AND ANYPODY WHO WAS WITHIN THAT EMPIRE(SBI)
<X T-7(A)-65B> IS ENTITLED - WAS GIVEN THE ENTITLEMENT
TO EECOME A BRITISH = SUBJECT (SBI)
<P 17>

<X T-7(A)-65C> AND HAVE A BRITISH PASSPORT ## <X T-7(A)-65D> THAT IS WHY WE HAVE WHAT IS NOW CALLED "A MULTI-RACIAL COUNTRY"#WE HAVE PEOPLE FROM BENNY'S COUNTRY, FROM AFRICA, FROM THE WEST INDIES, FROM

PARLIAMENTS = EH UNITED # BUT IT HASN®T ALWAYS BEEN THIS # BUT = UHM - DO - DO YOU THINK IT'S A GOOD THING = THAT UHM THERE SHOULD BE A DIVISION OF POWER AT ALL? ## <X T-8(A)-12> MHM = YOU KNOW = WELL LET - LET ME SAY A LITTLE MORE # I - I HAVE HEARD = THAT = SOME PEOPLE = IN THE NORTH OF ENGLAND = FEEL THAT THEY ARE ALMOST AS FAR AWAY FROM LONDON AND THAT THEIR PROBLEMS ARE = AS DISSIMILAR = TO THE PROBLEMS ROUND LONDON AS ARE THE SCOTTISH DNES # THEY SAY "WHY SHOULD SCOTLAND GET DEVOLUTION? # WHY SHOULD THEY DEAL = WITH THEIR OWN FROBLEMS? (CMLG) = AND WE SHOULDN \*T? 13B ## <X T-8(A)-44> I VOTED "NO" # I - I AM NOT = TREMENDOUSLY SURE WHY I VCTED "NO" # I THINK IT WAS MY HEART THAT WAS VOTING. PERHAPS = RATHER THAN MY HEAD # EHM = I WASN'T SURE THAT THE CHANGE = WOULD BE BENEFICIAL = # SO PERHAPS I FELT IT WAS SAFER TO STAY AS WE WERE BUT IT = I - I AM NOT VERY HAPPY, YOU KNOW, I AM NOT VERY HAPPY ABOUT THE WHELE THING # MY SON VOTED "YES" = UHM HE AND I HAD AN ARGUMENT ABOUT IT BUT = I - I AM NOT = VERY SURE ABOUT THE WHOLE THING # AND I THINK THERE ARE MANY, MANY PEOPLE LIKE ME WHO REALLY FELT THAT THEY DIDN \*T KNOW ENOUGH # I FELT WE WERE NOT GIVEN ENOUGH FACTS = ABOUT WHAT POWERS, OR WHAT CHANGES = THE ASSEMBLY WOULD BRING ABOUT ##

<Z 19> T11ADVP

<X T-11(A)-11> YEAH - MHM - YEAH - OH YES! # NO-OH WELL I WASN\*T OFFERING IT SO YOU CAN\*T THANK ME # (COUGHS)AND EH THESE ARE JUST FACTS, YOU SEE AND YOU% WE FIND THAT WE CORRECT OURSELVES MM? = WE CAN CORPECT OURSELVES - CORRECTING EXPERIENCES WE CALL THAT - AND WHEN WE

<P 12> COME BACK = AH THERE IS A PLACE HERE AFTEP ALL # SO THAT'S JUST = FEELING THOUGH #CAN YOU BASE VOTES ON SUBJECTIVE FEELING OR OBJECTIVE ARGUMENTS? ## <X T-11(A)-12> OBJECTIVE ARGUMENTS. FOR EXAMPLE NAPOLEON IS NOT A FRENCHMAN # EH WELL I WOULDN'T SAY THERE ARE NO SUCH THINGS AS OBJECTIVE ARGUMENTS BECAUSE THEY %WHAT ABOUT PHYSICS? # YOU CAN HAVE AN ARGUMENT, YOU SEE, AS TO WHAT IS GOING TO HAPPEN IN AN EXPERIMENT WHICH HAS BEEN FERFORMED DOZENS AND THOUSANDS OF TIMES THAT WE KNOW THE PHYSICAL RULE # WELL IT'S LEADING <X T-11(A) -124> TO A CONCLUSION, YOU SEE # IT'S, YOU CAN DO IT BY EXFERIMENT, TO BACK UP YOUR ARGUMENT. SHOWING THAT THE ARGUMENT, WELL, WE'LL ACCEPT THAT AS OBJECTIVE # (COUGHS) SO === (COUGHS) RIGHT == WELL EH ONE = THE THE BEST ARGUMENT I EVER HEARD FOR EH SCOTLAND BEING INDEPENDENT WAS GIVEN ME BY AN OVERSEAS STUDENT= FROM A % A NON- EUROPEAN # AND HE SAID WHEN HE WAS MOTORING UP TO SCOTLAND = EHM HE KNEW WHEN HE WAS IN SCOTLAND BY THE CONDITION OF THE READS # NOW THERE'S AN BY THE CONDITION OF THE ROADS # ARGUMENT -EH THAT WAS NOT THIS YEAR BUT IN % ER ADOUT FIVE OR SIX YEARS AGO # HE SAID WHEN YOU COME NORTH OF CARLISLE AND UP TOWARDS = UHM BETWEEN EDINBURGH AND GLASGOW, THEN THE

PAKISTAN - ALL OF WHOM HAD BRITISH PASSPORTS. SO THEY WERE ENTITLED TO COME HERE IF THEY WANTED TO # NOW DO YOU THINK == THAT HAVING BEEN A UNITED KINGDOM = FOR = TWO HUNDRED AND SEVENTY YEARS THAT % YOU WERE SAYING= BENNY THAT HONG-KONG COULD NOT STAND ON ITS OWN - DO YOU REALLY THINK THAT = SCOTLAND COULD STAND ENTIRELY = ON HER OWN, AFTER THIS TIME? # HOW MANY - HOW MANY INHABITANTS ARE THERE IN = THE WHOLE OF SCOTLAND? # DOES ANYBODY KNOW? ===# ABOUT FIVE MILLION# <X T-7(A)-65E> AND HOW MANY ARE THERE IN THE WHOLE OF = ER GREAT BRITAIN? ## <X I-7(A)-65F> YEAH, BETWEEN FIFTY AND FIFTY-FIVE THOUSAND, I THINK, YEAH OH ER MILLION, I MEAN, YES # SO IT\*S A VERY SMALL PERCENTAGE # BUT YOU WERE TALKING UHM= ABOUT THE = YEMEN TOO ## <X T-7(A)-90> WELL WE DON'T THINK OF THIS IN THIS COUNTRY AS-AS-AS % I DON'T THINK IT'S A CLASS # = UHM I THINK MOST SCOTSMEN FEEL = THAT THEY ARE SCOTS - IT DOESN'T = MATTER IF THEY ARE WORKING WITH THEIR HANDS IN THE STREET OR WHETHER THEY ARE THE MANAGING DIRECTOR OF A VERY BIG COMPANY# UHM = THE FEELING IN - IN THE =REFERENDUM REALLY WAS = MORE : DO SCOTSMEN WANT TO HAVE MORE=SAY IN THEIR OWN == GOVERNMENT, IF YOU LIKE, OR IN THE GOVERNMENT OF THEIR OWN COUNTRY# THERE\*S NOTHING TO DO WITH = ER CLASS OR MONEY OR POSITION - ANYTHING AT ALL# IT MAY BE DIF-DIFFICULT FOR YOU TO UNDERSTAND THAT EUT

<X T-7(A)-90A> THIS QUESTION OF CLASS DIFFERENCES NEVER CAME INTO IT##

<P 24>

<X T-7(A)-91> NO, IT WASN\*T SO, IT WASN\*T CLEAR# ERIT WILL BE DEFINITELY MORE PEOPLE = EITHER SAID "NO"=OP SAID NOTHING AT ALL = WHICH WAS VERY MUCH THE SAME THING# NOW THERE WAS A LOT OF THEM WHO REALLY COULDN\*T BE BOTHERED TO VOTE = OR DIDN\*T WANT TO = OR BELIEVED THAT IT MEANT "NO"# WELL, GENTLEMEN AND LADY, YOU\*PE AGITATING FOR YOUR TEA, ARE YOU? ##

#### <Z 17> T8ADVP

<X T-8(A)-9> SOME PEOPLE = SAID = THAT MR CALLAGHAN WAS ONLY UHM OFFERING SCOTLAND = AND WALES, BUT IN PARTICULAR SCOTLAND, DEVOLUTION IN ORDER TO GET THE SUPPORT IN = TO GET SUPPORT IN THE NEXT ELECTION # = MANY PEOPLE ARE RATHER CYNICAL, THEY THINK IT'S JUST % = IT WAS JUST A POLITICAL MOVE IN ORDER TO KEEP IN POWER # ER FOR MYSELF = UHM I JUST DIDN \*T GET ENOUGH INFORMATION = = AT ALL = = AS TO WHAT BENEFITS OR AS TO WHAT CHANGES THERE WOULD BE IF DEVOLUTION WERE BROUGHT IN # I FELT VERY UNEASY ABOUT IT = = YOU KNOW, WE GNLY # = DO YOU KNOW WHEN THE PARLIAMENT DIVIDED? ## <X T-B(A)-11> WELL. IN SIXTEEN\*HUNDRED\*AND\*THREE THE KI-% THE % JAMES THE SIXTH OF SCOTLAND, WHO WAS MARY QUEEN OF SCOTS\* SON = ER PECAME WHEN % = BECAME KING OF ENGLAND, WHEN QUEEN ELIZABETH THE FIRST DIED # <P 3> IN SIXTEEN\*HUNDRED\*AND\*THREE THE TWO CROWNS UNITED = BUT IT WAS SEVENTEEN\*HUNDRED\*AND\*SEVEN BEFORE THE

ROADS COMPLETELY DETERIORATE, COMPARED WITH THE ROADS IN ENGLAND RIGHT UP TO CARLISLE # AND HE ALSO SAID = WITH REGARD TO ELECTRIFICATION OF THE RAILWAYS, YOU CAN GET AN ELECTRIC TRAIN R% ALMOST DOWN TO LONDON FROM THE NORTH OF ENGLAND, LEC% ALL ELECTRIC TRAINS # ALSO IN LIVERPOOL, ALSO IN 13A NEWCASTLE AND ER - ER BIRMINGHAM, # AND THEN THE <P 13> SOUTH IS ALL ELECTRIC, YOU GET RIGHT DOWN TO EHM SOUTH- WHAT DO THEY CALL IT? - NEAR NEWHAVEN, NEWHAVEN IN ENCLAND. YOU SEE. BETWEEN NEWHAVEN AND BRIGHTON. THERE'S A TERMINUS, ALL ELECTRIC # THE BRIGHTON BELLE IS A= F4MOUS ONE # NOW IN SCOTLAND APART FROM THE ELUE TRAINS IN GLASGOW THERE'S NO ELECTRIFICATION OF RAILWAYS # NOW HE SAYS THE COMPARISON IS DREADFUL ## <X T-11(A)-22> WELL TH- WELL THERE'S SOME INDEPENDENCE, IS IT? #BECAUSE WHAT EH IS NEEDED IN SCOTLAND IS ONLY. WELL I THINK, DE- CENTRALISATION# == I MEAN THINGS THAT HAPPEN IN MIDLOTHIAN CAN BE SOLVED - NOT EVERYTHING BUT MOST THINGS- CAN BE SOLVED IN MIDLOTHIAN, NOT WHITEHALL # THEY DON T NEED TO GO AWAY DOWN THERE # NOW ANOTHER PROBLEM IS= I FIND THAT THIS NEGLECT - RELATIVE NEGLECT OF SCOTLAND - IS NOT ONLY IN SCOTLAND IT IS ALSO, I'M AFRAID. IN THE NORTH OF ENGLAND # W% EH WE TOOK A BUS RUN= ONE YEAR= FROM EDINBURGH TO BLACKPOOL, YOU KNOW WHERE BLACKPOOL 'IS? (CUP) # I WASN'T GOING DOWN <P 15> THERE FOR THE LIGHTS HOWEVER! # AND THE PUS PASSED THROUGH DISTRESSED APEAS #NOW DO YOU KNOW WHAT DISTRESSED AREAS ARE LIKE? ## <X T-11(A)-23> OH, POVERTY! AND MANY OF THE T% SMALL TOWNS AND VILLAGES THE BUS PASSED THROUGH EHM HAD ITS SQUALOR, LIKE GLASGOW, AT ITS WORST, # AND MYXI WAS%MY SON WAS WITH ME AND HE SAID "DAD" THAT'S ME! #I DON'T WANT TO GO TO BLACKPOOL BY BUS EVER AGAIN!" #HE LEARNED A BIGGER LESSON = IN- IN THE= DEPRESSED AREAS IN THE NORTH OF ENGLAND THAN HE DID ER FROM LIVING IN EDINBURGH # HE COMPARED IT IN MANY CASES WITH GLASGOW # NOW COMPARE= WITH LONDON # NOW IT'S ALL VERY WELL WHITEHALL THIS, WHITEHALL THAT, BUT LOOK AT THE ITV ER EFFORTS AT = STOPPING THE= SQUALOR AND SUFFERING EH IN THE PLACES IN EAST LONDON AND JUST OUTSIDE LONDON # CATHY GC HOME. DID YOU SEE THE FILM? # THAT'S NOT SCOTLAND # I HOPE IT - IT COMES BACK TO THE COLLEGE AND IT'S JUST ER A MATTER OF= IF YOU HAVE A FAMILY, THE MAN LOSES HIS JOB, THE WIFE HAS A FAMILY AND = TRYING TO FIND A HOUSE, AND ER SOMETIMES IT REALLY IS DREADFUL, THE CONDITIONS THEY HAVE! # THEY ARE NOT ANY BETTER DOWN THERE THAN THEY ARE UP HERE BUT WE DON'T SEE THESE THINGS UNLESS WE STAY FOR A LONG ENOUGH TIME AND KNOW WHERE TO GO TO LOOK FOR THEM # BUT = THE HOUSING SITUATION DOWN THERE - NOW THE RATES IN ENGLAND ARE GOING UP JUST AS THEY ARE IN SCOTLAND # ARE YOU WITH ME THERE? (CUF) SO THE RATES ARE GOING UF # NO THIS% THERE'S NO SELECTION, THEY ARE NOT SAYING SCOTLAND WILL PAY HIGHER RATES AND ENGLAND WILL PAY LOWER

<P 16> RATES # THEY'RE NOT% = THERE'S NO PREJUDICE THERE # NOW IN ONE PLACE IN THE NORTH OF LONDON -- HOLD ON (FS HAS BEEN HAVING A PRIVATE CONVERSATION- T'S CALLING TO CRDER) QUESTION? QUESTION? ## <X T-11(A)-24> NO? RIGHT ONE PLACE IN THE NORTH OF LONDON THE RATES ARE SO HIGH- DO YOU KNOW WHAT THE RATEPAYERS HAVE DONE? # THEY HAVE DEMANDED = FROM THE GOVERNMENT= THAT THE BOCKS OF THE LOCAL AUTHORITY BE INSPECTED, BY THE RATEPAYERS WHICH IS ALWAYS TURNED DOWN BUT THEY WENT SO FAR WITH THEIR DEMANDS # AND THEY ARE USING MONEY TO BUY, TO GREAT% = TO BUILD GREAT BIG NEW TOWNS, WITH MONUMENTS AND ALL THAT = AND PEOPLE DON\*T HAVE THE MONEY= TO PAY ALL THAT # THEY PAY THE HIGHEST RATES IN THE UNITED KINGDOM # NOW THIS IS NEAR LONDON NOT SCOTLAND ## <X T-11(A)-26> YEAH, FOSSIBLY = THEY MAY NOT HAVE REALISED THAT = ACTUALLY OIL%BRINGING OIL UP IS A VERY

REALISED THAT = ACTUALLY DIL%BRINGING DIE UP IS A VERY UNPLEASANT JCB, IT'S A DIFFERENT JOB ER MECHANICALLY AND THEY ARE LIVING ON THESE EH RIGS # NOW YOU ARE EXPOSED TO ALL SORTS OF DANGERS ON THESE RIGS # AND TO GO BACK, WHEN YOU GO EACK ON TO THE MAINLAND THEN YOU REALLY <P 17> WANT SOME KIND OF COMFORT TO MAKE UP= FOR THE RIGOURS ##

<X T-11(A)-48> NOW IF SHE IS GOING TO BE ECONOMICALLY INDEPENDENT THAT DEPENDS ON PRODUCTION= IN SCOTLAND # SHE MUST BE ABLE TO PRODUCE FOOD, CLOTHING AND SHELTER FOR HER POPULATION AND THE MONEY THE VALUE OF ANY MONEY-(ASIDE- TO STUDENT) IS THAT= UH LATE SPRING, IS IT? -THE VALUE OF (SBI)

<X T-11(A)-48A> THE VALUE OF ANY MONEY WILL BE NO HIGHER
THAN THE GOODS SHE PRODUCES # THERE'S NO USE HAVING
MONEY IF YOU

<P 20> CAN BUY NOTHING WITH IT ##

<X T-11(A)-52> UHUH WELL THIS IS% THE ONLY TROUBLE HERE IS= IF YOU ARE A MEMBER OF THE LABOUR PARTY, FOR EXAMPLE = YOU MIGHT FEEL YOU\*VE TO VOTE WHAT THE PARTY WANTS YOU TO VOTE AND THAT MIGHT BE AGAINST YOUR CONVICTIONS # THIS HAS BEEN THE TROUBLE WITH A LOT OF THE VOTERS- NOT WITH ME, I\*VE NO PROBLEM # BUT EH THIS HAS BEEN THE TROUBLE WITH SOME OF THE VOTERS # AND THEY\*VE CALLED IT A POLITICAL VOTE, RATHER THAN A GEOGRAPHICAL ONE, AND THEY HAVEN\*T FELT IT'S VEPY HONEST # THIS IS WHAT SOME OF THEM ARE ARGUING ABOUT ON THE TELEVISION ##

<Z 21> T2NSP

<X T-2(NS)-2^> THAT THE MAJORITY WINS # THE MAJORITY OF == OF = NOT JUST THE VOTERS == THE VOTERS ARE ALL THE PEOPLE WHO ARE FLIGIBLE TO VOTE AS SOMEBODY SAID A MINUTE AGO (MLG) === OF THE PEOPLE WHO ACTUALLY GO OUT AND VOTE = WHICH IS RATHER A DIFFERENCE # === UHM = WHY DO YOU THINK THEY INTRODUCED THIS FORTY PERCENT% RULE? ##

<X T-2(NS)-25> SO IT\*S FOR THAT REASON THAT THEY
INTRODUCED THE FORTY PERCENT RULE # NORMALLY IN THE
RULES UHM OF ANY SOCIETY = YOU% = IF YOU ARE GOING TO
CHANGE THE CONSTITUTION OF THE SOCIETY = IT IS GUITE
NORMAL TO HAVE TWO THIRDS OF THE PEOPLE = HAVING TO VOTE

FOR THE CHANGE = # AND THIS ACTUALLY IS TRUE EVEN FOR THE SCOTTISH NATIONALIST PARTY = IF THEY WANT TO CHANGE THEIR CONSTITUTION THEY HAVE TO HAVE TWO THIRDS = VOTING = FOR THE CHANGE ## <P 7>

<X T-2(NS)-26> OF THE PARTY # IF YOU HAVE A CLUB = THAT WANTS TO CHANGE ITS CONSTITUTIONAL PROCEDURE YOU HAVE TO HAVE TWO THIRDS OF THE PEOPLE = CHANGING IT ## SC THAT THE FORTY PERCENT RULE APPEARED TO BE QUITE === AAA = LENIENT ONE # ER WHAT ARE THE SCOTTISH NATIONALISTS SAYING AS A RESULT = OF = ER THE REFERENDUM WHICH IS QUITE OBVICUS THAT THEY WILL SAY? ## <Y T-2(NS)-33> WELL = THERE IS% HAVE YOU EVER TRIED = IT AFFECTS EVEN THE SIMPLEST THINGS LIKE TRYING TO LOOK SOMETHING UP IN THE TELEPHONE BOOK = # HAVE YOU EVER TRIED TO FIND A PARTICULAR SWIMMING POOL = IN THE PHONE BOOK TO FIND OUT IF IT'S OPEN OR NOT? = # OR A PUBLIC LIBRARY? # SCMETIMES YOU HAVE TO LOOK UNDER "LOTHIAN" = # SOMETIMES YOU HAVE TO LOOK UNDER "CITY" = OR "CITY OF EDINBURGH" # NEVER CAN YOU LOOK IT UP UNDER THE NAME OF THE SAIMMING POOL OR THE NAME OF THE LIBRARY OR EVEN UNDER "S" FOR SWIMMING POOL OR "L" FOR LIBRARY == # UHM WHAT HAPPENED A FEW YEARS AGO IS THAT = UHM = AND I CANNOT COMPLETELY UNDERSTAND IT = UHM = WE USED TO HAVE = LOCAL GOVEFNMENT IN EDINBURGH = AND THEN LOCAL GOVERNMENT IN = DISTRICT OUTSIDE EDINBURGH == AND THEY REORGANIZED IT = #THEY MADE IT = YOU NOW HAVE A THING <P 12> CALLED "THE LOTHIAN REGION" = WHICH IS DIVIDED INTO THREE SECTIONS = # (COUGHS) AND THERE'S A BIT OF THIS = INSIDE IT WHICH APPLIES TO = THE CENTRAL REGION = % MIDLOTHIAN = AND THEN THERE IS A BIT WHICH IS SOMEHOW EITHER SEPARATE OR NOT QUITE SEPARATE WHICH APPLIES TO THE CITY OF EDINBURGH = # AND = I FIND IT VERY DIFFICULT = TO UNDERSTAND WHICH = PART OF ALL THIS BIG BODY GOVERNS WHAT = # NOW IF I FIND IT DIFFICULT, I CANNOT UNDERSTAND HOW IF% SOMEBODY ELSE = WOULD BE ABLE TO UNDERSTAND = WITH AN ASSEMBLY # WHAT IS DONE BY THE ASSEMBLY? = # WHAT IS DONE BY THE REGION? # WHAT IS DONE BY THE DISTRICT? # WHAT IS DONE BY THE CITY? # FOUR DIFFERENT LAYERS AND YOU'VE GOT A COMPLAINT = # WHERE DO YOU TAKE THE COMPLAINT? ## (NUP)

#### <Z 24>T14NSP

<P 1>

<X T-14(NS)-1> I THINK IT IS WORKING, YFS IT IS WORKING AND HE SAYS THAT THIS WILL = PICK UP EVERYTHING THAT IS = SAID # NOW THE IDEA IS THAT = YOU ALL DO SOME TOPING % TALKING - TOPING! # THE SUBJECT UNDER DISCUSSION IS DEVOLUTION # THIS IS ER WHAT HE THOUGHT WOULD BE AN ENTERTAINING AND ER MAYBE AN ILLUSTRATIVE UHM = VEHICLE TO GET YOU TALKING TO- TO HAVE SOMETHING GOING IN THE CLASSROOM SITUATION # WHAT I HAVE DONF IS I HAVE = NOTED ONE GR TWO = FEATURES HERE ON = DEVOLUTION AND I LL PUT THEM ON THE BOARD AND THEY WILL EE GOOD = DISCUSSIVE POINTS UHM AND I THINK - IF YOU DON'T KNOW ANYTHING

ABOUT IT = TAKE YOU INTO IT # AND I'D BE VERY SURPRISED IF YOU'D BE ABLE TO AVOID ANYTHING ON - ON DEVOLUTION IN THE LAST LITTLE WHILE # SO I'LL PUT THESE ON THE BOARD AND = IN THE MEANTIME = IF YOU CAN THINK ABOUT IT = # THINK OF THE WHOLE ISSUE OF DEVOLUTION FROM ANY ANGLE AT ALL # AND AS I PUT THIS = MATERIAL ON THE BOARD, IT WILL PROBABLY SPARK OFF SOMETHING IN YOUR MINDS # I HOPE SO, ANYWAY # AND ER THEN WE CAN LOOK AT IT FOR FIVE OR TEN MINUTES # THAT SHOULD BE SUFFICIENT, I THINK # UHM ON THE FIRST OF MARCH ER SCOTLAND - PEOPLE IN SCOTLAND -HAD TO, OVER THE AGE OF ... # (IC) <x T-14(NS)-14> ...GVER THE 4GE OF EIGHTEEN HAD TO VOTE UHM = WHETHER THEY WOULD VOTE "YES" OR "NO" IN AGREEMENT WITH = ER = WHETHER THERE SHOULD BE A SEPARATE ASSEMBLY IN EDINBURGH = ER FOR THE BETTER CARE OF SCOTS GOVERNMENT # NOT BREAKING AWAY FROM THE = ENGLISH OR BRITISH FARLIAMENT ALTOGETHER BUT = UHM TO LOOK AFTER <P 2> SCOTS AFFAIRS THROUGHOUT SCOTLAND # ONE FEELING THAT ER WAS ROUSED PIGHT AWAY WAS THAT = WE IN SCOTLAND WOULD HAVE TOO MUCH GOVERNMENT BY ALL THIS # THAT WE WOULD HAVE = ANOTHER LAYER OF GOVERNMENT CREATED BY = THIS SCOTTISH ASSEMBLY = EHM WHICH WOULD LIE ON TOP OF THE REGION = ER DEVELOPMENT STRUCTURE AND DISTRICT = STRUCTUPE GIVING FAR TOO MUCH GOVERNMENT AND FOP MANY PEOPLE THIS WAS TOO MUCH # WELL THE ISSUES THAT HAD TO EE DISCUSSED ON THE = = ER THAT HAD TO BE DISCUSSED BEFORE THE FIRST OF MARCH = WERE = I THINK. PERAMBULATING ROUND ABOUT SOME OF THESE = VIEWS, POINTS THAT WE VE PUT ON THE BOARD HERE = # EHM = FIRST OF ALL = THIS IDEA OF A FEELING OF NATIONALISM - HOW STRONG DO YOU THINK = EHM THIS FEELING OF NATIONALISM IS IN SCOTLAND? # SCOTS CULTURE, SCOTS CUSTOMS, SCOTS LANGUAGES - YOU GET THE GAELIC AND THE - AND THE (???) AND THE SCOTS - LALLANS. OUP OWN CHURCH, OUP OWN LAWS. OUR OWN DISTINCTIVE EDUCATION OUR OWN OUTLOOK ON LIFE WHICH IS = MARKEDLY DIFFERENT FROM THE ENGLISH ONE # WHAT DO YOU FEEL ON THIS ONE, MARY? # WHAT- WHAT'S YOUR FEELING? # DC YOU THINK THIS HAD ANYTHING TO DO WITH HOW PEOPLE VOTED OR DIDN\*T VOTE OR WHAT THEY FELT ABOUT DEVOLUTION? ## <X T-14(NS)-26> YOU THINK THAT THE WAY IT BREAKS DOWN IS = EH IS ACCORDING TO CLASS # THAT'S AN INTERESTING UBSERVATION # YET MOST OF THE = IN MOST PEOPLE WITH PRITAIN IN- IN THE CLASS DIVISION, IN SCOTLAND IN THE CLASS DIVISION ARE WORKING CLASS THAT WOULD SEEM TO HAVE ER PROMISED & BIGGER = A MAJORITY OF "YESES" # WHY DO YOU THINK SO MANY = WORKING CLASSES THEN DID NOT VOTE OR NOT % VOTED "NO" === ? # YOU\*RE TAKING YOUR POINT ## (SBI) <X T-14(NS)-27> AH. YOU THINK WE WERE CONFUSED BY THE TELEVISION? ## <X T-14(NS)-28> TOO MUCH COVERAGE # \*CAUSE THE ISSUE IS NOT PAINTED CLEAR ENGUGH # WHAT ABOUT THE WAY I'VE

PAINTED THEM ON THE BOARD HERE, THEN? # THAT THERE'S-THERE'S POOR GOVERNMENT JUST NOW, THAT IT'S NON-DEMOCRATIC # WHEN YOU HAVE ONE MAN WHO IS APPOINTED, HE IS NOT ELECTED, HE IS SITTING THERE AND HE CONTROLS

EVERYTHING. HE CONTROLS MOST OF YOUR LIFE JUST NOW === # EHM SCOTS PUBLIC BUSINESS WHICH IS NOT IN THE SCOTTISH CHARACTER WHICH IS VERY DEMOCRATIC, WE ARE # CLYDESIDE RIGHT THROUGH TO THE COMMUNIST = GRANT PARK(?) # WHAT ABOUT THIS BUSINESS ABOUT = WHICH I FEEL VERY STRONGLY ABOUT AS YOU SHOULD KNOW BY NOW # THAT EVERYTHING - JUST EV-EVERYTHING IN- IN BRITAIN = HAS JUST GOT TO BE DOMINATED BY LONDON # AND THE SOUTH-EAST IS A VORTEX THAT PULLS ALL THE TALENT, KEEPS MOST OF THE MONEY, EVEN YOUR BEEF AND YOUR FISH GOES DOWN TO LONDON BEFORE IT COMES BACK UF HERE <P 8> AGAIN WITH A GREATER PRICE UHM LOAD ADDED TO IT? # DON'T YOU THINK THAT SOMETHING GENERAT- GENERATED -CREATED IN SCOTLAND WOULD MAKE = A HECK OF A DIFFERENCE EVEN FROM THAT ANGLE? # WELL, WHAT ABOUT THIS ONE. NUMBER FOUR? # THEY WILL ONLY HAVE BRANCH OFFSHOOTS OF INDUSTRY IN BRITAIN DUE TO AGAIN THIS SYSTEM WHICH HAS DOMINATED THE CENTRAL OFFICES AND EVERYTHING IS CONTROLLED FROM LONDON # AND IT'S GUITE NATURAL TO KEEP = YOUR STRENGTH ROUND ABOUT YOU AND THE WEAKEST WILL BE FURTHEST AWAY AND THEY WILL BE THE FIRST TO GO - WHICH IS THE SYSTEM HERE # WORK FACTORIES ARE CLOSING DOWN IN EAST KILBRIDE AND UN HONEYROOD, ALL THE REST ARE NOW = CLOSING # THEY\*RE THE FIRST TO GO UP HERE BECAUSE THERE IS NOTHING = A CORE INDUSTRY HERE, CORE FACTORIES HERE # EVEN IF THERE ARE, THEY ARE BOUGHT UP BY THE = MULTIPLE GIANTS LOCATED PERHAPS ABROAD BUT MANY OF THEM IN LONDON # AND AGAIN THEY VE BOUGHT THEM UP, THEY BUY THEM UF TO CLOSE THEM OR IF THEY DON'T CLOSE THEM, THEY ARE THE FIRST TO BE CLOSED # THIS ARGUMENT # WHAT ABOUT NUMBER FIVE? - THAT THERE- THERE IS A SCOTS DESIRE = A MAN WITH SCOTS IN THEM - THE MALE PREYING - THIS SORT OF RUBBISH = BUT- B-BUT THE DESIRE IS VERY REAL = TO CONTROL YOUR CWN AFFAIRS NOT TO HAVE SOMEBODY ELSE = EHM = = FROM THE SOUTH OF ENGLAND = DOMINATING # THERE IS NO WAY IN WHICH WE CAN GET = BEYOND A BUILT-IN ENGLISH MP DOMINANCE # WHENEVER IT COMES TO A VOTE, WHATEVER MOST MPS WANT I.E. DEMOCRACY, HAPPENS AND = IT HAPPENS, WHATEVER THEY WANT HAPPENS # AND THE CASE IS = THAT YOU HAVE MOST PEOPLE GOING TO THE BAR WHEN IT COMES TO SCOTS BUSINESS # WHEN THEY VOTE = AGAIN IT'S DOMINATED BY HOW IT AFFECTS

<P > THE SOUTH OF ENGLAND, NOT EVEN THE NORTH OF ENGLAND = THAT'S WHY THEY'RE RAGING # ABOUT THIS -NUMBER SIX - THE PROPOSED ASSEMBLY # RATHER A MESS (SOMEONE COUGHS) IN FACT, IT'S A MESS - DELIBERATELY A MESS! # IT'S BEEN HACKED, CARVED, BUTCHERED IN THE COMMITTEE STAGES DELIBERATELY = BY THE "NO" MEN = IN THE BEGINNING OF THE WHOLE THING SO THAT YOU'RE LEFT WITH A MESS # AND THEN THEY ASK YOU TO VOTE "NO" BECAUSE IT IS A MESS WHICH HAS BEEN CREATED BY THE VERY PEOPLE = WHO MADE IT A MESS # THAT = IS THE IGNOMINY OF THE WHOLE THING AND THAT IS JUST NOT PLAIN FAIR # IN FACT, IT'S SO BAD - IT'S THE LACK OF EYELIDS BEING CFENED TO THE WHOLE THING THAT ANNOYS ME SO MUCH AND - CEPTAINLY A PROPOSED ASSEMBLY WOULD BE A START - LIKE EIGHTEEN\*THIRTY TO EIGHTEEN\*SIXIY-SEVEN % EIGHTEEN\*EIGHTY-FOUR - BACK TO

COMMON SENSE # IT'S ONLY COMMON SENSE TO HAVE AN ASSEMBLY OF THIS NATURE # PARLIAMENT = WILL REFUSE DEVOLUTION # THE VOTE HAS BEEN A- A MAJORITY = IN FAVOUR OF IT, BUT THEY WILL REFUSE IT = ALTHOUGH IN FAVOUR I.E. = DEMOCRACY IS AT WORK AT LOCAL LEVEL BUT IT'S BEEN SAID THAT IT DOESN'T MATTER = DEMOCRACY WILL WORK AT PARLIAMENTARY LEVEL AND MOST OF THEM WILL SAY "NO" # WHAT ARE YOUR FEELINGS, THEN? # THERE WE HAVE ALL THESE POINTS: THE NATIONALISTS \* ARGUMENTS, THE HISTORICAL ONES ARE BYGONE AND THE SEVENTEEN \* OH \* SEVEN UNION WAS TREACHERY BUYING = THE WAY ENGLISH GOLD BOUGHT THE UNION # THEN WE HAVE THIS WHOLE = POST NINETEEN\*FORTY-FIVE DEVELOPMENT # IF YOU HEAR THE % READ = SCOTTISH LITERATURE WHICH IS = NOT EVEN = THE - THE HEIGHT OF % = THE WHOLE IGNOMINY OF IT! - SCOTTISH LITERATURE IS NOT EVEN TAUGHT IN SCOTTISH SCHOOLS! # HOW MANY OF YOU PEOPLE HAVE READ DUMAS? # HOW MANY OF YOU READ LEWIS GRASSIC GIBBON? # GOOD! BECAUSE YOU'VE BEEN FORCED TO DO IT FOR A TEXT OF FOR THE LOVE OF IT? ## <P 13> <X T-14(NS)-29> AS A TEXT, YES # TF IT HADN'T BEEN GIVEN TO YOU AS A TEXT, WOULD YOU HAVE READ IT, DO YOU THINK? # WOULD YOU EVER HAVE HEARD OF HIM? ## <x T-14(NS)-30> EXACTLY - THERE IS A NEW (STRAND?) (NOISE) FOUND HERE BECAUSE OF THIS # SOME = SOME = WONDERFUL STUFF HERE AND THIS SCOTS SQUARE AND SUNSET SONGS ARE MARVELLOUS, IT REALLY IS GREAT # AS AFE "GREEN SHUTTERS" AND GEORGE DOUGLAS BROWN # EVEN ECONOMICS = FOR SCOTLAND - THERE IS NO DOUBT ABOUT IT: SCOTLAND IS QUITE SELF-SUFFICIENT # ANY ARGUMENT THAT'S PUT TO YOU GF THE OPPOSITE IS = RUBBISH # WE COULD FEED OURSELVES -THE POPULATION IS SO SMALL - WE HAVEN'T = THE POPULATION # IT'S AS SIMPLE AS THAT: THERE IS ENOUGH FOOD. THERE IS ENOUGH COAL, GAS, NEVER MIND THE OIL ARGUMENT. HYDRG-ELECTRIC FOWER, POWER FROM- FROM CCAL, FISH, BEEF # AND THE MONEY THAT WOULD BE MADE FROM THIS = IS MORE THAN ENOUGH FOR SELF-SUFFICIENCY AND TO BE GOING ALONG # IT'S ER - IT'S NONSENSE FOR ANYBODY TO SAY OTHERWISE # AND THE SKILLS ARE HERE - ESPECIALLY IN THE AREA OF SKILLS - CENTURIES OLD # AND ALSO THE SCOTTISH EDUCATION IS FAR AND AHEAD OF THE ENGLISH ONE. AS MOST OF YOU ENGLISH PEOPLE WOULD UHM - WOULD AGREE WITH === # EHM, AFTER = SAYING ALL THAT = WOULD YOU LIKE TO KNOCK ME DOWN ON ANY CF IT? # HOW DO YOU FEEL ANNE? ## <x T-14(NS)-41> NO HE WAS NOT. HE'S A MAN CALLED = HEATHERINGTON ## <X T-14(NS)-42> AND HE WAS IN CONTROL OF THE SCOTTISH TELEVISION AND HE WAS BEFORE THAT THE EDITOR OF THE GUARDIAN - FIRST BY CHOICE, HE WAS GRADED BY SWANN ER AND OTHERS ON BBC NORTHERN TO BECOME CONTROLLER OF SCOTLAND # SC WHAT DID HE IMMEDIATELY START TO DO? # HE STARTED TO BUILD UP THE WHOLE OF THE SCOTTISH CULTURE THING, THE BIG WAY # <P 13> AND WHAT DID THE HIG = WARLORDS IN LONDON DO WITH

<P 13> AND WHAT DID THE HIG = WARLORDS IN LONDON DO WITH HIM? # HE IS NOW HOLDING ANOTHER JOB IN INVERNESS AS A-A (???), SC THE JOB IS UP FOR GRABS AGAIN # AND WHO WILL BE MAKING THE APPOINTMENT? # THE SAME = CHIEFS IN LONDON

AND THEY ARE GOING TO GET A "YES" MAN # THEY ARE CERTAINLY GOING TO GET A "YES" MAN AND THE PROGRAMMES ARE GOING TO BE ISSUED IN THE NATIONAL EFFORT, THAT AT THE MOMENT THERE ARE TWO PER YEAR - SCOTTISH ORIGIN -BBC SCOTLAND OR SOMETHING LIKE THIS - THEY RE GOING TO BE EVEN LESS # THIS IS THE SAME SORT OF CONTROL THAT I AM TALKING ABOUT - FROM SOUTH-EAST LONDON, FROM LONDON SOUTH-EAST, FROM THAT VORTEX - THE CONTROL AND THE WAY THEY CAN LIMIT OR CUT OFF ALTOGETHER = EHM = DEVELOPMENTS HERE # YOU CAN'T GET A SCOTTISH PROGRAMME ON THE NATIONAL NETWORK # OH THE REASONS: THEY\*LL NOT BE ABLE TO UNDERSTAND THE SCOTS ACCENT. THAT'S THE MAIN ONE # OR: IT IS A POCR SHOW, IT'S VERY BADLY EDITED # WHAT ABOUT THE CULLING OF THE SEALS - SHOCKING BY ITSELF -THE CULLING OF THE SEALS EPISODE? # A STORY DISCOVERED BY SCOTLAND, THEY GOT THE WHOLE TEAM READY TO COVER IT FLY OUT AND COVER IT AND ALL THE REST OF IT # OPDERS FROM LONDON: CUT, YOU'RE NOT DOING IT, WE'RE DOING IT # IT'S GOING ON THE NATIONAL NETWORK, SO WE'RE SENDING = A TEAM FROM LONDON UP AND THAT'S EXACTLY WHAT THEY DID # FINE, CULTURED, ENGLISH ACCENTS = GIVING ACROSS THE NATIONAL NETWORK AND THE WHOLE PLACE IN GLASGOW - WHICH OF COURSE IS A MONSTER IN ITSELF = COMPARED TO THE REST CF SCGTLAND == THEY WERE NAEWHERE # THAT'S WHY YOUR FREDOMINANT DISAFFECTION, WHY THEY APE ALL LEAVING IT IN SCORES - DROVES ==== (NOISE) <P 14> WHAT ABOUT EDUCATION? # WHERE DO WE GET THE MONEY TO RUN EDUCATION IN SCOTLAND? ## <X T-14(NS)-43> OH NO NO NO NO NO NO NO! THE VERY OPPOSITE! # IT'S ENGLAND THAT'S CUTTING ITSELF OFF FROM SCOTLAND! # WE HAVE ALWAYS BEEN OPEN = ACCESSIBLE TO FOREIGNERS # IF % DO YOU KNOW THAT IF YOU PEOPLE WANT TO GO DOWN TO ENGLAND AND TO GET RESIDENCE = IN AN ENGLISH = UNIVERSITY OR COLLEGE YOU WILL HAVE ON YOUR PASSPORT THAT YOU ARE A FOREIGNER. THAT YOU ARE FROM OVERSEAS # AND THE REASON? BECAUSE ALL THE ENGLISH AND WELSH LOCAL EDUCATION AUTHORITIES PAY MONEY INTO A COMMON POOL WHICH REDUCES THE RENT, THE COSTS OF LIVING IN A STUDENT ACCOMMODATION # BUT IN SCOTLAND, SCOTLAND IS FOREIGN. SCOTLAND DOES NOT PAY INTO THIS = POOL # (13A) NEVER BEEN INVITED # SO YOU GOING DOWN HAVE TO PAY TWICE OR THREE TIMES THE PENT WHICH ENGLISH AND WELSH PEOPLE WILL PAY # NOW THAT'S TYPICAL OF THE SORT OF ATTITUDE # AH. YOUR HIGHERS UP HERE, YOU TRY FLOGGING THEM IN AN ENGLISH UNIVERSITY === IN AN ENGLISH POLYTECHNIC # THEY ARE GETTING THEIR EYES OPEN A LITTLE BIT NOW BUT IT'S NOT SCOTTISH = INSULARITY AND BROKERISM, JOHN, IT'S THE CPPOSITE # IT'S ENGLISH BROKER=ISM - THAT THE WHOLE WORLD RUNS ROUND ENGLAND, THAT WE SHOULD JOIN # CAN'T WE SEE HOW KIND ARE THEY TO ALLOW = US TO JOIN # COME ON, AREN'T YOU AGAINST ME? ## <P 15> <X T-14(NS)-44> NO WE- WE\*RE. I THINK. LIVE AND LET

LIVE, AND I THINK THIS HAS ALWAYS BEEN THE SCOTTISH WAY # WE HAVE HAD NG - (FS COUGHS) HERE AS FAR AS I CAN S-SEE AND I HAVE STUDIED EDUCATION - IVE SEEN = NO = RULE = OF REGULATIONS WHATSOEVER DISCERNING AGAINST =

EHM ANY ENGLISH EHM DIPLOMA OR WHATEVER # THERE WAS A- A WHILE WHERE ENGLISH = FINAL EDUCATION = CERTIFICATES WEREN'T ACCEPTED # QUITE RIGHTLY, BECAUSE THEY WERE ONLY TWO YEARS AS AGAINST A THREE- OR FOUR-YEAR COURSE HERE # BUT THAT'S BEEN CHANGED - NOW IT'S ON A % = THE SCOTTISH AUTHORITIES HAVE PUT IT BACK # AND IN FACT NOW = WITH THE ART QUALIFICATION, PEOPLE LIKE MELVIN AND JOHN WHO HAVE AN RMS - % A D.A., DIPLOMA IN ART, WHICH IS THE OLD SCOTTISH QUALIFICATION IS NOT RECOGNISED AS A DEGREE HERE IN SCOTLAND, SO YOU ONLY GET FAY AS AN ORDINARY CRADUATE # IN ENGLAND THEY DON'T GET A D.A., THEY GET A DEGREE IN ART # THIS IS NOT AN EQUIVALENT ## (SBI) <X T-14(NS)-45> EXACTLY, BUT THEY GET PAID MORE MONEY! # THEY ARE THEN % - THEY ARE NOW LOOKED AT AS A = AN HONOURS DEGREE AND THEY GET HONOURS DEGREE = SALARY # SO THE RESULT IS IN FACT THE VERY OPPOSITE: THEY ARE GIVING MORE MONEY TO ENGLISH QUALIFICATIONS WHICH ARE = INFEPIOR TO CURS - WHICH HAS BEEN SUPERIOR # THAT'S THE EDUCATION THING # WHAT ABOUT THESE OTHER ARGUMENTS? # WHAT ABOUT THE- THE ENGLISH REWARD? # OCH, WELL WE'VE = SAID ENOUGH + I THINK WE'VE SAID ENOUGH # WHAT DO YOU THINK? ##

<Z 22> T15NSP

<X T-15(NS)-3> ROSE? YOU\*PE THE ONLY ONE YOU\*RE THE ONLY ONE THAT VOTED ? ALLRIGHT # SO! THE REFERENDUM # WE = WE HAD TO % = THE SCOTTISH PEOPLE = HAD TO DECIDE = ON WHETHER THEY WANTED AN ASSEMBLY # THE ASSEMELY WAS A FORM OF GOVERNMENT WHICH WE WOULD USE TO GOVERN OURSELVES # WE COULD = MAKE DECISION'S = USE THE MONEY = THAT = WE WOULD BE GIVEN TO = DO THINGS FOR OURSELVES: HOUSING, SCHOOLS, TRANSPORT, A NUMBER OF THINGS WHICH THEY TOLD US WE NEEDED = TO DO FOR OURSELVES # AND IT WAS THOUGHT THAT THE BRITISH = THE THE SCOTTISH FUELIC = WANTED TO GOVERN THEMSELVES # YOU KNOW, WHAT WAS% EVERYEODY THOUGHT% EVERYONE'S BEEN TALKING ABOUT IT FOR YEARS, HAVEN'T

<P 2> THEY? = THAT = WHAT THE SCOTTISH WANTED WAS THEIR OWN WAY OF GOVERNING THEMSELVES # NOT INDEPENDENCE, NOT SEPARATION, EUT JUST A WAY OF = USING = THE MONEY FOR THEIR OWN GOOD # AND WHAT HAPPENED? # WELL, THE REFERENDUM DIDN\*T GO THROUGH, DID IT? # THE SCOTTISH FEOPLE DIDN\*T GO OUT AND VOTE AND = IT ENDED UP THAT THE SCOTTISH PEOFLE (NUP) DIDN\*T = WANT THE SCOTLAND ACT WHICH WAS THE PROPOSALS FOR AN ASSEMBLY # SO = WHAT I\*D LIKE TO SAY TO YOU IS: WHY? # WHY AFTER ALL THIS TIME DID THE SCOTTISH PEOPLE NOT-VOTE FOR AN ASSEMBLY? = WHEN IT WAS SO WIDELY THOUGHT = THAT = WE DID? # ALLRIGHT, SO WHAT WERE SOME OF THE = ARGUMENTS THAT WERE PUT = FOR AN ASSEMBLY? # WHAT WERE THEY? # TELL ME WHAT THEY WERE? ## (OPENING PAPER)

<X T-15(NS)-8> UHM = NATIONAL IDENTITY = (WEB)ALLRIGHT NOW == IDENTITY (CORRECTING WHILE WRITING) # NOW == WHAT IS THE OPPOSITE ARGUMENT OF THE NATIONAL IDENTITY = ARGUMENT? # WHY DID THE "NO" VOTERS SAY "DON'T VOTE FOR

THE ASSEMBLY, THE ASSEMBLY = WILL DO US HARM BECAUSE == SEPARATION (WBB) ALLRIGHT? (CUF) # THEY WERE VERY = UHM SCARED = THAT = THE CONCLUSION OF THE ASSEMBLY WOULD LEAD US TO SEPARATION = AN INDEPENDENT SCOTLAND A SCOTLAND COMPLETELY AWAY FROM ENGLAND = A SCOTLAND THAT WOULD HAVE TO BE = COMPLETELY = SEFARATE IN ALL WAYS # BUT THIS IS NOT, THE "YES" PEOPLE SAID, THIS WAS NOT WHAT = DEVOLUTION WAS ALL ABOUT # THEY JUST WANTED A LITTLE EIT POWER, A LITTLE BIT MONEY # THEY DIDN\*T WANT SEPARATION # AND HERE = WHERE = THEY HAVE TO SPEND THEY HAVE% THEY GOT THIRTY-FIVE THOUSAND MILLION = THIRTY-FIVE FUNDRED SORRY = MILLION POUNDS = TO SPEND- # NOW THAT WAS Source what the assembly could spend = on these things AND MANY OTHER THINGS # WHAT WAS THE OPPOSITE ARGUMENT FOR THAT? THAT THE "NO" CAMPAIGNERS SAID = ? # THE ASSEMBLY WON\*T WORK BECAUSE = IT COSTS TOO MUCH = IT COSTS TOO MUCH" # (NBB) THEY THOUGHT THAT = WE WOULD BE = UHM OVERTAXED = WE WOULD BE OVER-GOVERNED # WE WOULD HAVE TO SPEND FAR TOO MUCH MONEY IN ORDER TO HAVE AN ASSEMBLY WHO WOULD BE ABLE TO SPEND THIS # AND THE"YES"% THE "NO" CAMPAIGNERS SAID UHM -"WE DON'T WANT AN ASSEMBLY BECAUSE OUR = WESTMINSTER GOVERNMENT CAN STILL SPEND THIS = MONEY # BUT THE "YES" CAMPAIGNERS SAID = "AH, DUT = WESTMINSTER DOESN'T CARE ABOUT SCOTLAND # THEY DON\*T CARE THAT WE NEED HOUSES # THEY DON\*T KNOW THAT WE NEED HOUSES OR THEY DON'T KNOW WHAT KIND OF HOUSES WE NEED # SO, THEY SAID; "WE NEED THE ASSEMBLY TO SPEND = THIRTY-FIVE HUNDRED MILLION = POUNDS ON US BECAUSE WE \*RE THE ONLY PEOPLE THAT KNOW WHAT WE NEED " # BUT = THE PIG ARGUMENT = IT \*LL COST <P 6> TOO MUCH = THE BIG ARGUMENT = SEPARATION = WERE TWO THINGS = THAT THE "NO" CAMPAIGNERS = SAID # = THE% SORRY = YES THE "NO" CAMPAIGNERS SAID = NO ASSEMELY = # WE DON'T WANT AN ASSEMBLY = # WE DON'T WANT A SEPARATE SCOTLAND = # WE DON'T WANT TO OVERTAX = OUR PEOPLE # ALLRIGHT (TURNING PAPER) IT'S A VERY GOOD IDEA IN THEORY THAT UHM = WE SHOULD HAVE OUR OWN GOVERNING BODY = A NUMBER OF = OTHER PLACES ALL OVER THE WORLD HAVE = DEVOLVED GOVERNMENTS # WHY DON \*T YOU THINK = THE SCOTTISH PEOFLE IN THE END = SAID = "NO ASSEMBLY FOR US" = BECAUSE WHAT HAPPENED OF COURSE WAS THAT = ABOUT A THIRD OF THE PEOPLE DIDN T VOTE = # I MEAN THEY JUST DIDN'T EVEN GET UP AND VOTE! ## <X T-15(NS)-10> YES, THEY GOT THIRTY-THREE PERCENT OF THE VOTES # AND = THE THING IS WE CANNOT NOW CLOSE OUR MIND TO THE QUESTION = # WE\*RE GOING TO BE ASKED TO CONSIDER THIS AGAIN # THIS ISN T THE END OF IT = # THE REFERENDUM FAILED, THE SCOTTISH PEOPLE SAID "NO" TO AN ASSEMBLY = BUT = THAT DOESN'T MEAN TO SAY THAT IT = IT'S AN ISSUE THAT'S = GONE AND FORGOTTEN # IT'S FAR FROM FORGOTTEN .CAUSE WE'VE STILL GOT TO SEE WHAT THE GOVERNMENT 'IS GOING TO DO ABOUT IT = # THE GOVERNMENT IS GOING TO BE PRESSURIZED WITHIN THE NEXT COUPLE OF WEEKS = INTO MAKING A DECISION # WELL THEY\*RE PRESSURIZED AT THE MOMENT = BUT THEY'RE NOT% THEY'VE NOT MADE THEIR DECISION = # WHAT WILL WE SAY IN THE FUTURE TO AN

ASSEMBLY? # I MEAN, WHAT DO WE REALLY FEEL? # DO WE FEEL THAT = A NEED FOR AN ASSEMBLY IS THERE? # <P 8> WHAT DO YOU THINK ABOUT HOUSINC? # DO YOU THINK THAT THE PEOPLE IN WESTMINSTER SHOULD SAY WHERE YOUR MUM SHOULD LIVE # = D.YOU THINK WE SHOULD SAY =WHERE YOUR MUM SHOULD LIVE # = AND = MAKE SURE THAT THERE ARE = ADEQUATE HOUSES FOR EVERYBODY = AND THE RIGHT SORT OF HOUSES? ## <X T-15(NS)-20> A SLIPPERY SLOPE MHUH THIS = ASSEMBLY THEY THOUGHT MIGHT BE THE FIRST STEP TOWARDS = AND DOWN THE SLIPPERY SLOPE TO = SEPARATION # SO WHAT ARE WE SAYING THEN? # ARE WE SAYING WE ARE A = QUITE A = UHM A NATIO% WE DO HAVE QUITE A NATIO% STRONG NATIONAL IDENTITY == THAT WE FEEL STRONGLY ABOUT = CARE FOR WANT TO UHM = REINFORCE # OR ARE WE SAYING THAT WE'RE NOT = WE DON\*T HAVE THIS NATIONAL IDENTITY = AND WE\*RE QUITE HAPPY TO BE A PART OF ONE WHOLE = ISLAND? # ===== IN FACT, MAYBE = THE VOTE AT THE REFERENDUM WOULD SUGGEST THAT WE TRE QUITE HAPPY TO BE PART OF A WHOLE ISLAND # WHAT ARE THE ADVANTAGES OF BEING = ONE HUGE = ISLAND RATHER THAN TWO SEPARATE BODIES? # CAN YOU SEE ANY ADVANTAGES? # WHAT HAPPENS IF WE'RE SEFARATE? # I MEAN WHAT'S THE ONE OBVIOUS THING THAT = IF YOU'VE GOT TWO PEOFLE ## (SEI) <X T-15(NS)-27> MICHT IT ALSO BE POSSIBLE TO TUPN IT ROUND THE OTHER WAY AND SAY THAT = THERE MIGHT BE A WAR = IF WE DON'T = GET SEPARATION = IF WE DON'T GET AN ASSEMBLY = # MIGHT THE EXTREMISTS = START SHOUTING LOUDER AND = WAR NOT = WAR AS SUCH IN THE BEGINNING BUT ACTS OF VICLENCE AND SO ON = # MIGHT THEY BE = UHM = A POSSIBLILITY IN THE FUTURE IF = THE PEOPLE THAT WANT AN ASSEMBLY DON'T GET AN ASSEMBLY AND IN PARTICULAR THE SNPS? ## <X T-15(NS)-28> HOW MANY DOES IT NEED? ## (LAUGHING) <P 17> <X T-15(NS)-29> YOU SEE NOW WE HAVE A SITUATION WHERE THE SNPS ARE FIGHTING FOR THEIR LIVES, AREN'T THEY? # ES: MHMJI MEAN, WE CAN SEE IT ALL THE TIME # I MEAN HERE = THEY WERE THE MOST EXTREME OF THE ONES WANTING A DEVOLVED SCOTLAND = IN TERMS OF = POSSIBLY, ALTHOUGH THEY WOULDN'T ALWAYS ADMIT IT = WANTING SEPARATION = # AND = NOW WE HAVE A SITUATION WHERE THEY VE LOST THAT BATTLE = # THERE'S NO WAY THEY'RE GOING TO WIN THAT BATTLE # THEY MAY STILL GET A DEVOLVED SCOTLAND = BUT IT'S VERY UNLIKELY = THAT THEY'RE GOING TO GAIN SUPPORT FOR SEPARATISM = # BUT ERM = WHAT DO YOU DO WITH = A FACTION OF PEOPLE WHO STILL EXIST? ## <P 18> <X T-15(NS)-32> YES, WE WERE VOTING FOR THE SCOTLAND ACT WHICH FROPOSED AN ASSEMBLY # AND THE ASSEMBLY = WAS A WAY OF DEVCLVING SCOTLAND = # AND WHAT WE WERE NOT = UHM VOTING FOR WAS SEPARATION # WE WERE VOTING FOR A DEVOLVED SCOTLAND = # WE WERE VOTING FOR = A WAY OF GOVERNING OURSELVES = IN PART = # AND = THE ARGUMENT THAT IT COST TOO MUCH = WELL = I\*LL FUT IT TO YOU THAT IT WOULD COST US ONLY-ABOUT FIVE PENCE PER WEEK = PER HEAD = TO = RUN THE ASSEMBLY # DO YOU THINK THAT'S A LOT
CF MONEY = CONSIDERING THE ASSEMBLY WOULD THEN BE ABLE TO SPEND = NINE MILLION POUNDS PER DAY == # THAT\*S THE SPENDING POWER OF THE ASSEMBLY = THIRTY = FIVE HUNDRED MILLION POUNDS PER YEAR = WHICH IS ABOUT NINE = NINE MILLION POUNDS A DAY - FOR A CONTRIBUTION ON OUR PART OF FIVE PENCE PER WEEK = APPROXIMATELY AND IT COULD BE LESS THAN FIVE PENCE PER WEEK ## <P 20>

<X T-15(NS)-33> (OPENING PAPER)WELL HERE\*S THE = THE LEAFLET THAT THE "YES" CAMPAIGN ISSUED = WITH BRUCE MILLAN ON THE FRONT = # AND = WEVE GOT THE PICTURE OF SCOTLAND HERE = # AND THESE ARE ALL THE WAYS = IN WHICH = THE ASSEMBLY = WOULD BE ABLE = TO SPEND MONEY = HOUSING, LOCAL GOVERNMENT, TRANSPORT, THINGS LIKE AIR FLIGHTS AND BOATS TO THE = THE ISLANDS. SCHOOLS # DO WE NEED ANOTHER COLLEGE LIKE THIS? == # THE ARTS, DO WE NEED MORE THEATRES" # DO WE NEED AN OPERA HOUSE? # LOTS OF PEOFLE CAMPAIGNING FOR AN OPERA <F 21> HOUSE # HOW MANY OF US WANT IT? # THERE ARE LOTS OF PEOPLE THAT DON'T WANT IT # BUT THE ASSEMBLY COULD MAKE DECISIONS ON = MATTERS SUCH AS THAT # THEY HAVE LIMITED = UHM = AM - S % AMOUNT CF SAY IN LAW = BUT = DO YOU NOT = THINK THAT THOSE THINGS ARE FUNDAMENTAL TO SCOTTISH LIVING? # OR DO YOU THINK THAT THERE'S NO DIFFERENCE BETWEEN OUR HOUSING PROBLEMS AND ENGLAND'S HOUSING PROBLEMS? ##

## <Z 23> T16NSP

<X T-16(NS)-6> I \*M NOT QUITE SURE WHAT THE FCSITION IS ACTUALLY # IT\*S VERY COMPLEX = # IT HAS TO BE REPEALED = # IT HAS TO BE REPEALED = SO WE\*LL SEE - WHAT HAFPENS = # OBVIDUSLY MR CALLAGHAN\*S STALLING FOR AS MUCH TIME AS HE CAN GET SO THAT HE\*LL - GET BACK SOME PUBLIC SUPPORT IN CASE = IT GOES TO AN ELECTION = AND OBVIDUSLY HE DOESN\*T WANT TO LOSE AN ELECTION # WOULD YOU BE IN FAVGUR OF A CF AN ASSEMBLY IF = THE CONDITIONS WERE DIFFERENT? # I MEAN = THE BILL AS IT WAS = ER THAT WAS% (PHONE RINGS) THAT WAS THE GREAT ARGUMENT = THE BILL AS IT STANDS AT THE MOMENT WASN\*T SATISFACTORY # (WALKING AWAY TO PHONE) WE\*RE GOING TO HAVE TO THINK OF IT AGAIN ##

<X T=16(NS)=7> I THINK POLITICS AT THE BEST OF TIMES ARE VERY VERY DIFFICULT TO UNDERSTAND # AND I THINK THE REFERENDUM = IS A PARTICULARLY COMPLEX ISSUE = BECAUSE IT'S FUNDAMENTAL TO OUR CONSTITUTION = # I MEAN WE'RE ASKING = FOR A COMPLETE CHANGE IN THE WAY THAT WE'RE GOVERNED = # NOW THAT'S = NO SIMPLE THING, IS IT? # WE ARE GOING TO HAVE TO THINK OF IT AGAIN. THOUGH; EECAUSE = REGARDLESS OF WHAT HAPPENS AT THE MOMENT = IT'S GOING TO REAR ITS HEAD = IN THE FUTURE = # MAYBE NOT THE IMMEDIATE FUTURE = BUT IT'S CERTAINLY GOING TO COME UP AGAIN IN OUR LIFETIME, THERE'S (LAUGHINGLY) NO DOUBT ABOUT THAT AND I SUSPECT IT WILL COME UP A HM = (SBI) <P 8>

<X T-16(NS)-8> I QUITE THINK A LOT SCONER THAN YOU THINK === # WHAT DC YOU KNOW ABOUT THE ASSEMBLY # DC YOU KNOW ANY = FACTS AND FIGURES ABOUT = SPENDING POWER AND SO ON? # WELL THEY SAY THEY WILL % THE ASSEMBLY WOULD HAVE NINE MILLION POUNDS PER DAY = TO SPEND ON SCOTTISH AFFAIRS = THINGS THAT WOULD BE ESSENTIALLY SCOTTISH = NINE MILLION FOUNDS & DAY = # AND IT WOULD ONLY COST US = ABOUT = FIVE PENCE A WEEK = EACH = TO RUN AN ASSEMBLY = \*COS THE GREAT ARGUMENT WAS THAT IT WOULD COST FAR TOO NUCH # D'YCU THINK THAT'S TOO MUCH TO PAY FOR AN ASSEMBLY? # YOU SEE, THEY SAY ## (SBI) <x T-16(NS)-12> THERE'S NOT MUCH DIFFERENCE. IS THERE? # (GENERAL LAUGHTER) IT'S ALL MONOPOLY MONEY ANYWAY ==== # DO YOU THINK WE SHOULD = THINK OF = IF% EVEN IF WE DON'T HAVE A DEVOLVED GOVERNMENT AS = WE DON'T HAVE EP BUT DO YOU THINK WE SHOULD THINK OF A WAY OF = GETTING MORE SAY IN PARLIAMENT? # I MEAN THAT'S THE ARGUMENT ISN'T IT? # THAT WE DON'T HAVE ENOUGH TIME = IN PARLIAMENT # D'YOU THINK WE DON 'T HAVE ENOUGH TIME? ## <X T-16(NS)-21> YES IT ALLOWS FOR = ALL SORTS OF THINGS # I MEAN. IF. SAY. ONE PERSON'S OFF ILL = I MEAN IT WOULD BE TERRIBLE IF = AN MP COULDN'T BE THERE BECAUSE HE HAD ANOTHER COMMITMENT = AND YET HE WAS AN AUTHORITY ON SOMETHING THAT AFFECTED THAT ISSUE = # I MEAN. IT WOULD HE DREADFUL IF HE WASN'T ABLE TO = VOICE AN OPINION = # SO = I SUPPOSE BY DELAYING IT = IT = COVERS THAT === ## SEE WHAT I THINK IS THAT = YOU CAN'T REALLY SAY = THAT SCOTLAND'S ANY DIFFERENT = -TO PARTS OF ENGLAND # I MEAN YOU TAKE = THE INDUSTRIAL NORTH = AND COMPARE THAT WITH LONDON = THE COMMERCIAL IF YOU LIKE = THE COMMERCIAL <P 14> SOUTH = # NOW, THEY ARE AS DIFFERENT AS CHALK AND CHEESE, AREN'T THEY? # AND YOU TAKE AN AREA LIKE CORNWALL = IT'S GUITE DIFFERENT TO = MANCHESTER CR(LIH) = # AND SURELY IT'S NO DIFFERENT OR THEY ARE NO DIFFERENT = THAN SCOTLAND IS TO LONDON OR ANY% = # THE WEST WOULD SAY THAT THEY ARE COMPLETELY DIFFERENT TO EDINBURGH, WOULDN \*T THEY? # ANY OF YOU COME FROM THE WEST? # WELL, I MEAN THE THE WEST = AND THEN IF YOU TAKE THE ISLANDS "N \*% THE HIGHLANDS AND ISLANDS, I MEAN. THEY "RE ENTIRELY DIFFERENT AGAIN = # THEY VE GOT FAR MORE AGI% AGRICULTURE IN ONE = PART \*N\* FAR MORE = UHM HARD INDUSTRIES IN IN ANOTHER = # AND THAT'S JUST THE SAME AS IN ENGLAND # I THINK EVEN IF WE HAD A DEVOLVED GOVERNMENT WE MIGHT VERY WELL = GET = SPLITS THERE BECAUSE THEY'RE GOING TO SAY "AH BUT THE WEST DON'T HAVE ENOUGH TIME TO = PUT THEIR FOINTS FORWARD OR (LIH) # D'YOU THINK EDINBURGH IS A GOOD PLACE TO HAVE IT, IF IT = WAS TO BE FERE? ## <X I-16(NS)-24> THE CLYDE, I SUPPOSE HAD A LOT TO DO WITH IT, BUT THEN WE\*VE GOT THE FIRTH OF FORTH, SO I DON'T GUITE KNOW WHY THAT HAPPENED # BUT = = (LIH) I DON 'T KNOW, PRESUMABLY IT'S ALL SORTS OF THINGS THAT YOU JUST DON'T = KNOW # I MEAN JUST THE FACT THAT SCMEBODY = HAPPENED TO LIVES I MEAN SOMEONE WITH (SHI) <X T-16(NS)-24A> AN IDEA TO BUILD A FACTORY = LIVED' THERE SO HE BUILT IT THERE RATHER THAN HERE, I MEAN, #

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THAT'S = A FAIR COMMENT? # OR YOU - YOU CAN DISAGREE WITH ME ON THIS ## (LAUGHTER)

WE GET WARS = # I MEAN. THAT THAT'S TAKEN TO ITS = ITS EXTREME = BUT I DON'T THINK YOU CAN DISCOUNT IT # YOU JUST NEED TO LOOK AT IRELAND TO SEE = HOW EASILY IT CAN HAPPEN = # AND IT'S HAPPENING ALL OVER THE WORLD # I MEAN YOU TAKE IRAN AND KURDISTAN AT THE MOMENT = FIGHTING IS GOING ON THERE # IT'S MUCH = THE SAME ISSUE = # I MEAN, IT'S DIFFERENT IN TERMS OF CULTURE AND BACKGRGUND BUT = I THINK THAT = IN A <P 22> WORLD AS SMALL AS WE ARE = SINCE WE SEEM TO GET SMALLER EACH DAY WITH = TECHNOLOGY, PHONES, PLANES \*N\*, YOU KNOWM WE TRE SUDDENLY = A MUCH SMALLER UNIT THAN WE USED TO BE '= # I THINK WE SHOULD BE STRENGTHENING THAT UNIT, NOT DIVIDING IT # THAT'S MY OPINION # DO YOU THINK

<P 21> <X T-16(NS)-26B> THAT'S ALTOGETHER FAIR TO SAY THAT THEY DON'T LISTEN TO US # I MEAN, THIS IS THE WHOLE THING, ISN'T IT? # THE% , THE "YES" PEOPLE SAY "WELL WE DON'T GET ENOUGH SAY AND WE% THEY DON'T UNDERSTAND = # NOT THAT THEY DON'T LISTEN BUT THEY JUST DON'T UNDERSTAND = WHAT MAKES US TICK = AS A NATION = YOU KNOW, "CAUSE THEY SEE US AS A NATION # YOU SEE, I SEE US ALL AS JUST ONE NATION: ENGLAND, IRELAND, WALES, SCOTLAND # I THINK WE SHOULD STICK TOGETHER = BECAUSE I THINK THAT QUITE OFTEN

= # AND = I CON'T KNOW IF

AND TO EAT IT = # <X T-16(NS)-26A> BECAUSE WE WANT TO HAVE OUF SAY ABOUT SCOTLAND UF HERE AND WE DON'T WANT ANY OF THE ENGLISH = TO SAY ANYTHING ABOUT WHAT'S HAPPENING IN SCOTLAND = # BUT WE WANT TO GO DOWN = TO ENGLAND = AND SEE WHAT CAN HAPPEN IN ENGLAND = # YOU KNOW AND THIS WAS REALLY THE. ARGUMENT THAT = IF WE GO BACK TO WESTMINSTER = ARE WE GOING TO BE LISTENED TO = AND HOW MUCH ARE THEY GOING TO • TRY AND FUSH THROUGH THINGS = AGAINST OUR = OUR WILL = AND OUR WISH # BUT WE WEREN \*T = SUPPOSED TO BE SEPARATE

JILL? ## <X T-16(NS)-26> YES, I DON'T THINK YOU WOULD EVER GET A REALLY = HARNONIOUS SITUATION. WOULD YOU? # WELL. LINDA'S FOINT'S A VERY REAL ONE. YOU SEE BECAUSE = THE ARGUMENTS ACAINST HAVING AN ASSEMBLY WERE: THAT = ALLRIGHT, FINE, IF WE HAVE AN ASSEMBLY = WE MAY BE ABLE TO SPEND SOME MONEY THE WAY WE WANT TO = BUT WHEN WE'VE GOT TO GO BACK TO WESTMINSTER WHICH = INDEED THEY HAVE <P 20> TO = WELL, IN FACT, THEY WOULD HAVE TWO LOTS OF MPS = WHEN OUR MPS ARE IN ENGLAND = IN-IN PARLIAMENT = HAVING TO DISCUSS THE THINGS WHICH ENGLAND DOES HAVE A SAY OVER. THE ARGUMENT WAS THAT = WE PROBABLY WON'T BE LISTENED TO THERE = BECAUSE WE'RE ASKING FOR OUR CAKE

<P 17> <X T-16(NS)-24B> AND IF YOU HAVE TWO, WHY NOT HAVE SIX? # WHY NOT HAVE ONE IN LIVERPOOL? # ONE UP IN THE SHETLANDS? MMM? # WELL WHAT D'YOU THINK? # IS IT GENEPALLY FOR AN ASSEMBLY OR NOT? = = # YOU'RE SHAKING YOUR HEAD = YOU'RE NOT FOR AN ASSEMBLY # WHAT ABOUT

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