

51064

0-315-03168-9

National Library
of CanadaBibliothèque nationale
du CanadaCANADIAN THESES
ON MICROFICHETHÈSES CANADIENNES
SUR MICROFICHE

NAME OF AUTHOR/NOM DE L'AUTEUR

HONG GHEE SEAH

TITLE OF THESIS/TITRE DE LA THÈSE

Contrastive Analysis, Error Analysis and
Interlanguage in relation to Adult Chinese Speakers
Learning English as a Second Language.

UNIVERSITY/UNIVERSITÉ

Simon Fraser University B.C.

DEGREE FOR WHICH THESIS WAS PRESENTED/

GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE

Ph. D.

YEAR THIS DEGREE CONFERRED/ANNÉE D'OBTENTION DE CE GRADE

1981

NAME OF SUPERVISOR/NOM DU DIRECTEUR DE THÈSE

Dr. H. Hammerly

Permission is hereby granted to the NATIONAL LIBRARY OF
CANADA to microfilm this thesis and to lend or sell copies
of the film.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈ-
QUE NATIONALE DU CANADA de microfilmer cette thèse et
de prêter ou de vendre des exemplaires du film.

The author reserves other publication rights, and neither the
thesis nor extensive extracts from it may be printed or other-
wise reproduced without the author's written permission.

L'auteur se réserve les autres droits de publication; ni la
thèse ni de longs extraits de celle-ci ne doivent être imprimés
ou autrement reproduits sans l'autorisation écrite de l'auteur.

DATED/DATE

Oct. 15, 1980

SIGNED/SIGNÉ

PERMANENT ADDRESS/RÉSIDENCE FIXE

No. 42 Jalan 14/30,

Petaling Jaya

Selangor, MALAYSIA



National Library of Canada
Collections Development Branch

Canadian Theses on
Microfiche Service

Bibliothèque nationale du Canada
Direction du développement des collections

Service des thèses canadiennes
sur microfiche

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us a poor photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

**THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED**

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de mauvaise qualité.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

**LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE**

CONTRASTIVE ANALYSIS, ERROR ANALYSIS AND
INTERLANGUAGE IN RELATION TO ADULT CHINESE
SPEAKERS LEARNING ENGLISH AS A SECOND LANGUAGE

by

Hong Ghee Seah

B. A. Hons., University of Malaya, 1968

M. Ed., University of Malaya, 1975

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
in the Department
of
Languages, Literatures and Linguistics

© Hong Ghee Seah 1980

SIMON FRASER UNIVERSITY

October 1980

All rights reserved. This thesis may not be
reproduced in whole or in part, by photocopy
or other means, without permission of the author

APPROVAL

Name: Hong Ghee Seah

Degree: Doctor of Philosophy

Title of Dissertation: Contrastive Analysis, Error Analysis and
Interlanguage in Relation to Adult Chinese
Speakers Learning English as a Second Language.

Examining Committee:

Chairman: Thomas A. Perry

Hector M. Hammerly
Senior Supervisor

Barrie E. Bartlett

Tai Whan Kim

Bernard Mohan
External Examiner
Associate Professor
University of British Columbia
Vancouver, British Columbia

Date approved: October 2, 1980

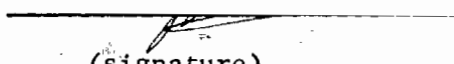
PARTIAL COPYRIGHT LICENSE

I hereby grant to Simon Fraser University the right to lend my thesis or dissertation (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this thesis for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Title of Thesis/Dissertation:

Contrastive Analysis, Error Analysis and
Interlanguage in relation to Adult Chinese
Speakers Learning English as a Second
Language

Author:


(signature)

HONG GHEE SEAH

(name)

OCT. 15, 1980

(date)

ABSTRACT

The more recent view of language and language learning offered by generative grammar has called into question the contrastive analysis hypothesis. The purpose of this study is to gather empirical evidence through an error analysis of the interlanguage of speakers of a source language that is fundamentally different from the target language being learned, namely, speakers of Chinese learning English as a second language (ESL). Four syntactic areas in English are found to have major contrasts with Chinese and four levels of difficulty are postulated. On the basis of the investigator's knowledge and experience as an ESL learner as well as an ESL teacher and on the basis of current theoretical insights, it is hypothesized (1) that, to adult Chinese speakers, the learning of a completely unrelated language like English presents numerous difficulties traceable to interference from Chinese; (2) that this interference from the source language decreases with levels of learning; (3) that in the four syntactic areas contrasted, English verbs, articles, prepositions and word order present a descending order of difficulty; and (4) that interference from the target language increases with levels of learning.

These hypotheses were tested against data collected by an uncontrolled elicitation technique. The data were examined through an error analysis of the linguistic productions of nine Chinese ESL students who represent three levels of

learning. The results of a qualitative and quantitative analysis of the errors supported hypotheses (1), (2) and (4) in that, for the sample under investigation, the interlingual interference did present numerous difficulties, and that the learners' interlingual errors did decrease while their intralingual errors increased with levels of learning. Hypothesis (3) was partially substantiated in that while the verb was the most and word order was the least problematic area, the article and the preposition showed little difference in the degree of difficulty.

In relation to the Chinese ESL students investigated, the above results indicate the following:

1. An a priori contrastive analysis proves valuable in locating and explaining problem areas. The phenomenon of objective linguistic difficulty is real and must be recognized in a second language learning theory.
2. An a posteriori error analysis provides data for verifying contrastive analysis and supplements it by revealing errors not predicted. Contrastive analysis and error analysis have to be jointly considered and employed for a better understanding and a more efficient treatment of difficulties in second language learning.
3. Clear inter- and intralingual errors indicate that first language transfer, overgeneralization and rule simplification are the learning strategies employed.
4. There is variability in the interlanguage of both

individuals and groups. Systematicity in the interlanguage lies in the recurring patterns of inter- and intralingual errors found in the linguistic productions.

While the data collected did support the main hypotheses propounded, the results are to be interpreted in terms of the strictly defined population as well as the relatively small sample used. The findings, though limited in generalizability, have practical significance and they warrant further research.

For further research, a replication of this study is suggested, preferably by a research team, on a larger scale and with inferential statistics. In general, more contrastive error analysis studies on a larger scale involving more languages, typologically related as well as unrelated, and in diverse learning contexts and situations, are desirable so that more cumulative data-based evidence will pave the way for the foundation of a viable theory of second language learning and teaching, which is the concern and preoccupation of current research in applied linguistics.

ACKNOWLEDGEMENTS

I wish to acknowledge my debt of gratitude to the following who, by their expertise, sustained interest as well as generous support and kind co-operation, have made this dissertation possible:

Dr. H. M. Hammerly, my Senior Supervisor, who has encouraged and guided me continuously throughout this study; Dr. B. E. Bartlett and Dr. T. W. Kim, members of my supervisory committee, who have given generously of their time and valuable advice; Dr. Titus Yu, Dr. A. H. Elliott, Mr. T. MacNamee and Miss Sue C. L. Ling whom I have consulted as informants on Chinese and English grammar and whose suggestions have been of use and help; Mr. Nic Morelli, the head of the English Language Training Department of Vancouver Community College, the Coordinators, teachers and students of the elementary, the intermediate and the advanced classes (September-October session, 1979) who were most helpful and co-operative in my data collection; and many others who have made contributions but whose names I have not mentioned.

I should like to acknowledge the financial assistance provided by the Canadian Commonwealth Scholarship and Fellowship Administration and the Malaysian Ministry of Education.

Last but not least, thanks are due to my wife and children who have given me moral support with their understanding and co-operation throughout my study.

TABLE OF CONTENTS

	Page
Approval	ii
Abstract	iii
Acknowledgements	vi
Table of Contents	vii
List of Tables	xii
 1. INTRODUCTION TO THE STUDY	 1
1. Introduction	
1.1. Statement of the Problem	1
1.2. The Purposes of the Study	3
1.3. The Hypotheses	4
1.4. Definitions and Assumptions	6
1.5. Limitations of the Study	16
2. REVIEW OF RELATED LITERATURE	21
2. Introduction	21
2.1. Contrastive Analysis	21
2.1.1. Historical Background	22
2.1.2. The Strong Version	24
2.1.3. The More Recent View of Language and Language Learning	25
2.1.4. Criticism of the Strong Version	26
2.1.5. The Weak Version	28
2.1.6. Some Remarks about Criticism of Contrastive Analysis	29
2.1.7. Empirical Validations	32

	Page
2.2. Error Analysis and Interlanguage	38
2.2.1. Historical Background	39
2.2.2. The Rationale and Assumptions	41
2.2.3. The Methodology	43
2.2.4. Criticism of Error Analysis and Interlanguage Studies	44
2.3. Summary	45
3. MAJOR AREAS OF CONTRAST AND AREAS OF DIFFICULTY HYPOTHESIZED	48
3. Introduction	48
3.1. Basic Nature of the Chinese Language	49
3.1.1. Lack of Grammatical Morphology	49
3.1.2. Fluidity of Word Class	52
3.1.3. Rigidity in the Placement of Modifiers	53
3.1.3.1. Noun Modifiers	53
3.1.3.2. Verb Modifiers	55
3.1.3.3. Simplified Phrase Structure Rules	56
3.1.4. Lack of Function Words	57
3.1.4.1. Prepositions	57
3.1.4.2. The Definite and Indefinite Articles	60
3.2. Areas of Expected Errors and Levels of Difficulties Hypothesized	61
3.2.1. The English Verb System	62
3.2.1.1. Nature of Interlingual Interference	63
3.2.1.2. Nature of Intralingual Interference	65

	Page
3.2.1.3. Nature of Expected Errors at Early and Later Stages of Learning	67
3.2.2. The English Article System	68
3.2.2.1. Nature of Interlingual Interference	68
3.2.2.2. Nature of Intralingual Interference	69
3.2.2.3. Nature of Expected Errors at Early and Later Stages of Learning	70
3.2.3. The English Prepositions	71
3.2.3.1. Nature of Interlingual Interference	71
3.2.3.2. Nature of Intralingual Interference	72
3.2.3.3. Nature of Expected Errors at Early and Later Stages of Learning	73
3.2.4. The Placement of Modifiers	73
3.2.4.1. Nature of Interlingual Interference	73
3.2.4.2. Nature of Intralingual Interference	74
3.2.4.3. Nature of Expected Errors at Early and Later Stages of Learning	74
3.3. Summary	75
4. METHOD AND PROCEDURES	76
4. Introduction	76
4.1. Collection of Data	76
4.1.1. The Language Background Questionnaire	76
4.1.2. The Subjects	77
4.1.3. Elicitation Procedure	79
4.2. Analysis of Data	80
4.2.1. The Categorization of Errors	80
4.2.2. Treatment of Errors	82

	Page
5. RESULTS AND FINDINGS	84
5. Introduction	84
5.1. Results of the Analysis	84
5.2. Discussion: Errors, Learning Strategies and Interlanguage	89
5.2.1. Errors at the Elementary Level	89
5.2.1.1. Verb Errors	89
5.2.1.2. Article Errors	92
5.2.1.3. Preposition Errors	93
5.2.1.4. Word Order Errors	93
5.2.2. Errors at the Intermediate Level	94
5.2.2.1. Verb Errors	94
5.2.2.2. Article Errors	95
5.2.2.3. Preposition Errors	96
5.2.2.4. Word Order Errors	97
5.2.3. Errors at the Advanced Level	98
5.2.3.1. Verb Errors	98
5.2.3.2. Article Errors	99
5.2.3.3. Preposition Errors	100
5.2.3.4. Word Order Errors	101
5.3. Summary	102
6. CONCLUSIONS AND RECOMMENDATIONS	103
6.1. Summary	103
6.2. Recommendations for Further Research	106
7. APPENDICES	108
Appendix A: Language Background Questionnaire	108

	Page
Appendix B: Samples of Linguistic Productions from the Subjects	112
Appendix C: Tables	119
8. LIST OF REFERENCE NOTES	126
9. BIBLIOGRAPHY	130

LIST OF TABLES

	Page
1. Interlingual Errors Across Levels of Learning	85
2. Intralingual Errors Across Levels of Learning	87
3. Mean Percentage of Interlingual Errors Across Four Syntactic Areas and Three Levels of Learning	88
4. Number of Inter- and Intralingual Errors per Total Usage at Elementary Level	120
5. Number of Inter- and Intralingual Errors per Total Usage at Intermediate Level	121
6. Number of Inter- and Intralingual Errors per Total Usage at Advanced Level	122
7. Interlingual Errors Across Four Syntactic Areas at Elementary Level	123
8. Interlingual Errors Across Four Syntactic Areas at Intermediate Level	124
9. Interlingual Errors Across Four Syntactic Areas at Advanced Level	125

CHAPTER 1

INTRODUCTION TO THE STUDY

1. Introduction

In this chapter, the rationale for this study, the approach, the purposes, the underlying assumptions, and the definition of the terms used as well as the limitations are stated.

1.1. Statement of the Problem

Recent research in applied linguistics has witnessed a resurgence of active interest in the contrastive analysis hypothesis which has had its scope widened especially in connection with the two new active fields of research in second language learning, namely, error analysis and interlanguage. Transformational generative grammar, with its alternative view of language and language learning, has revived old questions and posed new ones as well as brought about a shift of focus and direction in research activities. What seemed to be accepted tenets and prevailing axioms during the era of audiolingualism in the fifties and sixties have been called in question and made controversial once again, at least theoretically. The hypothesis of contrastive analysis, among others, is one main issue. Arguments, views and empirical evidence put forward regarding this issue are diverse ranging from those supporting the strong version to those in favor of the weaker ones. A review of recent

literature on this issue indicates that a growing number of people have argued for increasingly weaker versions of the hypothesis (Gradman, 1971a; Richards, 1971a; Wardhaugh, 1970). There are proponents who maintain that few or none of the errors second language learners make can be predicted or explained on the basis of a contrastive analysis (Dulay and Burt, 1974; Oller, 1979).

Arguments and views which are adequate logically may not be so empirically. Applied linguistics needs a sound foundation in empirical data. One can never overemphasize the importance of empirical evidence from data-oriented research in an applied field like second language learning and teaching, especially if the field is to establish itself as an independent discipline having autonomy and a wisdom of its own. Data-oriented research studies which do yield findings regarding the contrastive analysis hypothesis, however, have almost invariably dealt with Indo-European languages like English, French, German, Spanish, Italian and Russian. Studies involving uncommon languages like Chinese have been rather scanty and sparse. An investigation dealing with languages which are typologically diverse will undoubtedly contribute more cumulative evidence for a better understanding of the issue and shed further light on other issues which are inextricably related to the new fields of error analysis and interlanguage in applied linguistics.

1.2. The Purposes of the Study

This study seeks to examine the contrastive analysis hypothesis in relation to speakers of a source language which is fundamentally different from the target language being learned, namely, adult speakers of Chinese learning English as a second language (ESL). It seeks to investigate the issue of the contrastive analysis hypothesis across three different stages of learning, i.e. three levels of proficiency, through analyzing errors in the linguistic productions of the learners. This study is therefore an error analysis of the interlanguages of three groups of adult Chinese ESL students at different stages of learning and proficiency. On the theoretical side, it seeks to provide further empirical evidence with respect to the current controversy on the validity of the strong and weak versions of the hypothesis and, associated with this, on the nature of second language errors, second language strategies and the nature of interlanguage in relation to Chinese ESL students. Pragmatically, it attempts to identify areas of English grammar which cause difficulties to adult Chinese students of English, and to provide an explanation for the problem areas found.

This study is therefore both a priori and a posteriori in approach in that learning problems and, consequently, errors hypothesized on the basis of contrastive study are tested against real errors made and collected in learning situations.

It is hoped that the data will yield findings on the nature of second language learning strategies and second language learners' interlanguage in relation to the subjects under investigation, namely, adult Chinese speakers learning English as a second language.

To achieve the above goals, this study sets out to do the following:

1. To study the typological characteristics of Chinese and English syntax with a view to identifying areas of major contrast between the two languages;

2. To propound hypotheses identifying learning problems and, consequently, the errors expected based on the revealed areas of contrast and negative correspondences;

3. To select suitable subjects from different stages of learning and levels of proficiency and collect representative samples of interlanguages using uncontrolled procedures and techniques;

4. To identify, classify and analyze, qualitatively and quantitatively, the errors actually made by the subjects;

5. To test the hypotheses against the findings and discuss the nature of the errors, the learning strategies and the interlanguage in relation to adult native Chinese speakers learning English as a second language.

1.3. The Hypotheses

In applied linguistics the concept of difficulty and the knowledge of the problem areas in a second language learning

situation, their magnitude and causes, have been crucial, whether it is for pedagogical purposes as it was in the audiolingual era or for theory-building purposes as seems to be the preoccupation of current researchers. Difficulties can have many causes, linguistic as well as non-linguistic. The interest of the present study is focused on linguistic causes which stem from interference from the first language, which is interlingual, and from the second language, which is intralingual. Interlingual interference manifests itself in errors which can be traced to the use of categories, constructions, meanings and rules in the learner's source language. Intralingual interference is evident in errors whose causes lie in the inherent complexities within the target language itself such as its irregularities and asymmetry.

The following hypotheses are based on the aims stated above:

1. To adult Chinese speakers, the learning of a fundamentally different language like English presents enormous problems traceable to interference from Chinese.

2. This interlingual interference is evident in the interlanguages of the subjects under investigation though it may vary in degree with the stages of learning.

3. Based on a typological study of the two languages in morpho-syntactic areas, the following are problems for Chinese ESL students, in descending order of difficulty:

- (a) The English verb system
- (b) The English article system
- (c) The English preposition system
- (d) The placement of adverbials and modifiers.

4. Intralingual interference is more evident in later stages of learning at relatively higher levels of proficiency.

The above hypotheses can be put in terms of questions addressed in the following way:

1. Are interlingual errors a reality or a myth in relation to Chinese speakers learning English as a second language?

2. If they are a reality, what is their distribution with respect to different stages of learning or levels of proficiency?

3. Is a priori detection of errors based on contrastive analysis supported by a posteriori error analysis?

4. What is the distribution of intralingual errors with respect to different stages of learning or levels of proficiency?

1.4. Definitions and Assumptions

In attempting to define the following terms used in relation to this study, I am aware of the fact that lack of precise definitions in terminology is characteristic of a developing field of study like second language learning.

Applied Linguistics

In a broader sense, applied linguistics has been defined as "the application of the insights, principles, methods or findings of linguistic science to practical language problems" (Ferguson, 1971, p. 135). In this study, applied linguistics will refer to the British and international meaning of the term, namely, the field of second or foreign language learning and teaching. It is a field which came into being as a result of fresh theoretical insights and of growing practical needs during the era of structural linguistics and audiolingualism. As it is, applied linguistics appears to be moving away from preoccupation with practical pedagogy to concerns with theory building, with seeking explanations, rationales and capturing generalizations underlying second language learning. This study will place its focus on contrastive analysis, error analysis and interlanguage -- the three active fields of current research -- as research techniques for providing insights into the nature of second language learning in relation to adult Chinese ESL students.

Contrastive Linguistics

Contrastive linguistics is also known as contrastive analysis. It has been an important branch of applied linguistics and the major research paradigm in second language investigation. The contrastive analysis hypothesis has two versions. The strong version states that most, if not all, difficulties of the second language learner can be predicted

by a systematic contrastive analysis and teaching materials and strategies can be devised to meet these difficulties. The weak version claims no more than an explanatory role, stating that a comparison between the source language and the target language may help to explain the difficulties which are evident from the errors made by learners. One main purpose of this study is to gather empirical evidence as to the validity of either version with respect to adult Chinese speaking students learning English as a second language.

The Principle of Transfer

According to Selinker (1969), the notion of the transfer of linguistic entities from one language to another is an adaptation of the psychologist's concept of "transfer of training." This concept was defined by Osgood (1953) as "the effect of preceding activity upon the learning of a given task" (p. 520), and by Ausubel (1963) as "the impact of prior experience upon current learning" (p. 28). Selinker (1969) associates "preceding activity" or "prior experience" with the native language, and "given task" or "current learning" with the second language. The theory of transfer, in its simplest form, states that the learning of a task is either facilitated or impeded by the previous learning of another task -- depending on, among other things, the degree of similarity or difference between the two tasks. In the context of the present study, language transfer refers to the application of source language categories, meanings and rules

in the attempted use of the target language being learned. The laws of transfer in the context of contrastive analysis have been further discussed by Carroll (1968), Jakobovits (1971) and James (1976).

Competence

Chomsky (1965) defines competence as "the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance" (p. 4). It is the tacit and intuitive knowledge of a language, the device which enables a speaker-hearer to understand and produce an infinite number of grammatical sentences. Grammar in this respect is taken to mean the composite set of rules inherent in a language system which constitutes this device. This study examines the learner's performance as related to his linguistic competence. It assumes that if an element, category, or construction of a target language is consistently and appropriately used in the speech and writing of the learner, then it is part of his perceived knowledge of the language and, consequently, part of his evolving and transitional competence in the target language. Pedagogically speaking, the task of second language teaching is to help build up such a competence in the student.

Performance

Performance is the actual use of language which, though based on linguistic competence, may involve non-linguistic or extralinguistic factors such as lapses of memory, fatigue,

distraction and other psychological states, etcetera. While linguistic competence must necessarily underlie performance, it is only one factor. Even Chomsky (1965) has remarked that "to study actual linguistic performance, we must consider the interaction of a variety of factors, of which the underlying competence of the speaker-hearer is only one" (p. 4).

The Chinese Language

By Chinese language is meant Mandarin Chinese, the standard Chinese that educated Chinese speak and write irrespective of the dialects they use. It is also known as Modern Standard Chinese described by Kratochvil (1968) as "the language the overwhelming majority of educated speakers of all Chinese dialects share" (p. 19). In this study, the subjects under investigation speak both Mandarin Chinese and Cantonese dialects which are syntactically alike. According to Chao (1968), "Cantonese and Mandarin differ grammatically only in minor points" (p. vii). Tang, Tung and Wu (1972) maintain that though phonologically Chinese dialects may be "mutually unintelligible" syntactically they share the same rules (p. 66).

The English Language

The English language means the standard English that is used by educated English speakers as formally correct and acceptable, regardless of whether it is British or American

English. In particular, the English of this study refers to that spoken and written in British Columbia.

Standard Language

A standard language is taken as one which has attained official recognition in terms of having written grammatical descriptions in the language.

Source Language

By source language is meant the learner's native language or mother tongue or first language, all of which have been used interchangeably. Halliday, McIntosh and Stevens (1965) define first language as a language "learnt by the child before the age of instruction, from parents and others looking after it, or from other children" (p. 78). In this study, the source language refers to both Mandarin Chinese and Cantonese spoken by the subjects. As mentioned earlier, Mandarin Chinese and Cantonese are syntactically alike as they share the same rules.

Target Language

By this is meant the second language being learned, although it may be the third or nth language learnt after the first language. In this study the subjects did not have more than one second language - and that is English.

Interlanguage

By interlanguage is meant "the separate linguistic system based on the observable output which results from a learner's attempted production of a target language norm" (Selinker,

1972, p. 222). It is also known as "approximative system" (Nemser, 1971, p. 115), "idiosyncratic dialect" (Corder, 1971b, p. 147), "interlingua" (James, 1971), and "learner's language" (Hanzeli, 1975, p. 428). It is considered as "a dynamic linguistic system resulting from regular and systematic application of rules, strategies and hypotheses" (Richards, 1978, p. 2). In other words, it is the language of the second language or foreign language learner as he progresses from zero competence to near native speaker competence in the target language.

Norm

The norm is the standard form of the language used by native speakers. In the context of this study, utterances which are deviant from the standard form will be considered errors even though they do not affect intelligibility or communication.

Errors

Errors are deviations from the norm of the target language whether phonological, syntactic or semantic. Corder (1967) makes a distinction between "errors", which are systematic deviations from the target language revealing the learner's transitional competence and "mistakes", which are the product of chance circumstances or errors of performance owing to lapses of memory, inattention, fatigue, etcetera, and as such are unsystematic. According to Burt and Kiparsky (1972), error making is a productive phenomenon during the language

learning process. In this study it is assumed that a single instance of a deviation is insufficient to establish that there exists a regularity or a set of rules in the learner's interlanguage. It may be a performance error, a mistake. We can talk about the learner's rules only when we observe the same "error" occurring regularly. Errors, being the product of learning, are considered to reflect learning difficulties and their frequency to be proportionate to the degree of difficulty. The well-formed utterances, on the other hand, are assumed to be evidence of an absence of difficulty.

Error Analysis

Richards (1971b) defines the field of error analysis as "dealing with the differences between the way people learning a language speak, and the way adult native speakers of the language use the language" (p. 12). He considers the study of such differences as essential in discussing second language learning which involves such questions as the causes of the deviant behavior and what inferences we can draw about the learning strategies and psychological processes involved.

Interference

The notion of the transfer of linguistic entities from one language to another has been an adaptation of the psychologist's concept of transfer of training. Based on this concept, Weinreich (1964) has defined interference as "those instances of deviation from the norms of either language which occur as a result of familiarity with more than one

language" (p. 2).

Interlingual Errors

This class of errors is also known as errors of transfer from the source language, or errors caused by interference of learners' first language. They reflect the structure of the mother tongue. Applying the definition of interference given above by Weinreich (1964), interlingual errors will refer to those instances of deviation from the norm of the target language which occur as a result of familiarity with the mother tongue or first language. They are errors made as a result of the use or non-use of elements, structures and meanings from the source language while speaking or writing the target language at all linguistic levels.

Intralingual Errors

These are errors which are not caused by interference from the language which is previously learned. Richards (1971a) describes these errors as those which reflect the general characteristics of rule learning such as faulty generalization, incomplete application of rules, failure to learn conditions under which rules apply, and false concepts hypothesized. They do not reflect the structure of the mother tongue but generalizations based on partial exposure to the target language. This study will consider intralingual errors as those whose source is in the inherent complexities of the target language such as its irregularities, inconsistency and

asymmetry, resulting in confusion and mutual interference of items.

Developmental Errors

Richards (1971a) considers these errors as a subcategory of intralingual errors. These errors "show the learner's attempt to build up hypotheses about the target language from his limited experience of it in the classroom or textbook and reflect his competence at a particular transitional stage in his learning process" (p. 206). Based on this explanation, there seems to be little difference between intralingual and developmental errors.

Language Acquisition and Learning

Krashen (1976a and 1976b) proposes two possible systems for second language performance: one "acquired", and the other "learned". He describes acquisition as a subconscious natural process of internalization of linguistic abilities that typically takes place in an informal setting without the benefit of the teacher. Learning, on the other hand, is a conscious process that typically occurs in formal classroom situations, characterized by the presence of tuition through collective feedback and rule isolation. The language situation in this study is more of learning than acquisition.

Linguistic Adult

This refers to learners over the age of twelve or so after which the critical period for language acquisition is said to begin to atrophy and language learning becomes difficult and

is likely to be incomplete, especially phonologically. This notion comes from Lenneberg (1967) and Krashen (1975) who claim that for most adolescent and adult learners a native-sounding accent and full native-like competence even in syntax and semantics may never be achieved after the onset of puberty when the critical period in brain maturation has been passed and a kind of plasticity has been lost.

Learning Strategy

Tarone, Frauenfelder and Selinker (1976) define this as "a process of rule formation, a tentative hypothesis which the learner forms about the nature of the second language which is tested and subsequently modified" (p. 99). For instance, the strategy of language transfer using first language rules in the target language expression is an active learning strategy especially at the initial stages of second language learning. Sampson and Richards (1973) view learning strategy as "the learner's organization of what he perceives" (p. 22).

1.5. Limitations of the Study

Second language learning is a highly intricate process involving a complex of variables, linguistic as well as non-linguistic such as pedagogical, physiological, neuro-psychological and socio-cultural. This study focuses its attention on the linguistic variable. The non-linguistic variables affecting the subjects in this study are assumed to have been held constant to a reasonable extent in that these

subjects were selected from an approximately homogeneous group.

The grammatical component focused on in this study is syntax which, as the generative component in a grammar, is considered as one central and crucial component to language learning. As the study involves contrastive analysis, error analysis and interlanguage, the level of representation considered more relevant is the surface structure which constitutes the language specific rather than the deep structure which constitutes the language universals. Therefore, the main, though not the exclusive, emphasis is on the structures as they actually occur.

This study does not attempt to provide a full account of the structural differences between Chinese and English. In fact, a complete syntactic description of any language has yet to be made, let alone a complete syntactic comparison of any two languages which is only a theoretical possibility. As Nickel and Wagner (1963) have put it, "a comprehensive contrastive analysis presupposes extensive and detailed individual studies, which are well beyond the capacity of a single investigator" (p. 240). This is especially true of languages which modern linguists have not done much research in. As seems to be the consensus, a more modest and realistic goal would be a compilation of as many observations as possible on the divergences of the languages under investigation. Therefore, within the constraints and scope

allowed, this study aims at delineating the typological characteristics of Chinese and English and contrasting the selected subsystems which are hypothesized as the areas likely to cause the greatest difficulties and present the most serious learning problems.

No particular model of linguistic analysis is used for the description of these two unrelated languages as no current model seems to be adequate and well-suited to account for all phenomena and aspects of natural language (see Note 1). Generative transformational grammar, which is relatively more adequate than previous models on account of its greater descriptive and explanatory power, is not exempt from drawbacks of its own. One of its drawbacks remains a preoccupation with form at the expense of communicative function.

For the purpose of this study, the learner's language is presented and described in terms of the language to be learned. In other words, English will serve as the reference language to which Chinese and the learner's interlanguage are compared and contrasted. In this way Chinese provides a standard for assessment of redundancy in English. In order to bring the contrasting features into focus, similarities in the two languages will not be dealt with, assuming that difficulties for Chinese speakers have their sources in areas which mark English as distinctly different from their source language. As suggested by Di Pietro (1971), "to make a contrastive analysis operational, contrasts would

have to be expressed as a series of conversions performed on the source language in order to produce the forms of the goal language" (p. 18).

The uncontrolled elicitation techniques used in this study, while having their merits, yielded mostly simple active declarative sentences, leaving many expected categories, structures and constructions unelicited among which would almost certainly have been more errors of interlingual nature had they been elicited through controlled techniques that prompt them. The subjects seem to have a way of avoiding the use of elements, categories and constructions which they are not confident about handling. It appears that learners do have recourse to a sort of avoidance strategy when performing in the target language. This points to one limitation in the use of uncontrolled elicitation techniques in particular and in the use of error analysis in general.

This study, as is typical of most current research of this nature, begins with product-level data and reasons back to cause of errors and the underlying strategies. As such it entails explanation of errors. But to pin down the precise causes of errors inevitably involves some speculating about the underlying psychological processes. In fact, the explanation and classification of their source categories remain a vulnerable area of error analysis for which no solution is envisaged.

This study examines second language learning of a rather

strictly defined population, namely, adult native Chinese speakers learning English as a second language in a formal learning situation and exposed to it outside the classroom. As such, the findings will be generalizable only to similar populations under similar second language learning situations only, unless findings from other and further studies in second language learning support the extension of these findings to other second language situations.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2. Introduction

Under review in this chapter are the three areas of second language research, namely, contrastive analysis, error analysis and interlanguage, which constitute the current research paradigm and new directions in second language studies. In this study, they are viewed as three phases of one goal - that of dealing with the problem of learning difficulty and of providing insights into the nature of second language learning - and as research techniques in the study of second language learning. They are not considered as antithetic rivals or as pedagogical panaceas in developing teaching materials and classroom procedures.

2.1. Contrastive Analysis

Contrastive analysis used to be the major field in applied linguistics concerned with drawing the pedagogical implications of structural differences and similarities between languages. Its main objective was that of facilitating the learning of a second language. The literature of applied linguistics during the fifties and sixties illustrates these concerns. The changing view of language and language learning brought by generative grammar has broadened the scope of contrastive analysis both in the direction of more theoretical

objectives such as the search for linguistic universals in typology and in the direction of psycholinguistics concerned with the explanation of second language learning.

2.1.1. Historical Background

Although the influence of first language in learning a second language was known by such linguists and pioneers in the field of second language learning as Henry Sweet, Harold Palmer and Otto Jespersen, it was Lado (1957) who first articulated this common observation of practising teachers in stating that

... individuals tend to transfer the forms and meanings and the distribution of forms and meanings of their native language and culture to the foreign language and culture - both productively and receptively, ... that we can predict and describe the patterns that will cause difficulty in learning by comparing systematically the language and culture to be learned with the native language and culture... (p. 2).

With this statement the well-known contrastive analysis hypothesis was established. Moreover, it was Fries (1948) who first realized the pedagogical implications of the hypothesis, declaring that "the most effective materials are those that are based on a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner" (p. 13) and thereby establishing contrastive analysis as an integral component of the methodology of second language teaching.

This pronouncement confirmed the position of applied

linguistics in the Fries-Lado tradition which is also known as audiolingualism. Meanwhile studies in bilingualism like those of Weinreich (1964) and Haugen (1953) reported bilinguals' linguistic distortions as corresponding to differences in the languages involved. This supported the claim and assumptions underlying the contrastive analysis hypothesis. It was regarded as an insightful discovery applicable to second language teaching and learning. Rivers (1964) sees contrastive analysis as "the distinctive contribution of the linguistic scientists, and the results of studies of these contrasts are incorporated in the materials prepared for class and laboratory work" (p. 14). Stevens (1965) makes a similar statement in saying that the most appropriate materials for teaching a language are those which embody a bilingual comparison of the mother tongue and the target language. Politzer (1968) concurs in stating that "perhaps the least questioned or questionable application for linguistics to language teaching is the contribution of contrastive studies" (p. 151).

Lado's Linguistics Across Cultures (1957) thus became the actual foundation charter and classic field manual of contrastive analysis on the basis of which the whole enterprise of contrastive linguistics was launched. Research projects and regular publications of results in a number of countries began to appear among which were the well-known Contrastive Studies Series sponsored by the Center for Applied

Linguistics of the Modern Language Association (see Note 2). The body of literature in contrastive analysis is very large as evident in many bibliographies (see Note 3). Many conferences devoted to the field of contrastive linguistics have been held throughout the world. Among these conferences are the Nineteenth Annual Round Table Conference at Georgetown University in 1968 (Alatis, Note 4); the Second International Conference of Applied Linguistics in Cambridge in 1969 (Nickel, Note 5); the Pacific Conference on Contrastive Linguistics and Language Universals at the University of Hawaii, Honolulu in 1971 (Whitman and Jackson, Note 6); and the Fourth International Congress of Applied Linguistics in Copenhagen in 1972 (Nickel, Note 7).

2.1.2. The Strong Version

Contrastive analysis was placed on a pedestal and unanimously acclaimed as a breakthrough and as a pedagogical panacea for all major problems in second language learning and teaching. The optimism which was generated about the possibilities of contrastive analysis led to an overapplication among its proponents who were not hesitant to make some overclaims. It gave rise to a strong version of the contrastive analysis hypothesis. The strong version of the contrastive analysis hypothesis has been stated by Lee (1968) as follows:

- (1) That the prime cause, or even the sole cause of difficulty and error in foreign language learning is interference from the learner's native language;
- (2) That the difficulties are chiefly, or

wholly, due to the differences between the two languages;

(3) That the greater these differences are the more acute the learning difficulties will be;

(4) That the results of a comparison between the two languages are needed to predict the difficulties and errors which will occur (p. 186).

The concomitant pedagogical implications and applications deriving from this strong version are obvious.

As Banathy, Trager and Waddle (1966) put it,

The task of the linguist is to identify these differences. The task of the writer of a foreign language teaching program is to develop materials which will be based on a statement of these differences; the task of the teacher is to be aware of these differences and to be prepared to teach them ... and what the student has to learn equals the sum of the differences established by the contrastive analysis (p. 37).

This version deviated from the hypothesis formulated by Lado (1957) quoted earlier, and from his subsequent reiteration that "... these differences are the chief source of difficulty in learning a second language ... The most important factor determining ease and difficulty in learning the patterns of a foreign language is their similarity to or difference from the patterns of the native language" (Lado, 1964, pp. 21 & 91), taking "chief source" and "most important" to mean that first language interference is not the only important factor.

2.1.3. The More Recent View of Language and Language Learning

The rise of transformational generative grammar and cognitive psychology has brought about a different view of

language and language learning. The audiolingual approach, based linguistically on structural grammar, psychologically on behaviorism and philosophically on empiricism, is now confronted with a new approach which is based linguistically on generative grammar, psychologically on cognitivism and philosophically on rationalism. Essentially, the new approach claims that language is more biologically than culturally determined, that language learning is rule-governed creativity rather than a habit-governed conditioning activity and that concept-attainment as well as hypothesis-testing by the learner are more crucial than the roles of imitation and reinforcement through environmental agencies are in the learning process. With the growth in popularity of this new paradigm, the contrastive analysis hypothesis, which was one mainstay of audiolingualism, becomes one central issue for criticism and attack.

2.1.4. Criticism of the Strong Version

Chomsky (1959) criticizes the behavioral psychology and transfer theory on which the hypothesis is based as being able to adequately account neither for the nature of a system which is itself creative and open-ended nor for the learner's active contribution to language learning. Newmark and Reibel (1968) echo Chomsky's opinion and criticize the view that sees the role of the learner as nothing but a generator of interference as neglecting and ignoring the learner's contribution to his own learning. They are of the opinion

that ignorance rather interference is the real cause of most errors. Nickel and Wagner (1968) consider that a viable contrastive analysis presupposes a uniform linguistic theory and grammatical model, a general theory of contrastive linguistics and adequate descriptions of the source and target language concerned. Since all these are as yet unavailable, they are of the opinion that the Contrastive Structure Series was premature. Wardhaugh (1970) concurs that contrastive analysis makes unrealistic demands of current linguistic theory as there ~~is~~ as yet no comprehensive linguistic theory to formulate a set of linguistic universals, nor is there a theory of contrastive linguistics into which we can plug linguistic descriptions of languages being contrasted. He contends that linguistic theory at present is ill-equipped to write grammars of languages, let alone to compare them. Moreover, no language has been well enough described to permit a complete comparison between it and any other language. In view of the numerous practical difficulties raised by the hypothesis he wonders if it is really possible to make contrastive analysis. He also argues that the claims based on the hypothesis are not supported by actual facts, that contrastive analysis predicts errors which do not occur and does not forecast others which do occur. Gradman (1971b) too argues that the hypothesis is untenable since there is still considerable disagreement as to what a linguistic description is, what theory of language is best, and what a theory of

language entails, let alone about the acquisition of language.

Contrastive analysis is inevitably related both to grammatical models and linguistic theories. Its assumptions, the rigor and sophistication of its comparisons and the form of contrastive statements have all changed from time to time reflecting the changes in linguistic theory. Thus the structural contrastive approach which was most used has been criticized as based on the structuralists' inadequate conception of the structure of a language as a unique self-sufficient system, and for its emphasis on diversity rather than universality. It would follow logically that languages cannot be compared. Moreover, the structural approach admits only of a comparison of surface structures which yields a taxonomy of surface forms. Dingwall (1964), Nickel and Wagner (1968) and Di Pietro (1971), among many others, criticize taxonomic contrastive analysis for its preoccupation with the surface structure of language.

2.1.5. The Weak Version

The criticism levelled at the strong version has given rise to a modified view of contrastive analysis as held by many, the weak version. According to Wardhaugh (1970), the weak version "requires of the linguist only that he uses the best linguistic knowledge available to account for observed difficulties in second language learning" (p. 126). It does not claim the predictive power and, consequently, the putative pedagogical uses of the strong version. Stockwell (1968)

suggests two approaches to contrastive analysis: one by setting up a systematic comparison which scans the differences in structure in search of sources of interference, and predicting that errors will occur on the basis of the conflicts; the other by collecting errors students make and then trying to describe the conflicts that give rise to such errors. The latter approach is close to Wardhaugh's weak version. Catford (1968) and Lee (1968) maintain that the main and important role of descriptive comparison is explanatory rather than predictive. They are of the view that contrastive analysis should be selective, i.e. limiting itself to partial comparisons, analyzing those parts of the grammar which are known through error analysis, for instance, to present the greatest difficulty to learners. In other words, the weak version is a posteriori rather than a priori, explanatory and diagnostic rather than predictive and prognostic in function.

2.1.6. Some Remarks about Criticism of Contrastive Analysis

The crux of the problem appears to be that what is adequate logically may not be so empirically, and what is crucial in the applied field of second language learning and teaching is data-based empirical research and evidence rather than deductive theoretical arguments. Moreover, the validity of the more recent view of language and language learning propounded by Chomsky has not been seriously tested and empirically established either. Chomsky (1966) himself

is "skeptical about the significance, for the teaching of languages, of such insights and understanding as have been attained in linguistics and psychology,... and doubtful that either linguistics or psychology has achieved a level of theoretical understanding that might enable it to support a technology of language teaching." Referring to principles of linguistics and psychology, and research in these disciplines which may supply insights useful to language teaching, he advises that "they must be demonstrated and cannot be assumed or accepted on faith" (p. 45).

Other critics have questioned the theoretical basis for contrastive studies on the ground that we have as yet no adequate theory of language acquisition, of grammar and of contrastive linguistics as well as no adequate description of any language. This view seems utopian. A lot of this criticism is as much a criticism of general linguistic theory and psycho-linguistic theory as of contrastive analysis itself. It is too idealistic to be of any practical use or of positive contribution to the cumulative empirical evidence that is essential in an applied field. Nickel (1970) has suggested that, to begin with, a more modest goal for contrastive analysis can be a compilation of as many observations as possible on divergences between as many languages as possible since, as it is, a full account of the structural differences between two languages remains only a theoretical possibility. The history of applied linguistics has been one of cumulative

knowledge and progress, thanks to the advances made in the various contributing disciplines. The currently dominant theory of transformational generative grammar, for instance, has its roots in structural linguistics as well as traditional grammar. Similarly, a general theory of contrastive linguistics can well be built on the outcome of the contrastive analyses that have been and are being undertaken, especially now that more adequate theories and grammatical models are available. As for the criticism of structural contrastive analysis as lacking the distinction between the deep and surface structure, it seems to me that the usefulness and importance of the deep structure and its emphasis much depends on the use it is put to as well as the objective and nature of studies undertaken. For instance, it depends on whether it is theory-oriented or otherwise, whether it is for language description or language production. Studies in linguistic production which have more to do with performance, such as the present study, will find surface structure more amenable and relevant than deep structure. It is the surface structures which make up the grammatically acceptable structures that learners have to recognize and produce and which teachers teach. And neither do we speak or write in deep structures. Moulton (1968) finds that it is the language-dependent compulsory grammatical categories at lower levels that cause enormous learning and teaching difficulties.

Moreover, James (1969) considers the deep structure

irrelevant in a pedagogically-oriented contrastive study because it is non-contributory to foreign language learning. Jakobovits (1969) maintains that "similarities and differences of surface features may be more relevant for the operation of transfer effects in second language learning than deep structure relations, especially when one believes that at some level of depth all natural languages are describable in terms of one universal system" (p. 74). Selinker (1971) suggests that we need "to focus our analytical attention on only the observable meaningful data we have, i.e. the observable output which results from a learner's attempted production of a target language norm" (p. 36). Candlin (1974) advises that "similarities and differences of surface structures may be more relevant to error analysis than examining deep structure relations" (p. ix).

Besides, few are really sure what exactly constitutes the deep structure of language. It is a term that has come to mean different things to different people. Wardhaugh (1970) comments that "the notion of deep structure itself is extremely uncertain" (p. 128). Oller (1973) too observes that "there is little agreement among leading transformationalists on just what deep structure is" (p. 39). Chomsky (1968) has challenged the various definitions suggested by Lakoff (1968), McCawley (1968) and Fillmore (1968).

2.1.7. Empirical Validations

Stressing the need for empirical verification of

contrastive analysis, Jackson (1970) suggests two types of verification - primary and secondary. Primary validation is concerned with the objective replicability of the methods and procedures used in making the analysis, and secondary validation with the extent to which the output of a contrastive analysis matches the learner's errors. Fewer studies are oriented towards primary verification than towards secondary verification. The following are studies in adult second language learning which incorporate error analysis as an empirical component to verify and supplement contrastive analysis. These studies may be termed contrastive error analyses.

Ruiz (1963) makes a contrastive study of English and Hiligaynon tense and aspect systems and finds that the correlation coefficients between the difficulty ranks based on his contrastive analysis of the two verb systems and those based on errors are significantly high in predictive efficiency. Aguas (1964) studies errors in English compositions made by Tagalog speakers and concludes that first language interference is the greatest single cause of errors and that contrastive analysis can be used to predict to a very large extent those errors which arise from negative transfer from first language, though it does not predict errors which arise from a false analogy among linguistic elements in second language. Wakeham (1965) compares errors made by Filipino college freshmen with those by native speakers of English

and finds that errors made by non-native speakers were different from those made by native speakers of English. Duskova (1969) analyzes errors in written English made by Czech students and finds that first language interference causes the major part of the students' errors ranging from errors in word order and sentence construction to morphological errors. She also finds that categories non-existent in Czech, like the articles, are the most potent source of errors and difficulties. Banathy and Madarasz (1969) in a contrastive error analysis find that "contrastive analysis is a valuable tool for predicting difficulties and ease of learning problems, ... that in the majority of cases, linguistic similarities and differences can be correlated with ease and difficulty of learning" (p. 90) and error analysis is needed too for "a more comprehensive and more effective tabulation of learning difficulties" (p. 92). Buteau (1970) studies errors made by English speakers in a French grammar test and finds that a large number of incorrect responses show the influence of English, and that verb inflection causes less difficulty than the proper use of tense which involves an understanding of the semantic concepts in making the right choices. Richards (1971b) collects speech samples elicited from two subjects whose source languages are French and Czech. He finds that out of 47 errors made 25 can be attributed to interference from the mother tongue, 17 to interference from the target language due to overgeneralization and three are performance

errors. He concludes that interference from the source language is the most detectable kind of interference traceable to certain structures in particular linguistic areas. In another study using a non-contrastive approach to error analysis, Richards (1971a) still finds that "interference from the mother tongue is clearly a major source of difficulty in second language learning and contrastive analysis proves valuable in locating areas of interlingual interference" (p. 214). Ota (1971), in a contrastive error analysis study reports that his prediction of errors for his Japanese subjects learning English as a second language is fairly well borne out and that semantic errors are far more frequent than purely formal errors. Ho (1973) investigates composition errors of Chinese-medium pre-university ESL students in Singapore and finds that errors related to English verbs in the main areas of tenses, subject-verb concord and non-finite verbs make up the largest single group. This supports the contrastive statement that the verb system marks English as distinctly different from Chinese. In a study investigating the problem of difficulty in second language learning, Tran (1972) makes the following report:

Interference from the source language is the greatest source of error, accounting for approximately 51% of the total number of errors. The second important source of interference is the systemic complexity of the target language itself, which accounts for 27% of the total number of errors; the subtler the distinctions within the sub-system, the more difficult they are for the learner (p. 142).

Politzer and Ramirez (1973) in an error analysis study of Spanish speaking ESL students conclude that:

... it seems safe to say that the intrusion of Spanish, though certainly not the only cause of error, plays a considerable role. Spanish influence seems to be the major cause of error or at least one of the major causes of error (p. 59).

Schachter (1974) in a study of difficulties that different groups of foreign students have with the acquisition of English relative clauses reports that:

... the weight of the evidence from this study strongly supports the contrastive analysis a priori approach. The learner apparently constructs hypotheses about the target language based on knowledge he already has about his own language (p. 212).

Mougeon and Hebrard (1975) in a study investigating errors made in English by fluent French-Canadian bilinguals find that errors due to transfer from French were the ones that had the greatest tendency to fossilize. Similarly, Lo Coco (1975) and Taylor (1975) find a high incidence of interlingual errors in the word order of their adult subjects. Dommergues and Lane (1976) in an error analysis study involving French and English - two typologically related languages - find that speakers of French learning English made redundancy and omission errors in the articles following its use and non-use in French. In her report of a study of composition errors made by Afghanistan ESL students, Ross (1976) finds that 68.4% of the errors result from failure to use the appropriate grammatical structures which express the distinction in

meaning made in English grammar but not observed in the source language. Kleinmann (1977) in a study of avoidance behavior of Arabic, Spanish and Portuguese ESL students in several syntactic areas confirms an avoidance pattern in accordance with difficulties predicted by contrastive analysis. Merio (1978), in a study about interference errors, reports that as much as 58.7% of the errors made by Swedish speaking students learning Finnish can be attributed to the influence of the primary language on the secondary one.

The contrastive analysis studies cited above share the general conclusion that in adult second language learning, as far as the linguistic aspects are concerned, the largest group of errors was due to differences between source language and target language and is predictable by contrastive analysis; and errors owing to analogy and overgeneralization constitute another source of errors.

It is my contention that the informed opinion of experienced practicing teachers constitutes another source of established knowledge on second language learning and teaching. In the exchange of experience I have had with second language teachers, instructors at school and college levels, and professors in the Department of Languages, Literatures and Linguistics of this university, I find that there is a consensus of informed opinion that a significant proportion of their students' errors displays a regularity that can be traced to the use or non-use of the elements, structures and meanings concerned in their

students' source languages. From his experience with English speaking students learning Spanish as a second language, Hammerly (1977) finds that Spanish structures involving concepts which are lacking in English such as the distinction between ser and estar present peculiar perennial problems. These structures require a methodology that combines the merits of both the inductive and the deductive approaches. He reported an experiment using a cognitive audiolingual approach which confirmed the effectiveness of the methodology used.

2.2. Error Analysis and Interlanguage

These two new areas of second language research are reviewed together on the ground that they are closely related, although historically it is studies in error analysis which have led to the new field of research in interlanguage. The distinction between them is not always clear in the current literature so that a study in error analysis is inevitably a study in interlanguage. According to Corder (1967), errors reveal the knowledge of the learner of the target language at any point in its development. "The learner's errors are evidence of the system" (p. 166) and "the investigation of the language of second language learners would rely heavily on error analysis" (1971b, p. 154). "There could be no reason to engage in error analysis unless it served to elucidate what and how a learner learns when he studies a second language" (Corder, 1971b, p. 158). Selinker (1971) views errors

as a phenomenon of interlanguage which he defines as "the attempted production of a target language norm" (p. 37). Richards (1971b) relates error analysis to interlanguage studies in considering the field of error analysis as "dealing with the differences between the way people learning a language speak, and the way adult native speakers of the language use the language" (p. 12). He considers the study of such differences essential in discussing second language learning problems. Tucker and d'Anglejan (1971) too maintain that errors are a valuable source of information about the learning process. Both error analysis and interlanguage studies focus on the learner and the cognitive process at work in language learning.

2.2.1. Historical Background

Error analysis is probably as old as language teaching in that language teachers have long actually known and applied error analysis for various pedagogical purposes such as for providing diagnostic and remedial measures as well as feedback to the teacher about instructional materials and strategies. However, as a study that has grown out of a strong criticism of the limitations of the contrastive approach to second language learning difficulties and as a research technique to provide empirical data for verifying and supplementing contrastive studies, error analysis is relatively new. In its new important role, error analysis has merged with studies in interlanguage and had its scope broadened towards a

psycholinguistic orientation concerned with evolving an explanatory theory of the learner's performance.

The problem of error in language learning has been approached in different ways. Basically there have been three different attitudes and approaches. There was the corrective attitude which considered errors as bad and pernicious, and the learner as ignorant of the correct form or falling short of the standard required. In this traditional approach error analysis was used as a practical means to determine difficulties in language learning situations for pedagogical purposes. Little or no attempt was made to study and analyze them with the aim of either seeing the patterns in the errors made or seeking the causes for them. Next came the audiolingual approach influenced by the structural-behavioral paradigm which prevailed from the forties to the sixties. Closely associated with the prevalent structural contrastive analysis, errors are seen to have a system which is traceable to first language interference resulting from the differences between the source and the target languages. Errors are now understood with reference to the grammar of the learner's source language. However, the attitude toward errors remains negative. They are viewed as bad habits which must be avoided and eradicated through drill and overlearning of the correct form. Then came the cognitive approach to error analysis of the present time. Influenced by generative grammar, proponents of this approach consider errors as an essential step in the learning process.

Dulay and Burt (1974) maintain that we cannot learn without "goofing" and that error-making is evidence of the learning process and the strategies used by the learner. Errors are treated as exponents of the learner's system and are now understood with reference to the provisional grammar that the learner constructs and develops. They are not viewed negatively as a pathological manifestation to be eradicated but as constructive features of second language learning.

2.2.2. The Rationale and Assumptions

As mentioned earlier, studies in error analysis and interlanguage have grown out of a strong criticism of the limitations of the contrastive analysis approach to the problem of difficulties in second language learning. Contrastive analysis is criticized as too theoretical and as incapable of accounting for the sources of errors and difficulties. Error analysis is hailed as more practical and realistic, and more capable of revealing the learners' actual errors and difficulties. Moreover, the new view of language and language learning has posed new questions and brought about a shift in second language research from being teaching-centered to being learning-centered with the assumption that until more is known about learning, there will be no sound knowledge of how best to teach a language. As Corder (1971a) has remarked, "improvements in the methods and materials of second language teaching are likely to remain a matter of trial and error until we have a better understanding than we

have at present of the process of learning a second language" p. 57). Bennett (1975) concurs that "language teaching which is unclear about its relationship to language learning must remain a hit and miss affair ... and a method of second language teaching must be entirely dependent on adequate psychology of second language learning" (p. 25). Schumann (1976) describes the second language learning process as consisting of three main components: the affective variables as initiators of second language learning, the cognitive operations that the learner performs on the target language input data and the linguistic results of these operations in terms of the grammatical forms the learner uses when he attempts to use the target language. As we have no access to the cognitive operations, we can only examine the linguistic productions of the cognitive operations - the only observable manifestations - and make inferences with regards to the learning processes and the nature of the learner's interlanguage.

Underlying studies in error analysis and interlanguage is the assumption that there is systematicity in errors and interlanguage. Corder (1967) maintains that errors are systematic and consistent deviances characteristic of the learner's linguistic system at a given stage of learning. "The learner's errors are themselves systematic" (p. 166). According to Corder (1971b), the learner's language is "systematic, regular and consequently is, in principle, describable in terms

of a set of rules" (p. 147). Selinker (1972) defines interlanguage as "a separate linguistic system based on the observable output which results from a learner's attempted production of a target language norm" (p. 214). Nemser (1971) describes interlanguage as a deviant linguistic system employed by the learner attempting to utilize the target language and is internally structured. Corder (1978) further maintains that "it is only by treating interlanguage as a phenomenon to be studied in its own right that we can hope to develop an understanding of the processes of second language acquisition" (p. 71).

2.2.3. The Methodology

The methodology employed in the traditional error analysis was quite uniform in that it consisted of the collection of data, the identification of errors, the classification into error types, making statements of relative frequency of error types and, consequently, statements of areas of difficulty and therapy. With the changing view of language and language learning and the availability of more adequate theories of language and grammatical models, varying degrees of sophistication have been brought to bear on the description, the classification as well as the explanation of errors. More recent studies have made a distinction between performance and competence errors (Corder, 1967, 1971b; Duskova, 1969; Wolfe, 1967), inter- and intralingual errors (Buteau, 1970; Dommergues, 1976; Politzer and Ramirez, 1973),

global and local errors (Burt and Kiparsky, 1972, 1975; Ghadessy, 1976) and between errors of grammatical and source categories (Richards, 1971a, 1971b). Studies using transformational models have also attempted to describe errors in terms of breaches of the rules of grammar. Recent studies have contributed psychological explanations in terms of the strategies and processes of learning as well as the nature of the interlanguage (Richards, 1975; Richards and Kennedy, 1977; Richards and Sampson, 1973; Selinker, 1972).

2.2.4. Criticism of Error Analysis and Interlanguage Studies

Current error analysis and interlanguage studies have provided valuable insights and stimulating suggestions with regard to the nature of errors and explanation of their possible sources as well as their significance in the second language learning process. While more revealing and explanatory, error analysis and interlanguage studies are not exempted from certain weaknesses and limitations. It appears that these limitations have to do with the recalcitrant nature of error itself. Errors do not seem to lend themselves to any clearcut and precise systematic analysis. This seems so at least as far as our present stage of knowledge goes. Jain (1974) has summarized well the main problems in stating that:

... the division between errors traceable to first language interference and those that are independent of first language interference is not invariably clearcut; the phenomenon of errors caused by the cross-association of both first

language and second language also seems to exist; the identification and establishing of various first language independent interference factors is far from easy; the learner's psychological processes of second language learning in terms of learning strategies can at best be marginally inferred from his performance data (p. 190).

This being so, the vulnerable area of error analysis lies in the categorization and explanation of errors which lack objective criteria. Researchers, as it is, have no recourse but their subjective interpretation to rely on in attempting to pin down the precise cause of an error especially in identifying and classifying the underlying psychological processes involved. Knowing the complexity involved in second language learning, one wonders whether an error can be unambiguously identified, or exclusively related to one cause, or considered in isolation. As Candlin (1974) has commented, "The need to distinguish between the description of what is incorrect and the processes that were involved in the production of the error highlights the absence in error analysis of an optimal means for linking error identification in linguistic terms with diagnosis in psycholinguistic terms" (p. x).

2.3. Summary

In this chapter I have reviewed a cross-section of the literature related to second language learning dealing with contrastive analysis, error analysis and interlanguage which constitute three main active fields of research in applied linguistics. I have attempted to show that the history of

applied linguistics has been one of progress in which the faults of the old paradigms are corrected by the new ones, thanks to the contribution from different schools of thought within the contributing disciplines that make up the conglomerate field of applied linguistics. I have viewed contrastive analysis, error analysis and interlanguage as three evolutionary phases of one goal - the goal of understanding and explaining the nature of the target language learners' performance. Contrastive analysis, though found theoretically inadequate, seems to be supported by the empirical evidence available to date. Even proponents of error analysis and interlanguage such as Corder (1967), Richards (1971) and Selinker (1972) have not denied the importance of contrastive analysis. There is a consensus of opinion among all specialists that the empirical validity of contrastive analysis has to be verified on a reliable basis. James (1969) points out that "it is high time that serious heuristic investigation be undertaken to test the reliability of contrastive studies" (p. 83). Stern (1972) suggests that "reliable language descriptions and contrastive analyses have still to be developed" (p. 62). Nickel and Wagner (1968) maintain that "more comprehensive contrastive analyses of languages are still an urgent necessity" (p. 240). Sanders (1976) concludes in a study that "what is needed is more contrastive analyses and not less" (p. 68). In fact what Lado (1957) remarked, remains valid; when he stated then that "the

output of a contrastive analysis must be considered as a list of hypothetical problems until final validation is achieved by checking it against the actual speech of students" (Lado, 1957, p. 72). With the availability of more adequate linguistic theories and grammatical models and with error analysis as a research technique for verifying and supplementing contrastive studies, we should expect fewer controversial and more conclusive and definitive findings from data-oriented studies. It is my view that the validity of contrastive analysis can be reinforced and established by (a) replicating the contrastive studies which have been tested in some way; (b) testing the contrastive analyses which have been undertaken and (c) undertaking contrastive analyses of languages that have not been examined yet. This study represents the last category in that it involves two typologically different languages which are little studied and tested. It also combines two approaches, namely, contrastive analysis a priori and error analysis a posteriori with the common objectives of gaining insights into the nature of second language learning in relation to adult Chinese speakers learning English as a second language.

CHAPTER 3

MAJOR AREAS OF CONTRAST AND AREAS OF
DIFFICULTY HYPOTHESIZED3. Introduction

One single agreement among linguists, despite the different schools of thought they subscribe to, is the fact that there is as yet no adequate theory of language that can account for all aspects and phenomena of natural language, nor is there a model of description that is universally applicable. We have as yet no complete and uncontroversial description of any language based on any specific linguistic theory or model of description. Almost every analysis is not without its problems and for most of the hypotheses proposed there have been counter examples. This is true of English, a language in which most analyses and descriptions have been done, and more so of Chinese, a language that has not been studied as systematically and rigorously. Among the studies undertaken there has been much diversity of thought and opinion concerning various aspects and features of Chinese grammar, ranging from the establishment of word order to the identification of subjects, objects, word classes and aspect markers. Scholars in Chinese linguistics like B. Kalgren, Wang Li, Yuen Ren Chao, and William S-Y. Wong (see Note 8) have not been able to agree on many of these issues. This has made

attempts to describe the language problematic, and more so in contrasting it with English which is typologically different.

The description of Chinese and its contrast with English in this chapter is made on the basis of my intuition and knowledge of these two languages without following any particular linguistic orientation. Focus is placed on several syntactic areas and subsystems in which salient contrasts can be displayed in bold relief, namely, grammatical morphology, word order and function words. All transcriptions follow the romanized Pin Yin system except that the tones are left unmarked since both the glosses and translational equivalents are provided.

3.1. Basic Nature of the Chinese Language

3.1.1. Lack of Grammatical Morphology

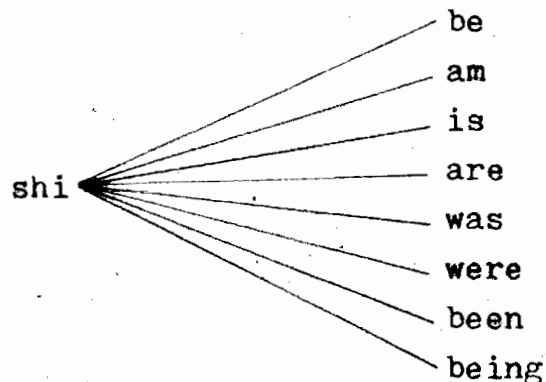
When Chinese is compared to an Indo-European language, the first typological feature that strikes one's attention is its lack of grammatical morphology. Linguists have classified Chinese as an isolating language and English as an inflectional language (see Note 9). An inflectional language is one whose words consist of stems to which complex morphemes are added to mark various grammatical categories and relations. An isolating language consists of words which are monosyllabic stems invariable in form. It is a language with relatively few grammatical categories and in which grammatical meanings and relations are conveyed through different devices like word order, separate function and content words, or are

left unmarked and implicit through extralinguistic contexts.

As described by Wang (1973):

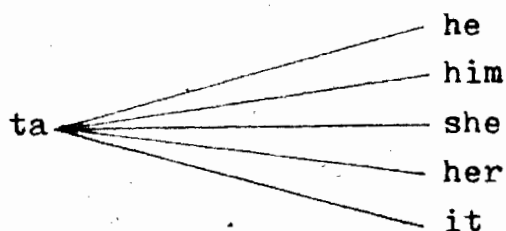
Chinese has virtually no conjugation for its verbs and no declension for its nouns. The inevitable paradigms that western school children have come to dread in their grammar books are totally absent (p. 51).

Herdan (1964) describes Chinese as "fundamentally a language in which each word is isolated, uninflected, and equivalent to a root" (p. 63). For instance, Chinese has one form shi for the copula while the English copula has eight forms to mark the grammatical categories of person, number, tense, aspect, mood and voice which are lacking in Chinese.



Generally, for every Chinese verb which has only one form, there are five forms for a regular English verb. This does not include other different forms for the irregular verbs. Furthermore, English verbs have various derivational affixes such as en-, -en, -ize, -fy, etc., which characterize their formal property. In regard to the noun, Chinese does not have the category number. Chinese nouns do not have plural markers while English nouns have three forms for the regular plural

markers. This does not include other different forms for the irregular nouns. Moreover, English nouns have various derivational affixes such as pro-, -ness, -ment, -ure, -tion, etc., which characterize their formal property. In the same way, in regards to pronouns, Chinese has only one form for each person regardless of case and gender while in English, except for the second person, there are different forms for each personal pronoun according to number, gender and case. For instance, for the third person pronoun, Chinese has only one form ta while English has five.



English adjectives too have various different derivational affixes such as -al, -ic, -ous, -ful, -ble, which mark their formal property while Chinese adjectives have only one marker -de as used in the following adjectives:

xingshi-de	formal
lishi-de	historic
butong-de	various
meili-de	beautiful
yidu-de	legible

In short, while English verbs, nouns, pronouns, adjectives and adverbs manifest their variability in form through inflectional and derivational affixes which mark the various

grammatical categories and the morphological shapes peculiar to each class, the Chinese counterparts by and large do not.

3.1.2. Fluidity of Word Class

This lack of grammatical morphology has led many western scholars and sinologists to consider Chinese as a language that has little grammar.

A Chinese grammar becomes in actual fact very meagre; mainly rules for the relative position of the words in the sentence and, in addition, the functions of a number of auxiliary grammatical words ... It is this lack of elucidating formantia which makes great demands on one's power of guessing (Karlgren, 1949, p. 68-69).

Those who believe that word classes should be established on the basis of morphological features like the inflections and derivations of Indo-European languages maintain that there are no word classes in Chinese. Rand (1969) characterizes Chinese as "a language with a great deal of grammatical cross classification in that the same word may be two or more different parts of speech" (p. 5). According to Herdan (1964), "the whole of Chinese grammar depends on position" (p. 11). Take, for instance, the word tuan 'round'. It can, according to position, be an adjective, a noun, a verb and an adverb as used in the following phrases.

tuan shan	'a round fan'
fén tuan	'a bowl of flour'
tuan fan	'to put cooked rice into a bowl'
tuan zuó	'to sit in a circle'

3.1.3. Rigidity in the Placement of Modifiers

The above statements on word order lead us to next examine if there is a salient contrast between the two languages in the area of syntax. According to Wang (1973), "...the basic sentence in Chinese has the order of subject-verb-object as in English" (p. 59). Li and Thompson (1978), however, have a somewhat different view (see Note 10). There is, however, a tendency in Chinese to prepose the object and delete the subject resulting in what has come to be known as the topic-comment sentence in Chinese (see Note 11). Thus the sentence wo chi ji which is word for word 'I eat chicken' in English can be ji chi after undergoing preposing and subject deletion, ji being the topic in the resulting sentence (see Note 12).

3.1.3.1. Noun Modifiers

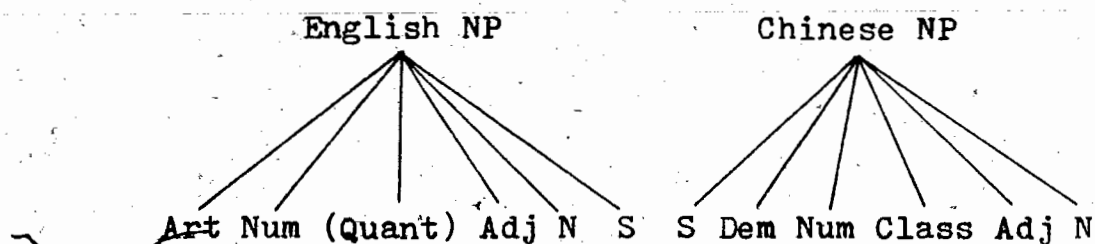
Though Chinese and English follow the preferred subject-verb-object word order in basic structure, Chinese shows a rigidity in the positioning of modifiers like adjectivals, relative clauses, and adverbials while English shows variability and flexibility in its counterparts. In English, noun modifiers can precede the head under some conditions or follow it under other conditions. In Chinese, noun modifiers are consistently ordered before the head noun. In other words, in Chinese, all modifying structures are prenominal. The following are some examples. Chinese noun phrases corresponding to (1) are given in (2).

[poss = possessive, class = classifier (see Note 13).]

- (1) a. red roses modifier-head
 b. friends whom I like head-modifier
 c. that thick book on the shelf modifier-head-modifier
 d. the pretty panda which modifier-head-modifier
 came from China
- (2) a. hong de meigui modifier-head
 red poss roses
 b. wo xihuan de pengyou modifier-head
 I like poss friends
 c. zai jia shang de nei modifier-head
 on shelf top poss that
 ben heu shu
 class thick book
 d. cong zhongguo lai de nei modifier-head
 from China come poss that
 zhi meili de xiongmau
 class pretty poss panda

The difference between English and Chinese in the internal structure of noun phrase (NP) can be summed up in the following diagram.

[Art = article, Num = numeral, Quant = quantifier, Dem = demonstrative pronoun, Adj = adjective, N = head noun, S = adjectival phrase or relative clause. Parentheses indicate that the item within them is optional.]



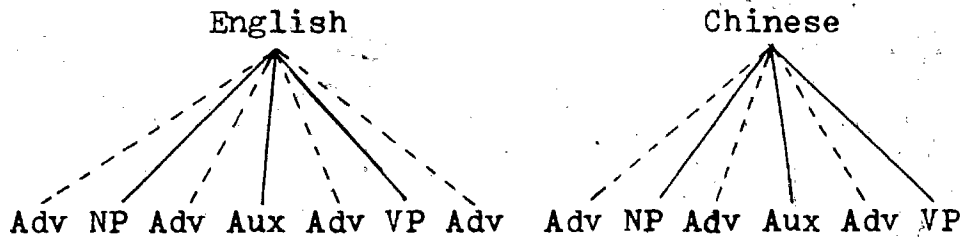
3.1.3.2. Verb Modifiers

Similarly, English verb modifiers like adverbs and adverbials of time, location and manner are less rigid as they can take both pre- and post-verbal positions. They can occur in sentence-initial, pre-auxiliary, or post-auxiliary or sentence final positions. In Chinese such adverbials are generally found in pre-verbal positions. They can occur in sentence-initial and pre- or post-auxiliary positions. The following are some characteristic examples. Chinese sentences corresponding to the English equivalents in (1) are given in (2). [asp = aspect. The item starred is ill-formed in word order.]

- (1) a. (Yesterday) he bought a book (yesterday).
 b. (In Japan) he studied fishery (in Japan).
 c. (Probably) he will (probably) go to England (probably).
 d. (Carefully) he (carefully) searched the room (carefully).
- (2) a. (Zuotian) ta mai-le yi ben shu (*zuotian).
 Yesterday he buy asp a class book yesterday
 b. Ta (zai riben) nianshu (*zai riben).
 He in Japan study in Japan
 c. Ta (dakai) hui qu yingguo (*dakai).
 He probably will go England probably

d. Ta (xiaoxin-de) sheucha fangjian (*xiaoxin-de).
 He carefully search room carefully

The difference between English and Chinese in the placement of adverbials can be summed up in the following diagram.



3.1.3.3. Simplified Phrase Structure Rules

To sum up, syntactically speaking, while both languages share the preferred subject-verb-object order in basic structures, English displays a greater variability and flexibility with respect to the placement of noun modifiers and adverbials whereas Chinese shows a greater rigidity in the positioning of its counterparts. In English, noun modifiers can be prenominal or postnominal, and adverbials can appear in various parts of a sentence. In Chinese, noun modifiers can only be prenominal and adverbials preverbal. A simplified set of phrase structure rules illustrating these differences is presented below.

English

S → (Adv) NP (Adv) Aux (Adv) VP (Adv)

NP → (Det)(Num)(Quant)(Adj)N(S)

Chinese

S → (Adv) NP (Adv) Aux (Adv) VP

NP → (S)(Det)(Num)(Class)(Adj)N

$$\text{Det} \rightarrow \begin{Bmatrix} \text{Dem} \\ \text{Poss} \\ \text{Art} \end{Bmatrix}$$

$$\text{Det} \rightarrow \begin{Bmatrix} \text{Dem} \\ \text{Poss} \end{Bmatrix}$$

$$\text{Art} \rightarrow \begin{Bmatrix} \text{Def} \\ \text{Indef} \end{Bmatrix}$$

$$\text{VP} \rightarrow \begin{Bmatrix} \text{cop} \begin{Bmatrix} \text{NP} \\ \text{PP} \\ \text{AP} \end{Bmatrix} \\ \text{V}(\text{NP})(\text{NP}) \end{Bmatrix}$$

$$\text{VP} \rightarrow \begin{Bmatrix} \text{cop} \begin{Bmatrix} \text{NP} \\ \text{PP} \end{Bmatrix} \\ \text{AP} \\ \text{V}(\text{NP})(\text{NP}) \end{Bmatrix}$$

$$\text{PP} \rightarrow \text{P NP}$$

$$\text{PP} \rightarrow (\text{P}) \text{NP} (\text{P})$$

$$\text{Aux} \rightarrow \text{Tense (M)(Perf)(Prog)}$$

$$\text{Aux} \rightarrow (\text{M})(\text{Asp})$$

$$\text{Tense} \rightarrow \begin{Bmatrix} \text{Pres} \\ \text{Past} \end{Bmatrix}$$

3.1.4. Lack of Function Words

Another striking typological feature that distinguishes Chinese from English is the lack of function words, in particular, the preposition and the article.

3.1.4.1. Prepositions

Chao (1968) uses the term "localizer" to refer to this class of words in Chinese which express the spatial and temporal locations of things (p. 620). According to Baron (1971), "Mandarin has no special class of words corresponding to prepositions in English. There does exist a fairly limited set of verbs which become lexically weakened and form verb-noun combinations expressing much the same thing as do English prepositional phrases" (p. 36). Li and Thompson (1974a) describe

this class of words as "verb-like morphemes with prepositional meaning" (p. 110). Chinese has a way of avoiding the use of many prepositions. The preposition-like word yu, for instance, covers the use of many English prepositions as shown below.

(1) Yu covers in, on and at in English:

- a. Ta sheng yu jianada. He was born in Canada.
he born in Canada
- b. Jiang wu zhi yu Place the object on the table.
cause object place on
zhuoshang.
table
- c. Hui yu wu shi The meeting is held at five.
meeting at five o'clock
juxing.
hold

(2) Yu covers from, than and by in English:

- a. Er bai nian yu Two hundred years from now.
two hundred years from
jin.
now
- b. Jin nian sheuru duo The income this year is more
this year income more than that of last year.
yu qu nian.
than last year
- c. Ta bu que yu He was not daunted by
he not daunted by
kunnan.
difficulties

Other similar words are placed immediately after the objects they govern so that postpositions might be a better term rather than prepositions.

(3) Zhong covers at, in and among and is postpositional.

- | | |
|---|--|
| a. Ta jia <u>zhong</u> you
he home <u>at</u> has
ba kou.
eight mouths | He has eight mouths to feed
<u>at</u> home. |
| b. Ban <u>zhong</u> ta zuihao.
class <u>in</u> he best | He is the best <u>in</u> the class. |
| c. Tingzong <u>zhong</u> you
audience <u>among</u> is
shouxiang.
premier | <u>Among</u> the audience was the
premier. |

(4) Shang covers over, in and on and is postpositional.

- | | |
|--|-------------------------------------|
| a. Shan <u>shang</u> you yun.
hill <u>over</u> is clouds | <u>Over</u> the hills are clouds. |
| b. Bie dao jie <u>shang</u>
don't go street <u>in</u>
wan.
play | Don't play <u>in</u> the street. |
| c. Che ting lu <u>shang</u> .
car stop road <u>on</u> | The car stopped <u>on</u> the road. |

Moreover, many of the English prepositions used with lexical verbs, nouns and other word classes are non-existent in Chinese, their semantic distinctions being conveyed through different lexical items as shown in the following:

jiancha	to look at
zhuyi	to look to
huanshi	to look around
kangu	to look after
tiaucha	to look into
senzhao	to look for
yangwang	to look up to
qingshi	to look down on

3.1.4.2. The Definite and Indefinite Articles

These two function words are conspicuously absent in Chinese. As Chao (1948) puts it, "No articles are required before Chinese nouns" (p. 51). The numeral yi 'one' and demonstratives like zhei 'this' and nei 'that' are used instead when specificity is required. Generally, the grammatical concepts of definiteness and indefiniteness are marked optionally and sporadically as shown in the following examples. (Parentheses indicate optional use of the numeral and the demonstrative.)

(a) The chairman will make a report.

Ø zhuxi jiang zuo Ø baokao

(b) In the spring the scenery is very beautiful.

zai Ø chuntian Ø fengjing hen meili

(c) A dog is a man's best friend.

Ø gou shi Ø ren-de hao pengyou

(d) The dog bit a man.

(Neizhi) gou yao-le (yige) ren

Another device used to convey the concept of definiteness is word order. As Chao (1968) describes it, "the subject has definite reference whereas the object has indefinite reference" (p. 77). He maintains that the subject represents the known, i.e. the old information which is the topic, and the predicate introduces something unknown, i.e. the new information which is the comment. The following are some examples: [asp = aspect, prt = particle]

- | | |
|---|--|
| a. Lai-le yi - ge keren.
come aspa class guest
A guest came. | Keren lai-le.
guest come asp
The guest came. |
| b. Wo zhu fan - le.
I cook rice asp
I have cooked rice. | Fan wo zhu - le.
rice I cook asp
I have cooked the rice. |
| c. Ni yang gou ma?
You rear dog prt
Do you rear a dog? | Gou ni yang ma?
dog you feed prt
Have you fed the dog? |
| d. Ta zhaodao-le difang ma?
he find asp place prt
Has he found a place? | Difang ta zhaodao-le ma?
Place he find asp prt
Has he found the place? |

3.2. Areas of Expected Errors and Levels of Difficulties Hypothesized

The above description of the basic nature of Chinese and its contrast with English at the morpho-syntactic level in several major subsystems will now be used as the basis for predicting errors and for postulating four levels of difficulty

for Chinese ESL students. The following sub-headings which are the main subsystems contrasted appear in the hypothesized descending order of difficulty. Further illustrations are given to show the magnitude of the contrast in terms of the sources of inter- and intralingual interference which constitute the basis for the hypothesized hierarchy of difficulty.

3.2.1. The English Verb System

As mentioned earlier, the most striking feature that distinguishes Chinese from English is its lack of grammatical morphology. The various affixes in grammatical morphology are markers of grammatical categories. One morpho-syntactic area in English that involves a variety of these grammatical categories is the verb system. In fact, in no other area of syntax does English display such a variety of grammatical category together with their overt forms as in the verb system. The five forms each verb takes are further involved in various possible combinations and permutations with the auxiliaries HAVE, BE and DO making up the multiple forms of verb phrases which mark person, number, tense, aspect, mood and voice. Some illustration is in order here. The Chinese sentence given below can have twelve English equivalents showing different tenses and aspects in the English verb. In fact, these twelve sentences can be multiplied with the use of other personal pronouns and in both singular and plural numbers as well as in different voices and moods, yielding

a still greater variety in the verb forms.

Chinese: Ta jiu dian kaishi gongzho.
he nine o'clock begin work

English: He begins his work at nine.

He has begun his work at nine.

He is beginning his work at nine.

He has been beginning his work at nine.

He began his work at nine.

He had begun his work at nine.

He was beginning his work at nine.

He had been beginning his work at nine.

He will begin his work at nine.

He will have begun his work at nine.

He will be beginning his work at nine.

He will have begun his work at nine.

3.2.1.1. Nature of Interlingual Interference

The above example shows that the Chinese verb system is lacking in the grammatical categories of tense and aspect. Chinese verbs are neutral with regard to time reference in that tense and aspect are not built into them. The time reference is either implied through extralinguistic situational contexts, which is a pragmatic matter, or made specific by adding, lexically, temporal adverbs or adverbials when required and when ambiguity could otherwise arise. Thus, the above example shows the nature of negative

correspondence with English in terms of (a) the lack of grammatical categories concerned, in this case, tense and aspect, as well as the finer semantic distinction in each category; (b) the optionality in the substitutional use of different grammatical devices, in this case, the optional use in Chinese of temporal adverbs and adverbials; (c) the convergence versus divergence phenomena, in this case the divergence phenomenon, English having a larger number of verb forms and corresponding semantic distinctions in tense and aspect than Chinese. Furthermore, in the same example given above, there is in Chinese no obligatory correspondence between subject and verb in number and person known as agreement. These are instances of negative correspondences which constitute sources of interference from Chinese. Errors made that can be attributed to these sources will be considered as interlingual errors. To clarify further, a few more examples are given below.

Although there are a few suffix-like words in Chinese which indicate aspects, they do not correspond to their numerous counterparts in English. The word le which indicates perfective aspect can be the simple past, the present perfect, the past perfect, and the future perfect in English as shown in the following sentences.

Chinese: Shu wo mai-le.

book I buy asp

English: I bought the book.

I had bought the book.

I have bought the book.

I shall have bought the book.

Similarly, the affix-like words zai and zhe which indicate progressive aspect can be the present progressive, the past progressive, the present perfect progressive and the past perfect progressive in English.

Chinese: Tai zai nian (zhe) shu.

he asp read asp book

English: He is studying.

He was studying.

He has been studying.

He had been studying.

All the above examples further illustrate interference from the source language owing to negative correspondence in terms of the lack of the categories concerned, the optionality in the use of different grammatical devices, and the divergence phenomenon.

3.2.1.2. Nature of Intralingual Interference

Coupled with the above sources of interlingual interference from Chinese are the complexities inherent within English in terms of its internal irregularity, inconsistency, and asymmetry which constitute the source of interference from the target language, i.e. intralingual

interference. A few examples may suffice. There is, for instance, the irregularity in the morphological forms for the English preterite and the past participle such as those of the following categories.

eat, ate eaten

take, took, taken

go, went, gone

fly, flew, flown

ring, rang, rung

teach, taught, taught

set, set, set

As is characteristic of natural language, there is also the lack of one-to-one correspondence between grammatical form and meaning. English does not show consistency in the matching of a category member and its underlying grammatical meaning. Thus, in the English verb system, grammatical tense is not synonymous with time reference. A logical tense can have several grammatical tenses in different forms. In the following sentences, the future time reference is expressed by five different grammatical tenses.

Simple Present: I leave tomorrow.

Present Progressive: I am leaving tomorrow.

Future Progressive: I shall be leaving tomorrow.

Simple Future: I shall leave tomorrow.

Copula + Infinite Verb: I am to leave tomorrow.

On the other hand, a tense can mean several kinds of time as shown in the following sentences. As Lee (1954) has pointed out, "the English simple tense does not refer unequivocally to present time" (p. 118).

Habitual: He drives to school everyday.

Future: The steamer leaves for China next week,

Historical Present: Long ago, there lives a king.

Partaking of Past, Knowledge puffs up, but wisdom and charity
Present and Future: edify.

Timeless: Jesus Christ is the same yesterday, today
 and tomorrow.

Based on the above contrastive description and illustrations, the English verb system is therefore considered and hypothesized as the syntactic area in which English presents the greatest difficulty to Chinese-speaking students. Interlingually, Chinese lacks the finer and more precise distinction in tense and aspect as well as the multiple overt markers for these grammatical categories and their variants. Intralingually, English displays inherent complexities in the irregular verb forms and the lack of one-to-one correspondence between time reference and grammatical tense.

3.2.1.3. Nature of Expected Errors at Early and Later Stages of Learning

Chinese-speaking ESL students are expected to make the most form-meaning errors in English verb phrases. They tend, for instance, to produce stem-form English in which verbs are

used in their root forms, irrespective of tense, aspect,⁴ number and person, to fail to maintain a consistent tense sequence and to observe the subject-verb agreement. Errors like these are interlingual in nature and are likely to occur at early stages of learning. Intralingual errors such as the use of wrong verb forms owing to the irregularity in English strong verbs, and the incorrect use of tenses owing to confusion between grammatical tense and time reference are expected to occur at later stages of learning.

3.2.2. The English Article System

This syntactic area is hypothesized as ranking next in the hierarchy of difficulty. The indefinite and definite articles are as conspicuously absent in Chinese as the categories of tense and aspect. As a result, a Chinese noun phrase can be as vague in determination as its verb is imprecise in time reference.

3.2.2.1. Nature of Interlingual Interference

As shown previously, instead of the articles, Chinese uses the numeral one+classifier as a substitute for the indefinite article a and the demonstrative pronouns this/that+classifier for the definite article the if specificity is required. Another device to indicate definiteness is word order. A noun phrase in a preverbal position tends to have definite reference while one in a post-verbal position has indefinite reference, unless the noun phrase is explicitly modified by indefinite numeral expressions or by demonstratives

Thus, the absence of the articles, the optionality in the use of Chinese equivalents, and the use of word order to indicate indefiniteness are instances of negative correspondences which constitute sources of interference from Chinese. Errors made that can be attributed to these sources will be considered as interlingual errors.

3.2.2.2. Nature of Intralingual Interferences

Coupled with this interlingual interference are the complexities inherent in the English article system. Besides quantifying and particularizing, the indefinite and definite articles also generalize, identify and name a class. The heavy semantic load carried by these two articles results in an inevitable overlapping of form and semantic function. (As the uses of the articles involve the grammatical category number and the notion of countability I shall include, for description purposes, the presence and absence of the plural marker -s and the zero marker \emptyset as component features of the English article system.) Thus, in the following sentences, the generic function of the article system is conveyed in five different forms.

A tiger is a member of the cat family.
The tiger

\emptyset Tigers are members of the cat family.
The tigers

\emptyset Fur is thick hair covering certain animals.

On the other hand, one form can convey several semantic

functions. In the sentences below, the article the can be anaphoric, generic, presuppositional and conventional.

Did you feed the dog?

The dog is man's best friend.

While I was doing the dishes, the phone rang.

He listens to the radio.

The moon is full tonight.

It is evident that the distinction between anaphoric, generic, and presuppositional or conventional uses of the in the above sentences is a semantic one, since syntactically they share the same form. This overlapping of form and function together with the finer semantic concepts underlying each form makes the task of determining the use or non-use of the articles a difficult and a confusing one. However, when compared with the verb system, the article system is not as complex and intricate in terms of the numerous forms which mark the finer semantic distinctions in tense and aspects, hence it is ranked as second in difficulty to the verb system.

3.2.2.3. Nature of Expected Errors in Early and Later Stages of Learning

Chinese-speaking ESL students are likely to make errors of omission in both the definite and indefinite articles. They may tend to use the numeral one and the demonstrative pronouns as the indefinite and definite articles respectively as is typical of Chinese. Errors of these categories will be interlingual in nature and are expected to be more dominant

in early stages of learning. Students will tend to use the articles indiscriminately, omitting them when they should be used or using them when they should not. Later errors of these types are evidence of confusion as a result of overlapping of form and semantic function in the article system. They are therefore intralingual in nature and are likely to continue to occur at later stages of learning.

3.2.3. The English Prepositions

The use of this class of function word is considered as ranking next in the four-level hierarchy of difficulty. It is not as complex as the verb system which has various grammatical categories each of which has overt markers for its distinctive grammatical meaning, nor is it more involved than the article which, because of its only two available forms, has inevitably confusing overlapping of form and semantic function. Prepositions are a class of ubiquitous words that English cannot do without while Chinese can do with relatively few similarly-functioning forms.

3.2.3.1. Nature of Interlingual Interference

As shown previously, what appear to be the productive prepositional phrases in English are just content words or phrases without prepositions in Chinese. The non-use of these prepositions in Chinese is likely to cause omission errors, i.e. failure to insert the necessary English prepositions. The relatively small number of Chinese localizers and postpositional words are capable of covering the numerous

prepositions of English. This is likely to cause errors owing to the divergence phenomenon mentioned earlier as one of the sources of interference from Chinese.

3.2.3.2. Nature of Intralingual Interference

Inherent complexities within the target language in regard to prepositions lie in what appears to the learner to be randomness and illogicality in their use in English. Various different prepositions can follow or precede a word giving subtly different meanings as the following examples show:

jump at	at the corner
jump on	on the corner
jump in	in the corner
jump around	round the corner
jump into	into the corner
jump by	by the corner

One can travel in a rocket, at the speed of light, by the year 2000, into space, arrive in the moon, walk on its surface, to an unknown destination, and round the year.

One can throw things on, to, at someone; laugh at or with someone; something can be in or on my mind; someone can be in my way or I can meet someone on my way, etc.

The use of wrong prepositions owing to confusion and the insertion of unnecessary prepositions are likely to be the errors due to intralingual interference.

3.2.3.3. Nature of Expected Errors at Early and Later Stages of Learning

Inability to perceive the logic and the fine semantic difference in the use of these numerous spatial and temporal words will constitute the main learning difficulty. Chinese ESL learners are likely, for instance, to omit the use of many prepositions, to use the same preposition or same few to cover the use of many, following the parsimonious use of the equivalent localizers in Chinese. These errors are interlingual in nature and will occur mostly in the early stages of learning. Failure to understand the rationale or logic underlying the use of the numerous prepositions is likely to lead to their random and indiscriminate use. Such errors are intralingual in nature and are expected to be more dominant in later stages of learning.

3.2.4. The Placement of Modifiers

As Chinese and English are, by and large, subject-verb-object languages, Chinese speakers are not likely to make errors and have difficulty with respect to word order in basic sentence structure, hence the ranking of word order as the least in magnitude in the postulated hierarchy.

3.2.4.1. Nature of Interlingual Interference

However, interference from Chinese is likely to manifest itself in the positioning of nominal and verbal modifiers in which English is flexible and more variable and Chinese is relatively rigid. As shown earlier, in English, noun modifiers

can both precede and follow the head noun, and adverbials can occur in both preverbal and postverbal positions. In Chinese, noun modifiers can only be prenominal and adverbials preverbal. Errors made in the placement of these modifiers that can be attributed to the carry-over effect from Chinese will be considered as interlingual.

3.2.4.2. Nature of Intralingual Interference

Few errors showing intralingual interference are envisaged as there is little inherent complexity within English in the placement of these modifiers. As there are conditions governing the positioning of certain adverbs and adverbials of which Chinese learners have little knowledge and intuition, they will tend to place these verbal modifiers in pre- and postverbal positions indiscriminately. Errors of this category will be considered intralingual in nature.

3.2.4.3. Nature of Expected Errors in Early and Later Stages of Learning

As all nominal classifiers cluster before the head noun in Chinese, learners tend to place all adjectives, adjectivals and relative clauses in prenominal position. Similarly, they are likely to bunch the adverbs and adverbials in preverbal positions. Errors showing this tendency will be considered as interlingual and are expected to occur in the early stages of learning. Errors showing an indiscriminate and incorrect placement of adverbs and adverbials belong to the intralingual category. They are more likely to occur in later stages of

learning.

3.3. Summary

This chapter can be summarized as consisting of two main parts. The first part outlines the basic typological nature of Chinese while providing a contrast with English in four major morpho-syntactic areas. The second part deals with the rationale for the hypothesized levels of difficulty formulated on the contrastive description given in part one. Interlingual interference is described in terms of the lack in Chinese of the grammatical categories in question and their overt markers, the optionality in the use of other grammatical devices, and the divergence phenomena. Intralingual interference is described in terms of irregularity, inconsistency and the lack of one-to-one correspondence between form and meaning. The magnitude in the complexity involved in the interlingual interference constitutes the basis for hypothesizing four levels of difficulty in four syntactic areas in the following descending order: English verb system, articles, prepositions and placement of modifiers.

CHAPTER 4

METHOD AND PROCEDURES

4. Introduction

This chapter deals with the investigation proper which provides data-oriented evidence to test the hypotheses propounded in Chapter 1. It outlines the methodology and procedures employed, including the selection of suitable subjects for this study, the elicitation techniques used, the underlying rationale as well as the analysis of the data.

4.1. Collection of Data

4.1.1. The Language Background Questionnaire

A language background questionnaire was prepared to select suitable subjects for the study. It is an established fact that factors affecting second language learning are many and varied, ranging from linguistic to non-linguistic. Among non-linguistic variables are pedagogical, neurophysiological, psychological and socio-cultural ones. An attempt was made to hold constant only the major variables amenable to control, as a complete control of all the relevant variables is only a theoretical possibility. The variables considered as of major importance are age, ethnic group, source language or dialect, educational level, type and amount of exposure to English prior to and after arrival in Vancouver, length of study of English and social milieu.

The items in the questionnaire aim at obtaining information from the subjects about themselves with regard to the above-mentioned major variables. The questionnaire was administered in Chinese. The English version of the questionnaire is in Appendix A.

4.1.2. The Subjects

The subjects used in the investigation are students in the English Language Training department of Vancouver Community College. Only Chinese students were chosen as one purpose of the study is to test the validity of the notion of language transfer with respect to speakers of a source language that is typologically different from the target language being learned. Students at different stages of learning and proficiency levels were taken since another objective of the study is to see the extent of inter- and intralingual interference across different levels of learning and proficiency. Nine subjects of the elementary, intermediate and advanced groups (see Note 14) were selected out of their respective classes based on their responses to the questionnaire administered. Three subjects of each level were selected and considered as the closest in homogeneity with respect to the major variables that affect second language learning mentioned above. In age, these subjects range from 19 to 29. It is assumed that within this age range there could be little geriatric decline in learning owing to the

age factor. Cantonese and Mandarin Chinese are their common dialects. These two dialects are considered syntactically alike according to the consensus of many Chinese grammarians like Chao (1968), Krachtoval (1968), Li and Thompson (1974b), and Tang, Tung and Wu (1972). Syntactically, therefore, there could be little interference from a third language or dialect with regard to the deviant forms produced. These subjects were all from Hong Kong. Educationally, they had completed their primary and secondary education in Chinese with English as a second language (see Note 15). The three subjects from the elementary group came to Vancouver in the latter half of 1978, while the other six subjects from the intermediate and the advanced groups came in 1977. All of them began their English classes shortly after their arrival in Vancouver. As for the attitudinal variable in the affective domain, these subjects have immigrated to this English-speaking country of their own choice. They were all well aware of their common immediate need for a reasonable competence in English both for everyday communication and for securing a good job. Their regular attendance and serious attitude toward learning the language as reported by their respective teachers show their keen interest and motivation. As indicated in their responses, they come from a similar social milieu in that they all live in and around Chinatown.

4.1.3. Elicitation Procedure

An uncontrolled elicitation technique, namely, the retelling of given stories was used to elicit written linguistic productions from the nine subjects selected. This uncontrolled elicitation technique was employed to avoid induced errors which controlled techniques like multiple choice, morphological tests, translation and cloze tests tend to produce. These controlled techniques generally tend to neglect the relationship between language and communication. A morphological test is often geared to provoking specific morphological errors and a direct translation test tends to load a study in favor of transfer and interference from the source language. In a multiple-choice test, the learner is made aware of the specific linguistic tasks he is being tested on. His attention is thus drawn to concentrate on the formal linguistic side so that the resultant linguistic productions may contain more or fewer errors than is normal. In an uncontrolled elicitation technique like the retelling of a story, the subjects' attention is drawn away from the formal linguistic side to the content side. They are forced to draw on their internalized grammar while reproducing the given semantic content. The linguistic product thus can be considered to be more natural and more representative of the subjects' interlanguage or transitional competence.

Two stories, considered appropriate both in language

and content, were presented to the subjects orally by their respective class teachers. Any new or difficult word whose meaning was not clear was explained. The subjects were asked to retell the stories in their own words in writing. This procedure was followed by both the intermediate and the advanced groups. For the elementary subjects who could not yet write in English, the stories were told to them with the help of pictures and the subjects were asked to retell them in their own words orally. For these subjects, before the stories were presented to them, there was a conversation between each subject and the investigator for the purpose of putting the subject at ease and for eliciting more utterances from the subjects. The linguistic production from both the conversation and the retold stories were recorded on audio cassette tapes which were transcribed for analysis.

4.2. Analysis of Data

4.2.1. The Categorization of Errors

As mentioned earlier, the focus of the present study is on errors which stem from linguistic sources, namely, errors due to transfer from the source language and those due to the complexities within the target language. As such, errors from the speech samples collected will be identified and classified on the basis of the definitions of inter- and intralingual errors given in Chapter 1 and in Chapter 3. The oft-quoted statements by Lado (1957) and Weinreich (1964)

have been used as the definition for interlingual errors. Generally, interlingual errors refer to errors made as a result of the use or non-use of elements, patterns and meanings from the source language while using the target language. Specifically, on the basis of the contrast between Chinese and English, interlingual errors are errors caused by negative correspondences between the two languages in terms of (a) the lack of the grammatical category concerned and of the finer semantic distinctions made among the members of that category; (b) the optionality in the substitutional use of different grammatical devices; and (c) the convergence phenomenon in Chinese. Intralingual errors, on the other hand, are errors as defined by Corder (1967) and Richards (1971a). Specifically, they are errors whose source is in the inherent complexities within English such as its irregularities, inconsistency, asymmetry and non-correspondence between form and meaning which result in confusion among items and in mutual interference of items. Besides the above criteria, the investigator's intuition, knowledge and experience are much used in deciding on the nature of interference which plausibly leads to an error.

As this study deals mainly with the verb, the article, the preposition and word order, errors not within these four syntactic areas such as lexical errors and errors which can be traced to phonological causes were excluded. Performance and indeterminate errors were also ignored. By

performance error is meant an error which is not indicative of a patterned regularity or an underlying rule in the structure concerned. It is usually a single instance of a deviation from a structure when the use of the same structure in other instances has been correct. Corder (1967) calls such an error a mistake. Indeterminate errors can be systematic. They have also been known as ambiguous errors. They are errors which are amenable to multiple interpretations.

4.2.2. Treatment of Errors

Errors, after being identified and categorized, were processed on the basis of the hypotheses propounded in Chapter 1. These hypotheses concern (a) the evidence of interlingual errors due to language transfer; (b) the evidence of intralingual errors due to inherent complexities within the target language; (c) the extent of interlingual errors across the three levels of learning; (d) the extent of intralingual errors across the three levels of learning; and (e) the hierarchy of difficulty for all the learners in the four syntactic areas examined. Errors of each category in each syntactic area made by each subject were counted. So was the number of instances which involved the total usage of a structure. Errors were totalled and expressed as a percentage of errors per total usage of that structure.

Mean percentages were computed for comparing the extent of inter- and intralingual interference across the three levels of learning. The frequencies of interlingual errors in each

of the four syntactic areas and their mean percentages were computed for establishing the rank ordering of the four syntactic areas of difficulty.

CHAPTER 5

RESULTS AND FINDINGS

5. Introduction

This chapter reports the results and findings of the study. The error analyses carried out on the linguistic productions of the subjects are shown in nine tables. Only Tables 1, 2 and 3 are presented in this chapter as these tables summarize the main results of the analysis for testing the hypotheses propounded in Chapter 1. The rest of the tables are given in Appendix C.

5.1. Results of the Analysis

Table 1 is a summary of Tables 4, 5 and 6 in Appendix C. It shows the total interlingual errors in all the four syntactic areas, namely, the verb, the article, the preposition and word order, made by each subject from all three levels of learning. The figures in column 3 show the number of interlingual errors made in the four syntactic areas by the subjects. Those in column 4 show the total usage, i.e. the total number of instances of the four syntactic structures used in the subjects' linguistic productions. Column 5 shows the percentage of errors per total usage of the four syntactic areas and column 6 shows the mean percentage of interlingual errors for each level of learning. The results given in Table 1 show that interlingual errors are present

Table 1

Interlingual Errors Across Levels of Learning

Levels of learning	Subjects	No. of errors	Total usage	% error/total usage	Mean %
Elementary	E1	38	145	26.2	
	E2	35	178	19.7	22.6
	E3	26	119	21.8	
Intermediate	I1	28	213	13.1	
	I2	39	230	17.0	15.0
	I3	30	201	14.9	
Advanced	A1	24	237	10.1	
	A2	20	149	13.4	12.0
	A3	16	127	12.6	

at each level of learning and that they decrease with levels of proficiency. This indicates that learning difficulties due to interference from the source language are evident at all three levels of learning and that these difficulties decrease as the level of proficiency increases.

Table 2 is read in the same way as Table 1 for the intralingual errors. The results given in Table 2 show that intralingual errors, like interlingual errors, occur at each level of learning. Unlike interlingual errors, however, they increase with the three levels of learning. While this indicates that difficulties due to confusion arising within English are more evident in later stages of learning, it also shows that these difficulties are present even at the elementary level. In short, Tables 1 and 2 show that, in relation to these Chinese ESL students, errors of the inter- and intralingual types vary quantitatively but not qualitatively with the three levels of learning.

Table 3 is a summary of Tables 7, 8 and 9 in Appendix C. The figures in columns 2, 3 and 4 show the mean percentage of interlingual errors made by the subjects of each level in each of the four syntactic areas. Column 5 shows the average mean percentage of the interlingual errors made by all the subjects in each syntactic area. While, in general, there is a pattern showing that verb errors rank highest and word order errors rank lowest in the hierarchy of difficulty, there is little difference in the degree of difficulty between

Table 2

Intralingual Errors Across Levels of Learning

Levels of learning	Subjects	No. of errors	Total usage	% error/total usage	Mean %
Elementary	E1	6	145	4.1	
	E2	13	178	7.3	7.2
	E3	12	119	10.1	
Intermediate	I1	16	213	7.5	
	I2	29	230	12.6	9.2
	I3	16	201	8.0	
Advanced	A1	23	237	9.7	
	A2	16	149	10.7	12.8
	A3	23	127	18.1	

Table 3
Mean % of Interlingual Errors Across Four
Syntactic Areas and Three Levels of Learning

Category	Mean % errors per total usage			Overall Mean %
	Elementary group	Intermediate group	Advanced group	
Verb	31.6	21.6	16.6	23.3
Article	12.8	21.5	14.9	16.4
Preposition	26.5	13.9	7.9	16.1
Word Order	17.2	0.0	0.0	5.7

the article and the preposition. This result supports partially the hypothesis that for the Chinese ESL students, English verbs, articles, prepositions and word order present a descending order of difficulty.

5.2. Discussion: Errors, Learning Strategies and Interlanguage

A close examination of the subjects' errors at each level of learning reveals some interesting regularities and patterns from which the nature of the learning strategies and the interlanguage can be inferred.

5.2.1. Errors at the Elementary Level

The linguistic productions at the elementary level are found to be a sort of Chinese English, that is, English lexis in Chinese syntax. The sentence pattern follows closely that of Chinese. This is evident in the subjects' use of the English verb, article, preposition and word order. The following are sentences containing typical examples of errors in each syntactic area collected from the subjects' speech samples at the elementary level. Each sentence has been edited in that other errors in the sentence not focused on have been corrected. The type of error being studied is underlined.

5.2.1.1. Verb Errors - Interlingual

Errors due to the use of the stem form (the non-finite form) regardless of person and number:

My husband go to work everyday.

He come to bring me home at five.

He drive me to school.

My sister have two children.

She do household work.

Verb errors due to the use of the stem form regardless of tense and aspect:

I come to Canada in 1978.

Last weekend I go shopping.

Now I study English in Vancouver College.

The police come and catch the thief.

The dog don't know he have a shadow.

Omission of copula:

Some of my friends ___ in France.

Some of them ___ in Canada.

My factory ___ far from home.

I ___ very tired.

The people ___ friendly.

Omission of to before the second verb in verb-and-verb constructions:

I like ___ speak Chinese.

I ask them ___ eat.

After work I go ___ take my baby.

He asks me ___ come to school ___ learn English.

They want ___ learn English.

Omission of do support in negative sentences:

Last weekend I ___ no go out.

My mother ___ no work.

The teacher __ no teach.

My husband __ no allow me.

If I __ no come to school to learn English...

The above errors in the use of verbs are clear examples of errors due to language transfer. Chinese verbs have no markers for number, person, tense and aspect. Chinese adjectives and adjectivals used predicatively are without the copula shi as mentioned previously. The omission of to before the second verb in verb-and-verb constructions and of do for negative sentences reflects the patterns of Chinese verb constructions. That English verbs are like Chinese verbs seems to be the hypothesis that the learners are formulating and testing at this level.

Verb Errors - Intralingual

While the majority of verb errors are interlingual by nature as shown above, there are also errors in verbs, though not as many, which could be due to confusion arising from within the English language. Many of these are errors in verb forms. The following are some examples:

I __ studying English now.

My brother __ working in Hong Kong.

I have no time to doing homework.

If no fish coming...

My mother helps me washing dishes.

They stay home to talking and eating.

Now I __ making money.

5.2.1.2. Article Errors - Interlingual

The most common article errors due to language transfer are omission errors. The following are typical examples:

They go to __ park for __ walk.

I was __ student of __ high school.

This is not __ same as that.

I was __ farmer.

I work seven days one week.

She gave him __ drink.

He is reading __ newspaper.

She looks after __ house.

Errors like the above seem to point to a plausible hypothesis being used by the learners, namely, that English nouns, like their Chinese counterparts, do not require articles.

Article Errors - Intralingual

Based on the limited amount of English exposure, there seems to be another hypothesis operating at the same time, namely, that all English nouns require the definite article. There is clearly a confusion arising within the article system. Numerous errors seem to be the result of this false hypothesis and this confusion. The following are some examples:

I eat the dinner at the six o'clock.

All the parties are held in the weekend.

I was in the high school in the 1976.

They did not teach the English.

They don't have the meat to eat.

I lived in the small town.

Some of them are in the France.

Others are in the Canada.

5.2.1.3. Preposition Errors - Interlingual

Errors due to omission reflecting the non-use of the preposition as in Chinese:

I go __ bed at ten o'clock.

My work begins __ eight o'clock.

I have been married __ two years.

I work __ five days.

I come home __ four o'clock.

She helps me take care __ the baby.

He did not apply __ his parents.

They listen __ the radio.

Preposition Error - Intralingual

Some examples of errors due to wrong substitution are:

I begin work in eight o'clock.

He works at 8.30 to 5 o'clock.

The bus stops in Hastings and Pender.

The woman stopped in a store.

She made a cup of tea to her husband.

Mr. Wong comes home on five o'clock.

The lady left her handbag at a bench.

5.2.1.4. Word Order Errors - Interlingual

These errors are traceable to word order patterns used

in Chinese. The following are some examples:

I everyday at seven o'clock get up.

Vancouver in summer is not hot.

I with my mother came to Vancouver.

My work in the afternoon at five o'clock stops.

I very early wake up.

The manager everyday phones.

From the examples of errors in the four syntactic areas given above, it seems evident that at the elementary level errors due to language transfer are more dominant than errors due to confusion arising within English. The latter errors, nevertheless, are present, especially in the use of the article and the preposition. The use of language transfer as a strategy of learning seems evident. The reliance of the learners on their source language at this level has caused a large proportion of interlingual errors in all the four syntactic areas. The recurring patterns of these interlingual errors in the four syntactic areas in the subjects' linguistic productions indicate a systematicity in their interlanguage - a systematicity that approximates that of the source language.

5.2.2. Errors at the Intermediate Level

5.2.2.1. Verb Errors - Interlingual

Errors due to the use of the stem form (the non-finite form) regardless of person, number, tense and aspect:

He do not know.

He have to do something.

Uncle George have a chat with her.

The lady wait for him.

The second traveller pretend to be dead.

He say they go.

He tell the other traveller.

Verb Errors - Intralingual

Errors as a result of the use of past forms even for non-finite verbs in the sentence:

Uncle George made his house looked nice.

He did not liked to stayed there.

He wondered how he could continued.

George was lived in a village.

She had something to talked to him.

He said he could not opened it.

He had saw the bear.

5.2.2.2. Article Errors - Interlingual

Errors due to omissions which reflect the non-use of the indefinite article as in Chinese:

Uncle George had __ good wife.

They had __ happy life together.

She had __ bad temper.

He opened __ door.

He waited for __ short time.

After __ few weeks, his wife died.

He got __ pension.

He sat on ___ bench.

Article Errors - Intralingual

Errors due to confusion arising within the article system. (The context requires the use of the indefinite article a in many of the following sentences which appear non-deviant out of context.)

One day they passed through the wood.

... if they get into the trouble.

The first man climbed up the tree.

One day he met the nice woman.

He brought her to the theater one day.

He found the bench to sit on.

One day they went to the dinner.

Once upon a time there was the old man.

5.2.2.3. Preposition Errors - Interlingual

Errors due to the omission of prepositions, reflecting the non-use of the preposition as in Chinese:

She came ___ his house.

They talked ___ each other.

No friends live close ___ him.

He met her ___ the same day.

After a few months ___ happy life...

They knocked ___ the door.

Preposition Errors - Intralingual

Examples of errors due to wrong substitution are:

He got a pension in his firm.

At the summer...

They came to there.

The government paid for his pension.

They were around a wood.

Uncle George met her at the same day.

5.2.2.4. Word Order Errors

There are practically no word order errors, either interlingual or intralingual, at this level of learning.

Of the three levels, errors made at this level are most mixed and confusing. The same individual learner is found to alternate the right form and the wrong form of the same structure in the same retold story. For instance, the following sets of forms were used by the same learner in the same linguistic production.

(a) He didn't have...

He didn't has...

He has to...

He have to...

(b) She would came...

She would come...

She would liked...

She would like...

(c) He was sad...

He were happy...

They was happy...

They were happy...

They happy...

It seems evident that both the language transfer and the overgeneralization strategies are operative at this learning stage. The influence from the source language and that from the target language to which they are exposed seem to be competing for control resulting in more indeterminate or ambiguous errors as well as the lack of systematicity in the interlanguage of the learners at this level of learning.

5.2.3. Errors at the Advanced Level

5.2.3.1. Verb Errors - Interlingual

Errors due to the use of the stem form and the omission of the copula are still present, though with less frequency.

Physical exercise promote good health.

If your friend pick it up and lose it,...

He explain why he has to do it.

It very convenient for use.

We ready at about eight.

We so very tired.

Check like money.

Verb Errors - Intralingual

Intralingual verb errors at this level are more varied, including confusion between active and passive verbs, the use of wrong verb forms and failure to use the right tense sequence such as in the following examples.

Machines are replaced human labor.

Police will be arrived soon.

An accident caused by carelessness.

After examined a few, he selected one.

In a developing country like the United States...

How could a person has good health.

They found that his signature has been used.

She knew that they have made a mistake.

5.2.3.2. Article Errors - Interlingual

Omission of articles, which reflects patterns characteristic of Chinese, is still present at this level.

The following are some examples:

 car accident is caused by...

 check has replaced money.

The story is about the use of check.

They talked about weather.

In a developed country like United States...

We can cash it from bank.

He went to jewellery store.

Article Errors - Intralingual

Errors due to redundancy and wrong substitution do not diminish at this level. They persist and for some subjects they even increase in frequency. The heavy semantic load carried by the two articles a and the with resultant overlapping of form and semantic function proves problematic for subjects even at this level. (The contexts do not require

the in some of the sentences below.)

The physical exercise is good for health.

Do you accept payment by the checks.

If the other people pick up the check...

The people can cash it in the bank.

If you give the check to your friend...

The police asked him to sign his name on the piece of paper to compare his signature.

One day she went to the store.

They realized they had made the mistake.

5.2.3.3. Preposition Errors - Interlingual

Omission errors that can be traced to Chinese remain evident though less frequent.

Manual labor is replaced __ machine.

It depends __ how much exercise we have.

It is __ no use for them.

They went __ about eight o'clock.

We arrived __ that place late.

They laughed __ me for doing that.

Preposition Errors - Intralingual

Errors due to confusion still persist. The apparent randomness in the use of English prepositions still causes many errors. Some examples are as follows:

Everyone has a hobby at his leisure hours.

It has value for itself.

He preferred travelling by car than travelling by plane.

His name was used as a robbery.

He said he would buy it in another store.

The weather is different than that of my country.

We got up in the Sunday morning.

We left to the island.

5.2.3.4. Word Order Errors

There are no errors in word order either of the inter- or intralingual nature at this level.

On the whole, the picture with respect to predominance of inter- or intralingual errors is clear. Errors caused by language transfer, though still influential, have considerably diminished, while errors caused by complexities within English have increased. Difficulties due to complexities inherent within English are now the major cause of errors. This indicates that as the learners attain more proficiency in the target language, their reliance on the source language decreases while their reliance on the target language increases. Overgeneralization and rule simplification strategies are more prevalent than the language transfer strategy at this level. The systematicity of the interlanguage lies in the recurrent patterns in the learners' inter- and intralingual errors and in their approximating the target language system. Individual learners,

however, show variability with respect to the dominance of inter- or intralingual errors in the areas of verbs, articles and prepositions.

5.3. Summary

The results of the error analysis of these subjects show that interlingual and intralingual errors are two major categories of second language errors. Interlingual errors decrease while intralingual errors increase with the three levels of learning. It is inferred from these results that learners at the elementary level rely most on a language transfer strategy. The systematicity of the interlanguage at this level approximates that of the source language. Learners at the advanced level rely more on an overgeneralization strategy. The systematicity of the interlanguage at this level comes closer to that of the target language. Learners at the intermediate level rely on both strategies resulting in numerous ambiguous errors and randomness in the interlanguage at this level. Most errors are found in the use of the verb. Article errors and preposition errors, which are similar in frequency, rank next. There are few word order errors beginning with the intermediate level. This indicates that the hierarchy of difficulty for Chinese ESL students is in the descending order of verb, article, preposition, and word order.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1. Summary

This study is an error analysis of the linguistic productions of nine adult Chinese ESL students from three different levels of learning. It seeks to test the following hypotheses: (1) that the learning of a completely unrelated language like English presents difficulties traceable to interference from Chinese; (2) that this interference from Chinese varies with levels of learning; (3) that in the four syntactic areas contrasted, English verbs, articles, prepositions and word order will present a descending order of difficulty; and (4) that intralingual interference is more evident in later stages of learning.

The nine subjects were selected on the basis of their responses to a questionnaire. They were assumed to be approximately homogeneous with respect to the major variables affecting second language learning at the adult level. They were asked to retell in writing two stories first presented to them orally. The subjects at the elementary level were asked to retell the stories orally as they could not yet write in English.

It is assumed that errors reflect learning difficulties and that frequencies reflect their hierarchy. The results of

the analysis show that errors traceable to interference from Chinese are present at all levels but they vary decreasingly with the levels of learning, thus supporting hypotheses (1) and (2); that, except for the article and the preposition which have similar frequencies, errors made in the four syntactic areas do show the hypothesized hierarchy of difficulty, thus supporting hypothesis (3); that errors attributed to complexities within English show greater prevalence at the advanced level, thus supporting hypothesis (4).

Based on a qualitative and quantitative analysis of the errors, two main learning strategies are inferred, namely, source language transfer and overgeneralization or rule simplification. As far as these two main categories of errors are concerned, errors vary quantitatively but not qualitatively, hence the systematicity in the interlanguage of these learners with respect to its predictability in terms of inter- and intralingual interference. However, there is variability inherent in interlanguage owing to its dynamic nature as well as to idiosyncratic differences in individual learners.

Contrastive analysis a priori seems to have predictive and explanatory power in forecasting learners' problem areas based on distinctive differences revealed in the contrastive study made, and explanatory power in accounting for the cause of a fair proportion of the errors discovered. This

finding militates against some current denial of this role of contrastive analysis. However, contrastive analysis can only account for errors due to language transfer. Errors of other categories are beyond its predictive and explanatory power.

Error analysis a posteriori does discover these errors though it cannot predict or explain them. Both contrastive analysis and error analysis are useful research tools and techniques that have to be jointly employed for research in second language learning, and their findings jointly considered for a better understanding of the nature of second language strategies and for a more efficient treatment of learning difficulties.

The results and findings of this study should provide useful information to researchers investigating the phenomena of second language learning in general and those investigating second language learning by Chinese ESL learners in particular. Pragmatically, these findings with their pedagogical implications are of practical value to teachers of Chinese-speaking ESL students.

This study is confined to two major categories of error. Errors due to other causes have been categorized as indeterminate or ambiguous and were not dealt with. Among these errors there could plausibly be some inter- and intralingual errors that could have been added to the error and frequency counts taken. This points to the recalcitrant

nature of error, hence one main limitation of error analysis studies. Other causes of error merit study, too, if a more complete characterization of second language learning is to be achieved. Moreover, analysis of errors alone seems biased towards studying the performance of second language learners which certainly includes non-errors. Non-error analysis or success analysis in second language learning is of importance and will be complementary to error study in the performance analysis of second language learners. Current research in error analysis needs to extend its scope to cover discourse analysis.

6.2. Recommendations for Further Research

The findings of a study are said to be reliable if other studies confirm them. Reliability of a study can be established through replication by other researchers, either using the same methodology with different populations or using different methodologies with the same population. One suggestion for immediate further research is therefore a replication of the present study, preferably by a research team and on a larger scale amenable to inferential statistical analysis.

In general, more contrastive error analysis studies involving more languages, typologically related as well as unrelated, and in diverse learning contexts and situations, are desirable. So are more cross-study comparisons and more replications of similar studies. More and more such cumulative

data-based evidence is a sine qua non for determining with confidence the nature of learning strategies and interlanguage, and for establishing the foundations of a viable theory of second language learning and teaching - a concern and preoccupation of current research in applied linguistics.

"Second language teaching should have, as far as possible, a scientific basis of empirical research" (Hammerly, 1971, p. 409). "Applications of psychology or linguistics to language teaching ... must be demonstrated and cannot be presumed" (Chomsky, 1973, p. 34). I submit that these two statements may well serve as appropriate mottoes for applied linguistics if it is to establish itself as an autonomous discipline having a wisdom of its own.

APPENDIX A

Language Background Questionnaire

Language Background Questionnaire

1. Name: _____
2. Address: _____ Phone No.: _____
3. Sex: _____
4. Ethnic Group: _____
5. Date of Birth: Month _____ Year _____
6. Place of Birth: _____
7. Country of Origin: _____
8. Occupation (if any): _____
9. Language and/or dialect you spoke before coming to Canada:
at home _____
at work _____
with friends _____
10. Education received before you came to Canada:
No. of years with Chinese
as a medium of instruction _____
No. of years with English
as a medium of instruction _____

11. Courses taken in English as a subject before you came to Canada:

Level	Primary				Secondary				University			
No. of years												
No. of months per year												
No. of hours per week												
Skills emphasized (Check one or more items 1= least emphasis and 4= most emphasis)	1	2	3	4	1	2	3	4	1	2	3	4
Listening												
Speaking												
Reading												
Writing												
Grammar												
Translation												
No. of teachers who were native speakers of English.												
The time in class he/ she spoke in English	most	half	part		most	half	part		most	half	part	
The time in class you spoke in English												

12. The date on which you came to Canada: Month _____ Year _____

13. If you have not had any formal instruction in English,
when did you begin learning English on your own?

Month _____ Year _____

14. Language and/or dialect you speak at present:

at home _____

at work _____

with friends _____

15. How have you been learning English? Check one or more.

	Hours per week	Months per year	No. of years
() By attending classes at the Chinese Cultural Center			
() By attending classes at the Community College			
() By watching T.V.			
() By listening to the radio			
() By reading the newspaper			
() By other means			

16. The languages/dialects of your neighbours:

Most of them speak _____

Some of them speak _____

Others speak _____

Do you mix a lot with your neighbours? _____

If yes, what languages/dialects do you use with them?

Most of the time _____

Sometimes _____

APPENDIX B

Samples of Linguistic Productions
from the Subjects//

A Sample of the Linguistic Productions from the Elementary Group

I come to Canada in the 1978. I am in Vancouver about two years. I come from big family. I have two brother and six sister. Some in the France, some people in the United States and some in the Canada.

I everyday morning at seven o'clock get up. I cook the rice and feed my daughter. I boil the rice and the soup, give my parents and ask them eat. After I pick up my baby and go give my mother. My mother help me take care the baby. I go to school study English in nine o'clock. My husband call me come to school learn English. He no give me go to work. Too much trouble. No need stay at home. If not come to school learn is stupid. My English have a little progress. After school finish, I go take my baby go my husband mother.

He is my friend. He no apply his parents came here. May be have Communist trouble if they take the Thailand. It is safety here. No war in Canada.

Last weekend, I stay home. I live in house, see home and take care the baby. No got out. I tired. Before every day I go out to shopping and see my mother.

Mr. Wong come back at the six o'clock. He look at newspaper. Mrs. Wong take the tea give her husband drink. They go to park for walk. They eat the dinner at the eight o'clock. They like listen radio.

One day a dog stealing one bone in the meat shop. The man want to catch him. He run away. He cross the bridge. He see the other dog and the bone in the water. He want to take the bone. He see the river have shadow. There have another dog. He want get the bone in the river dog. After he open the mouth, the bone fell the river.

A Sample of the Linguistic Productions from the Intermediate Group

Uncle George was lived in a village. He was over sixty and retired. Every month he got the pension from his company which was the government paid for him. He had his own house and he didn't have worry about the money. He had very nice wife and good life. In the spring time, he worked in his garden, produce some vegetables and made his house looked nice. In the winter, he raked the snow when the weather were snowing.

One day, his wife was sick. After few week she dead. Uncle George was very sad. He do not know how he continued his life. He didn't has any close relative and any good friend. He have to did something, so he decide to take a long walk. He walked everyday.

One day, he walked to a park and felt a little tired. He sat on a bench. A young lady was just sitting beside him. They start to talking about weather. They have a very nice conversation. The young lady stood up and said that she had to go. He asked if he would meet her again and the young lady said that maybe.

Since then he walked through the park and sat on the same bench everyday. He met the young lady again. They had a very nice conversation. Later he asked she would liked to have a dinner with him. She answered yes. They both went to take the dinner. After dinner, they went to movie. In the later four month, they went to theatre and some other place. They was

very happy. One day, Uncle George asked her if she would like to married him. The young lady answered yes. They married.

At beginning four or five month, they very happy. After than there were some between he and she. His wife had very bad temper. One day they finished the dinner. He help his wife wash the dishes. While the wind was through the kitchen door and his wife asked him to close the door. Uncle George said that he was busy and wait for short time he would closed the door. His wife was very angry. She throw the plants at him. After that Uncle George went to bar to drink the whisky every day. He did not like stayed at house. Every day he was drunk.

One night, he came back. But he couldn't opened door. He knocked at door. His wife came down and opened door for him. She said to Uncle George that she had something talked to him. Uncle George was drunk but he also went to upstairs. His wife pulled him while he came. He was fall down to the downstair. Also he made so much noisy.

A Sample of the Linguistic Productions from the Advanced Group

The story is about using the check. You can use it everywhere. For example, if you want to buy things you can write a check to the company or to the store. Check just like a money. The people can cash it in the bank. And it very convenient. If you give the check to your friend, but your friend lose it, then the other people get it. It is no use for them because they cannot get the money from bank.

At one time my friend went to jewellery store to buy a necklace. She gave the salesman a check. The salesman went to talk to the manager and they did not wanted to sell the necklace to my friend. So my friend got mad and wanted went out of the store and went to the other jewellery store to buy it. At the moment the manager told her she better waited a few minutes because the policeman would come soon.

When the policeman came, they asked her wrote a few words on the paper. "I have a gun in my pocket, bring all the money in the bag." Fortunately, my friend hand-writing was quite different to the note which the policeman had read. It written by the robber who has signed the name liked my friend. After that the policeman knew that they mixed up. So my friend could leave safely.

One day, Mrs. Wong came home from work. She opened the door. She saw the cigarette ash on the stairs. She surprised because she and her husband don't smoke. She went to open the living room. She saw a stranger fell asleep in chair. She went out from home immediately and called a taxi to the police station. She told the policeman all about what she saw. Two policemen and she went home by police car. When they arrived, it is too late. The stranger ran away. Mrs. Wong checked the things what has stolen. She went to the dressing table. She found her imitation diamond was stolen, but not her valuable things. She feel relieved because the stranger just stole her imitation diamond.

She guessed the stranger came into the house from the open window. She learned a lesson. When she go out she has to close the window too.

APPENDIX C

Tables

Table 4
Number of Inter- and Intralingual Errors per Total Usage
at Elementary Level

Category	Subjects	Interlingual Errors	Intralingual Errors	Total Errors	Total Usage
Verb	E1	18	1	19	52
	E2	13	4	17	59
	E3	16	3	19	42
Article	E1	7	5	12	36
	E2	5	7	12	48
	E3	2	9	11	23
Preposition	E1	4	0	4	19
	E2	7	2	9	26
	E3	6	0	6	19
Word order	E1	9	0	9	38
	E2	10	0	10	45
	E3	2	0	2	35

Table 5

Number of Inter- and Intralingual Errors per Total Usage
at Intermediate Level

Category	Subjects	Interlingual Errors	Intralingual Errors	Total Errors	Total Usage
Verb	I1	13	14	27	80
	I2	23	15	38	80
	I3	14	11	25	71
Article	I1	12	2	14	49
	I2	14	12	26	67
	I3	10	4	14	52
Preposition	I1	3	0	3	27
	I2	2	2	4	24
	I3	6	1	7	27
Word Order	I1	0	0	0	57
	I2	0	0	0	59
	I3	0	0	0	51

Table 6
Number of Inter- and Intralingual Errors per Total Usage
at Advanced Level

Category	Subjects	Interlingual Errors	Intralingual Errors	Total Errors	Total Usage
Verb	A1	11	7	18	86
	A2	14	7	21	60
	A3	7	8	15	51
Article	A1	10	10	20	59
	A2	5	7	12	37
	A3	6	7	13	42
Preposition	A1	3	6	9	38
	A2	1	2	3	14
	A3	3	8	11	34
Word Order	0	0	0	0	54
	0	0	0	0	38
	0	0	0	0	40

Table 7

Interlingual Errors Across Four Syntactic Areas
at Elementary Level

Category	Subjects	No. of errors	Total usage	% errors/total usage	% Mean for Category
Verb	E1	18	52	34.6	
	E2	13	59	22.0	31.6
	E3	16	42	38.1	
Article	E1	7	36	19.4	
	E2	5	48	10.4	12.8
	E3	2	23	8.7	
Preposition	E1	4	19	21.1	
	E2	7	26	26.9	26.5
	E3	6	19	31.6	
Word Order	E1	9	38	23.7	
	E2	10	45	22.2	17.2
	E3	2	35	5.7	

Table 8

Interlingual Errors Across Four Syntactic Areas
at Intermediate Level

Category	Subjects	No. of errors	Total usage	% errors/total usage	% Mean for Category
Verb	I1	13	80	16.3	
	I2	23	80	28.8	21.6
	I3	14	71	19.7	
Article	I1	12	49	24.5	
	I2	14	67	20.9	21.5
	I3	10	52	19.2	
Preposition	I1	3	27	11.1	
	I2	2	24	8.3	13.9
	I3	6	27	22.2	
Word Order	I1	0	57	0.0	
	I2	0	59	0.0	0.0
	I3	0	51	0.0	

Table 9
Interlingual Errors Across Four Syntactic Areas
at Advanced Level

Category	Subjects	No. of errors	Total usage	% errors/total usage	% Mean for Category
Verb	A1	11	86	12.8	
	A2	14	60	23.3	16.6
	A3	7	51	13.7	
Article	A1	10	59	16.9	
	A2	5	37	13.5	14.9
	A3	6	42	14.3	
Preposition	A1	3	38	7.9	
	A2	1	14	7.1	7.9
	A3	3	34	8.8	
Word Order	A1	0	54	0.0	
	A2	0	38	0.0	0.0
	A3	0	40	0.0	

REFERENCE NOTES

1. Li and Thompson (1978, p. 226), among others, find that certain grammatical aspects and phenomena peculiar to Chinese cannot be adequately tested and dealt with in current grammatical models which carry the assumption that the sentence is a self-sustained unit for grammatical description. Further, they contend that the notion of subject is not a well-defined one in Chinese grammar and the order in which basic constituents occur is governed to a large extent by pragmatic and semantic considerations rather than by grammaticalness.
2. The Contrastive Structure Series is the world's first large scale contrastive investigation organized and carried out under the auspices of the Center for Applied Linguistics in Washington, D.C. Among this series are:

Moulton, W. G. The sounds of English and German. Chicago: University of Chicago Press, 1962.

Kufner, H. L. The grammatical structures of English and German. Chicago: University of Chicago Press, 1963.

Stockwell, R. P. & Bowen, J. D. The sounds of English and Spanish. Chicago: University of Chicago Press, 1965.

Stockwell, R. P., Bowen, J. D., & Martin, J. W. The grammatical structures of English and Spanish. Chicago: University of Chicago Press, 1965.

Agard, F. B. & Di Pietro, R. J. The sounds of English and Italian. Chicago: University of Chicago Press, 1965.

Agard, F. B. & Di Pietro, R. J. The grammatical structures of English and Italian. Chicago: University of Chicago Press, 1965.

Gage, W. W. The sounds of English and Russian. Unpublished.

Gage, W. W. The grammatical structures of English and Russian. Unpublished.
3. Among these bibliographies are:

Gage, W. W. Contrastive studies in linguistics: A Bibliographical Checklist. Washington, D.C.: Center for Applied Linguistics, 1961.

Hammer, J. H. & Rice, F. A. (Eds.). A bibliography of contrastive linguistics. Washington, D.C.: Center for Applied Linguistics, 1965.

Nostrand, H. L. & Foster, D. W. (Eds.). Research on language teaching: An annotated international bibliography 1945-1964. Seattle: University of Washington Press, 1965, 244-258.

4. Proceedings of this meeting are published in:
 Alatis, J. E. (Ed.). Report of the 19th annual round table meeting on linguistics and language study: Contrastive linguistics and its pedagogical implications, Georgetown University Monograph Series No. 21. Washington: Georgetown University Press, 1968.
5. A selection of the papers presented in this conference are published in:
 Nickel, G. (Ed.). Papers in contrastive linguistics. Cambridge: Cambridge University Press, 1971.
6. A selection of the papers presented in this conference are in:
 Whitman, R. & Jackson, K. (Ed.). Proceedings of the pacific conference on contrastive linguistics and language universals. University of Hawaii Working papers in linguistics, 3 (4), 1971.
7. Papers presented at this conference are published in:
 Nickel, G. (Ed.). Proceedings of the fourth international congress of applied linguistics Copenhagen 1972, Vol. I. Stuttgart: Hochschul Verlag, 1976.
8. While Karlgren and Wang Li have been associated with traditional Chinese grammar, Y. R. Chao and S-Y. Wang have been regarded as having played a major role in laying the foundations of modern Chinese linguistics, the former in structural grammar and the latter in transformational generative grammar.
9. While by and large this typological statement is true, it is evident that neither English nor Chinese is a complete representative of inflectional and isolating languages respectively. Modern English has lost much of its inflectional system and modern Chinese has words which are the results of combining two or more morphemes.
10. Li and Thompson (1978, p. 226) are of the opinion that Chinese is not a straightforward example of subject-verb-object language. According to them, the notion of 'subject' is not a well-defined one in Chinese grammar and the order in which sentence constituents occur is governed by pragmatic and semantic considerations rather than by grammatical ones.
11. Li and Thompson (1974b) have described Chinese as a discourse-oriented language in which the topic rather than the subject is prominent. Chao (1968, p. 69) also observes

that "the grammatical meaning of subject and predicate in a Chinese sentence is topic and comment rather than actor and action." Fillmore (1968, p. 57) calls this process of fronting a topic of discourse and following it with a surface subject "a secondary topicalization". In English, the corresponding form would be sub-standard or dialectal for most speakers.

12. Normal word order

	s	v	o
	wo	chi	ji
Word order after object preposing	o	s	v
	ji	wo	chi
Word order after subject deletion	o	∅	v
	ji		chi

13. Classifiers are also known as measures or numeral adjuncts. They are bound morphemes which form determinative-measure compounds. In Chinese, a numeral cannot directly modify a noun but must be followed by a classifier according to the shape, kind, or some other property associated with the noun. Thus, every noun has its proper classifier. The following are some examples:

yi - ge	ren	a man
one class	man	
yi - zhi	niao	a bird
one class	bird	
yi - ben	shu	a book
one class	book	
yi - jian	wu	a house
one class	house	

14. The English Language Training department of Vancouver Community College offers courses and programs which cater to students ranging from those with zero competence in English to those requiring a pre-college level of proficiency. The elementary, intermediate and advanced programs consist of core courses, each of one-year duration with fifteen hours of tuition per week. The elementary course is also known as the beginners' level. For admission into the intermediate and the advanced courses, students are assessed by the testing department before being assigned to their respective groups. Besides these three courses, there are English 059, English 098 and English 099, among other special courses, which are designed for post-advanced students who wish to attend college, university or British

Columbia Institute of Technology.

15. Under the education system in Hong Kong, English has been taught as a second language for about an hour per school day from primary one to junior middle three which are equivalent to grade one to grade nine respectively under the school system here in British Columbia.

BIBLIOGRAPHY

- Aguas, E. F. English composition errors of Tagalog speakers and implications for analytical theory. Unpublished Ph. D. thesis. Los Angeles: University of California, 1964.
- Ausubel, D. P. The psychology of meaningful verbal learning. New York: Grune and Stratton, 1963.
- Banathy, B. H. & Madarasz, P. H. Contrastive analysis and error analysis. Journal of English as a Second Language, 1969, 4 (1 & 2), 77-92.
- Banathy, B. H., Trager, E., & Waddle, C. The use of contrastive data in foreign language course development. In A. Valdman (Ed.), Trends in language teaching. New York: McGraw-Hill, 1966, 35-56.
- Baron, S. P. Some case for case in Mandarin syntax. In C. J. Fillmore (Ed.), Working papers in linguistics No. 10, August 1971. Columbus: The Ohio State University, Department of Linguistics.
- Bartlett, B. E. Pedagogic grammar and applied linguistics. A paper presented at the thirtieth annual conference of the Pacific Northwest Council on Foreign Languages, April 19-21, 1979.
- Bennett, W. A. The nature of research into second language learning. Audio Visual Language Journal, 1975, 13 (1), 23-26.
- Burt, M. K. & Kiparsky, C. The gooficon: A repair manual for English. Rowley, Mass.: Newbury House, 1972.
- Burt, M. K. & Kiparsky, C. Global and local mistakes. In J. Schumann & N. Stenson (Eds.), New frontiers in second language learning. Rowley, Mass.: Newbury House, 1975.
- Buteau, M. Students' errors and the learning of French as a second language: A pilot study. International Review of Applied Linguistics, 1970, 8 (2), 133-145.
- Candlin, C. N. Preface. In J. Richards (Ed.), Error analysis: perspectives on second language acquisition. London: Longman Group Ltd., 1974, ix.

- Carroll, J. B. Contrastive analysis and interference theory. In J. E. Alatis (Ed.), Report of the Nineteenth Round Table Meeting, Monograph 21. Washington, D.C. 1968, 113-121.
- Catford, J. C. Contrastive analysis and language teaching. In J. Alatis (Ed.), Report of the Nineteenth Round Table Meeting, Monograph 21. Washington, D.C. 1968, 159-171.
- Chao, Y. R. Mandarin primer. Cambridge: Harvard University Press, 1948.
- Chao, Y. R. A grammar of spoken Chinese. Berkeley: University of California Press, 1968.
- Chomsky, N. Review of Skinner's verbal behavior. Language, 1959, 35, 26-58.
- Chomsky, N. Aspects of the theory of syntax. Cambridge: MIT Press, 1965.
- Chomsky, N. Linguistic theory. In R. G. Mead, Jr. (Ed.), Language teaching: Broader contexts. New York: Modern Language Association Materials Center, 1966, 43-58.
- Chomsky, N. Language and mind. New York: Harcourt, Brace and World, 1968.
- Chomsky, N. Deep structure, surface structure, and semantic interpretation. In D. Steinberg & L. Jakobovits (Eds.), Semantics: An interdisciplinary reader in philosophy, linguistics and psychology. Cambridge: Cambridge University Press, 1974, 183-216.
- Corder, S. P. The significance of learners' errors. International Review of Applied Linguistics, 1967, 5 (4), 161-169.
- Corder, S. P. Describing the language learner's language. In Center for Information on Language Teaching Reports and Papers, 1971a, 6, 57-64.
- Corder, S. P. Idiosyncratic dialects and error analysis. International Review of Applied Linguistics, 1971b, 9 (2), 147-160.
- Corder, S. P. Language-learner language. In J. Richards (Ed.), Second language learning: Issues and approaches. Rowley, Mass.: Newbury House, 1978, 71-93.

- d'Anglejan, A. The acquisition of complex English structures by adult learners. Language Learning, 1974, 25 (2), 281-307.
- Dingwall, W. O. Transformational generative grammar and contrastive analysis. Language Learning, 1964, 14 (3 & 4), 147-160.
- Di Pietro, R. J. Language structures in contrast. Rowley, Mass.: Newbury House Publishers, 1971.
- Dommergues, J. Y. & Lane, H. On two independent sources of error in learning the syntax of a second language. Language Learning, 1976, 26 (1), 111-123.
- Dulay, H. & Burt, M. You can't learn without goofing: an analysis of children's second language errors. In J. Richards (Ed.), Error analysis: perspective on second language acquisition. London: Longman Group Ltd., 1974, 95-123.
- Duskova, L. On sources of errors in foreign language learning. International Review of Applied Linguistics, 1969, 7 (1), 11-36.
- Ferguson, C. A. Language structure and language use. Stanford: Stanford University Press, 1971.
- Fillmore, C. J. The case for case. In E. Bach & R. Harms (Eds.), Universals in linguistic theory. New York: Holt, Rinehart and Winston, 1968.
- Fries, C. C. As we see it. Language Learning, 1948, 1 (1), 12-16.
- Ghadessy, M. An error analysis of the writings of Iranian freshman students learning English - A pilot study. International Review of Applied Linguistics, 1976, 14 (1), 74-81.
- Gradman, H. L. The limitations of contrastive analysis prediction. Proceedings of the Pacific Conference on Contrastive Linguistics and Language Universals. University of Hawaii Working Papers in Linguistics, 1971a, 3 (4), 11-16.
- Gradman, H. L. What methodologists ignore in contrastive teaching. In the Pacific Conference on Contrastive Linguistics and Language Universals Papers, April 1971b, 3 (4). Honolulu: Department of Linguistics, University of Hawaii.

- Halliday, M. A. K., McIntosh, A. & Stevens, P. The linguistic science and language teaching. London: Longmans Green & Co., Ltd., 1965.
- Hammerly, H. Recent methods and trends in second language teaching. The Modern Language Journal, December 1971, LV (8), 499-505.
- Hammerly, H. The teaching of ser/estar by a cognitive audiolingual approach. Hispania, May 1977, 60 (2), 305-308.
- Hanzeli, V. Learner's language: Implications of recent research for foreign language instruction. Modern Language Journal, 1975, 59 (8), 426-432.
- Haugan, E. The Norwegian language in America. Philadelphia: University Penn. Press, 1953.
- Herdan, G. The structuralistic approach to Chinese grammar and vocabulary. The Hague: Mouton, 1964.
- Ho, W. K. An investigation of errors in English composition of some pre-university students in Singapore. Regional English Language Centre Journal, 1973, 4 (1), 48-65.
- Jackson, K. The verification and comparison of contrastive analysis. In the Pacific Conference on Contrastive Linguistics and Language Universals Papers: Working papers in linguistics. University of Hawaii, 1970, 3, 201-210.
- Jain, M. P. Error analysis: Source, cause and significance. In J. Richards (Ed.), Error analysis: Perspectives on second language acquisition. London: Longman Ltd., 1974, 189-215.
- Jakobovits, L. A. Second language learning and transfer theory: A theoretical assessment. Language Learning, 1969, 19 (1 & 2), 55-86.
- Jakobovits, L. A. Foreign language learning: a psycholinguistic analysis of the issues. Rowley, Mass.: Newbury House Publishers, 1971.
- James, C. Deeper contrastive study. International Review of Applied Linguistics, 1969, 7 (2), 83-95.
- James, C. Foreign language learning by dialect expansion. A paper read to PAKS Symposium, Stuttgart, 1971.

- James, C. The psychological basis of contrastive analysis. In G. Nickel (Ed.), Proceedings of the Fourth International Congress of Applied Linguistics Vol. II. Stuttgart: Hochschul Verlag, 1976, 165-174.
- Karlgren, B. The Chinese language: An essay of its nature and history. New York: The Ronald Press Co., 1949.
- Kim, T. W. & Kim, T. H. Teaching English: Theory and practice. Seoul: Cultural Publisher, 1978.
- Kim, T. W. & Wawrzyszko, A. Bibliographical guide to the study of Chinese language and linguistics. Edmonton: Linguistic Research Inc., 1980.
- Kleinmann, H. H. Avoidance behavior in adult second language acquisition. Language Learning, 1977, 27 (1), 93-107.
- Krashen, S. D. The critical period for language acquisition and its possible bases. In D. Aaronson & R. W. Rieber (Eds.), Developmental psycholinguistics and communication disorders. New York: New York Academic of Sciences, 1975.
- Krashen, S. D. Formal and informal linguistic environments in language acquisition and language learning. Teachers of English to Speakers of Other Languages Quarterly, 1976a, 10 (2), 157-168.
- Krashen, S. D. Second language acquisition. In M. Burt, H. Dulay & M. Finochario (Eds.), Personal viewpoints of English as a second language. New York: Regents, 1976b.
- Kratochvil, P. The Chinese language today: Features of an emerging standard. London: Hutchinson University Library, 1968.
- Lado, R. Linguistics across cultures. Ann Arbor: University of Michigan Press, 1957.
- Lado, R. Language teaching: A scientific approach. New York: McGraw-Hill, 1964.
- Lakoff, G. Instrumental adverbs and the concept of deep structure. Foundations of Language, 1968, 4, 4-29.
- Lee, W. R. Thoughts on contrastive linguistics in the context of language teaching. In J. Alatis (Ed.), Contrastive linguistics and its pedagogical implications. Washington: Georgetown University Press, 1968, 185-194.

- Lees, R. B. Grammatical terminology in teaching English. Language Learning, 1954, 5 (1 & 2), 117-121.
- Lenneberg, E. H. Biological foundations of language. New York: John Wiley and Sons, Inc., 1967.
- Li, C. & Thompson, S. A. A linguistic discussion of the co-verb in Chinese grammar. Journal of the Chinese Language Teachers' Association, October 1974a, 2 (3), 109-119.
- Li, C. & Thompson, S. A. Chinese as a topic-prominent language. A paper presented at the Seventh International Conference on Sino-Tibetan language and linguistics, October 1974b.
- Li, C. & Thompson, S. A. Co-verbs in Mandarin Chinese: Verbs or prepositions? Journal of Chinese Linguistics, 1974c, 2 (3), 257-278.
- Li, C. & Thompson, S. A. An exploration of Mandarin Chinese. In W. P. Lehmann (Ed.), Syntactic typology: Studies in the phenomenology of language. Austin: University of Texas Press, 1978, 223-266.
- Lo Coco, V. G. An analysis of Spanish and German learners' errors. Working Papers on Bilingualism, 1975, 7, 96-124.
- McCawley, J. D. The role of semantics in grammar. In E. Bach & R. Harms (Eds.), Universals in linguistic theory. New York: Holt, Rinehart and Winston, 1968.
- Merio, K. The psycholinguistic analysis and measurement of interference errors. International Review of Applied Linguistics, 1978, 16 (1), 27-44.
- Mougeon, R. & Hebrard, P. Acquisition et maitrise de l'anglais par les jeunes bilingues de welland. Toronto: Franco-Ontarian Section, Ontario Institute for Studies in Education, 1975. Mimeo.
- Moulton, W. G. The use of models in contrastive linguistics. In J. Alatis (Ed.), Nineteenth Annual Round Table Meeting, 1968, 27-38.
- Nemser, W. Approximative systems of foreign language learners. International Review of Applied Linguistics, 1971, 2 (2), 115-124.

- Newmark, L. & Reibel, D. A. Necessity and sufficiency in language learning. International Review of Applied Linguistics, 1968, 6 (2), 145-164.
- Nickel, G. The applied contrastive linguistics project of the University of Stuttgart. Linguistic Reporter, February 1970, 4-6.
- Nickel, G. (Ed.). Papers in contrastive linguistics. Cambridge: The University Press, 1971.
- Nickel, G. & Wagner, K. Contrastive linguistics and language teaching. International Review of Applied Linguistics, 1968, 6 (3), 233-255.
- Oller, J. W., Jr. Some psycholinguistic controversies. In J. W. Oller, Jr. & J. C. Richards (Eds.), Focus on the learner. Rowley, Mass.: Newbury House, Inc., 1973, 36-50.
- Oller, J. W., Jr. The psychology of language and contrastive linguistics: The research and the debate. Foreign Language Annals, 1979, 12 (4), 299-309.
- Oller, J. W., Jr. & Richards, J. C. (Eds.). Focus on the learner: Pragmatic perspectives for the language teacher. Rowley, Mass.: Newbury House Publishers, Inc., 1973.
- Osgood, C. E. Method and theory in experimental psychology. London: Oxford University Press, 1953.
- Ota, A. Comparison of English and Japanese, with special reference to tense and aspect. In the Pacific Conference on Contrastive Linguistics and Language Universals Papers, Working papers in linguistics. University of Hawaii, 1971, 3 (4), 121-157.
- Pimsleur, P. & Quinn, T. (Eds.). The psychology of second language learning. Papers from the Second International Congress of Applied Linguistics Cambridge, 8-12 September, 1969. Cambridge: The University Press, 1971.
- Politzer, R. Toward psycholinguistic models of language instruction. Teachers of English to Speakers of Other Languages Quarterly, 1968, 2 (3), 115
- Politzer, R. L. & Ramirez, A.G. An error analysis of the spoken English of Mexican-American pupils in a bilingual school and a monolingual school. Language Learning, 1973, 23 (1), 39-61.

- Rand, E. The syntax of Mandarin interrogative. Berkeley: University of California Press, 1969.
- Richards, J. C. A non-contrastive approach to error analysis. English Language Teaching, 1971a, 25 (3), 204-219.
- Richards, J. C. Error analysis and second language strategies. Language Sciences, 1971b, 17, 12-22.
- Richards, J. C. (Ed.). Error analysis: Perspectives on second language acquisition. London: Longman Group Ltd., 1974.
- Richards, J. C. Simplification: A strategy in the adult acquisition of a foreign language. Language Learning, 1975, 24 & 25, 115-126.
- Richards, J. C. (Ed.). Understanding second and foreign language learning: Issues and approaches. Rowley, Mass.: Newbury House Publishers, 1978.
- Ritchie, W. C. (Ed.). Second language acquisition research: Issues and implications. New York: Academic Press Inc., 1978.
- Rivers, W. M. The psychologist and the foreign language teacher. Chicago: The University of Chicago Press, 1964.
- Ross, J. The habit of perception in foreign language learning: insights into error from contrastive analysis. Teachers of English to Speakers of Other Languages Quarterly, 1976, 10 (2), 169-175.
- Ruiz, M. B. Weighting and sequencing English tense - aspect modifications for Hiligaynon speakers. Unpublished Ph. D. thesis. Los Angeles, California: University of California, 1963.
- Sampson, G. P. & Richards, J. C. Learner language systems. Language Sciences, August 1973, 24-28, 18-25.
- Sanders, C. Recent developments in contrastive analysis and their relevance. International Review of Applied Linguistics, 1976, 14 (1), 67-73.
- Schachter, J. An error in error analysis. Language Learning, 1974, 24 (2), 205-214.
- Schumann, J. H. Second language acquisition research. Language Learning, January 1976, Special Issue (4), 15-28.

- Schumann, J. H. & Stenson, N. (Eds.). New Frontiers in second language learning. Rowley, Mass.: Newbury House Publishers, Inc., 1974.
- Selinker, L. Language transfer. General Linguistics, 1969, 9, 67-92.
- Selinker, L. The psychologically relevant data of second language learning. In P. Pimsleur & T. A. Quinn (Eds.), The psychology of second language learning. Papers from the Second International Congress of Applied Linguistics. Cambridge: The University Press, 1971, 35-44.
- Selinker, L. Interlanguage. International Review of Applied Linguistics, 1972, 10 (3), 209-231.
- Stern, H. H. Directions in language teaching theory and research. Third Congress Copenhagen Proceedings Vol. III, 1972, 61-68.
- Stockwell, R. P. Contrastive analysis and lapsed time. In J. Alatis (Ed.), Nineteenth Annual Round Table Meeting, 1968, 11-36.
- Stevens, P. Papers in language and language teaching. London: Oxford University Press, 1965.
- Stevens, P. On defining applied linguistics. In G. Nickel (Ed.), Proceedings of the Fourth International Congress of Applied Linguistics, Vol. I. Stuttgart: Hochschul Verlag, 1976, 81-84.
- Tang, T. C., Tung, C. H., & Wu, Y. T. (Eds.). Papers in linguistics in honour of A. A. Hill. Taipei: Rainbow Bridge, 1972.
- Tarone, E., Frauenfelder, U., & Selinker, L. Systematicity/variability and stability/instability in interlanguage systems. Language Learning, January 1976, Special Issue (4), 93-134.
- Taylor, B. The use of overgeneralization and transfer learning strategies by elementary and intermediate students in English as a second language. Language Learning, 1975, 25, 73-108.
- Tran, T. C. The concept of difficulty in second language learning and teaching. Unpublished Ph. D. thesis. Ontario: University of Toronto, 1972.

Tucker, C. R. & d'Anglejan, A. Language learning processes. In D. L. Lange (Ed.), Britannica Review of Foreign language education III. Chicago: Encyclopedia Britannica, Inc., 1971.

Wakeham, M. I. Deviations from standard English in the writing of Filipino college freshmen. Unpublished Ph. D. thesis. California: Stanford University, 1965.

Wang, W. S-Y. The Chinese language. Scientific American, 1973, 228 (2), 51-61.

Wardhaugh, R. The contrastive analysis hypothesis. Teachers of English to Speakers of Other Languages Quarterly, 1970, 4 (2), 123-130.

Wardhaugh, R. & Brown, H. D. (Eds.). A survey of applied linguistics. Ann Arbor: The University of Michigan Press, 1976.

Weinreich, U. Languages in contact: findings and problems. The Hague: Mouton, 1964.

Wolfe, D. L. Some theoretical aspects of language learning and language teaching. Language Learning, 1967, 17 (3 & 4), 173-188.