

NATIVE-SPEAKER REACTIONS TO THE  
INTERLANGUAGE OF NON-NATIVE  
STUDENTS: A STUDY IN  
ERROR GRAVITY

By

MARY ANN WARD

Bachelor of Arts

Kent State University

Kent, Ohio

1960

Submitted to the Faculty of the  
Graduate College of the  
Oklahoma State University  
in partial fulfillment of  
the requirements for  
the Degree of  
MASTER OF ARTS  
December, 1983

Thesis  
1983  
W266n  
cop. 2



NATIVE-SPEAKER REACTIONS TO THE  
INTERLANGUAGE OF NON-NATIVE  
STUDENTS: A STUDY IN  
ERROR GRAVITY

Thesis Approved:

*Ravi Shetty*

Thesis Adviser

*Bruce Southard*

*Larry Hochhaus*

*Norman D. Durbin*

Dean of the Graduate College

## ACKNOWLEDGMENTS

I would like to thank the teachers at the English Language Institute and the teaching assistants in the English department at OSU for graciously sharing their students' compositions with me so that I could collect data for this thesis. An anonymous note of thanks is extended to the sixty-two TESL teachers from various institutions throughout Oklahoma and the one hundred nineteen professors and instructors in technological areas at OSU for volunteering their time to answer the questionnaire. I especially appreciate the many comments and suggestions given. I would like to thank Dr. Walter J. Ward of the School of Journalism and Broadcasting and Research Bureau for his superb assistance with the statistical design and interpretation. Without his considerable expertise, it would have been impossible to examine the findings in such depth. Foremost is my thanks to Dr. Ravi Sheorey, my thesis adviser and director of the TESL program at OSU. It was he who generated my interest in the topic of error gravity. I am deeply appreciative of his unselfishly sharing his time as well as enthusiasm, energy, creativity, and extensive knowledge. I would also like to thank the other committee members, Dr. Bruce Southard and Dr. Larry Hochhaus, for their assistance in preparation of the final manuscript.

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION . . . . .	1
Objective . . . . .	1
Background . . . . .	3
Focus of This Study . . . . .	9
Rationale . . . . .	12
II. REVIEW OF THE LITERATURE . . . . .	13
Summary . . . . .	29
III. METHOD . . . . .	30
Error Identification and Analysis . . . . .	30
Description of Error Components . . . . .	35
Word Choice . . . . .	35
Word Form . . . . .	37
Number of Noun . . . . .	38
Article . . . . .	38
Preposition . . . . .	39
Verb Form . . . . .	40
Subject-Verb Agreement . . . . .	41
Subject Omission . . . . .	41
American Error . . . . .	42
The Pretest Questionnaire . . . . .	43
Subjects for the Pretest . . . . .	45
Results of the Pretest . . . . .	48
The Questionnaire . . . . .	48
Subjects . . . . .	53
IV. FINDINGS: DIFFERENCES AMONG ERROR STATEMENTS, RESPONDENTS, AND ERROR COMPONENTS . . . . .	59
Variation among Error Statements . . . . .	59
Variation among Error Components . . . . .	61
Variation among Error Statements within Specific Components . . . . .	64
Verb Form--Standard Deviation of Error Gravity .13 . . . . .	68
Number of Noun--Standard Deviation of Error Gravity .14 . . . . .	69
Article--Standard Deviation of Error Gravity .29 . . . . .	70

Chapter	Page
Word Form--Standard Deviation of Error Gravity .34 . . . . .	71
Preposition--Standard Deviation of Error Gravity .42 . . . . .	72
Subject-Verb Agreement--Standard Deviation of Error Gravity .43 . . . . .	73
Word Choice--Standard Deviation of Error Gravity .62 . . . . .	73
American Error--Standard Deviation of Error Gravity .67 . . . . .	74
Relationship between Error Components and Statements . . . . .	75
Error Statement Measurement Consistency . . . . .	79
Similarity Among Error Components . . . . .	85
 V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . . . .	 90
Summary . . . . .	90
Conclusions and Recommendations . . . . .	92
 REFERENCES . . . . .	 100
APPENDIX A . . . . .	105
APPENDIX B . . . . .	109
APPENDIX C . . . . .	113

## LIST OF TABLES

Table	Page
I. Pretest Questionnaire Sentences . . . . .	46
II. Mean Gravity Ratings of Error Statement Components for Pretest . . . . .	49
III. Explanation of Error Components . . . . .	55
IV. Mean Gravity Ratings of Error Statement Components . . . . .	62
V. Rank Positions and Mean Seriousness Scores: By Type of Error and Error Statement Number . . . . .	65
VI. Mean and Standard Deviations of Error Gravity Scores of Eight Error Components . . . . .	67
VII. Rank Positions of Component Mean Error Gravities and Standard Deviations of Corresponding Error Statements . . . . .	77
VIII. Discriminatory Power of Each of 25 Error Statements: By Mean, Ratio and Standard Score . . . . .	80
IX. Product-Moment Correlations of Mean Gravity Scores among Eight Error Components . . . . .	87

## CHAPTER I

### INTRODUCTION

#### Objective

Errors invariably occur in second language acquisition. During the days when behaviorism and the contrastive analysis hypothesis were in their heyday, errors were considered undesirable and something to be avoided. Today, however, errors are viewed as by-product of a positive process. Piazza (1980:80) calls them "windows" through which the acquisition process may be viewed. Errors have come to be considered a creative aspect of hypothesis formulation, testing, and, in many cases, revision. No longer to be dreaded, they can be learned from as they shed light on the acquisition process itself.

Today, many teachers of English as a second language (ESL) have abandoned the goal of linguistic perfection for their students. Selinker's (1972) concepts of interlanguage and fossilization reveal the futility of expecting perfection. Errors tend to recur despite the teacher's conscientious efforts to eradicate them. A problem for the teacher is to understand the effects errors may have on interlocutors who are native speakers. Probably, all native speakers



do not react to errors in the same way, and an individual native speaker may react differently to different kinds of errors. Most likely, reactions to errors which interfere with communication are stronger than reactions to errors which do not. However, studies by Albrechtsen, Henricksen and Faerch (1980), Guntermann (1978), Chastain (1980, 1981), Galloway (1980), and Piazza (1980) all reveal that, overall, errors do not interfere with communication. Native speakers are able to understand very high percentages of oral and written communication of non-native speakers. Nonetheless, results of other studies indicate that even though native speakers can comprehend most non-native speakers' errors, they often have negative reactions to those errors.

Accordingly, this study was designed to measure the effect of written errors on the second-language learner's attempts to achieve communication. Specifically, this study seeks to ascertain if some errors are considered more serious than others, given that they do not block communication. Piazza (1980), Guntermann (1978), and Chastain (1980, 1981) all have suggested that this is the direction research should take. As far back as 1975 Stig Johansson (1975) developed a method for studying degree of irritation and suggested judgments of error gravity as a topic for research. He saw the goal of foreign language teaching as endowing students with the ability to communicate. With that goal in mind he questioned the effect of errors and saw two possible results. One was that errors affect the comprehensibility of the

message. The other was that

They could affect the relationship between the speaker and the listener (e.g. make the listener tired or irritated or draw away his attention from the contents of the message) and they have serious effects in communication, even though the message is comprehensible (p. 10).

If native speakers do react more negatively to certain errors, a hierarchy of error gravity or seriousness may be established that will impact heavily on the area of teaching English as a second language (TESL) as well as on teaching all foreign languages.

#### Background

The change in view regarding errors in second language acquisition has come about largely through the so-called hypothesis of interlanguage, postulated independently by Corder (1971), Nemser (1971), and Selinker (1972). Although each used his own terminology--Corder, idiosyncratic dialect; Nemser, approximative systems, Selinker, interlanguage--the ideology of the three is similar. It is Selinker's terminology, however, that has become the most popular.

In "The Significance of Learner's Errors," Corder (1967) suggested the idea of a "transitional competence" characterizing the speech of a second language learner. This implies movement away from the learner's first language toward the goal of acquiring the second. The learner moves in that

direction according to his own "built-in" syllabus (curriculum) rather than according to a teacher-designed syllabus. That is, what is internalized is not always what the teacher presents, but rather what the learner assimilates. This gradually improving competency is revealed largely through the learner's production data, including his errors which are important for several reasons. They show the learner is making hypotheses and testing them, as does a child acquiring his first language. They reveal how far the learner has come toward mastery of his goal. They show the researcher how a second language is acquired.

In "Idiosyncratic Dialects and Error Analysis" Corder (1971) coined the term "idiosyncratic dialects" to describe a second language learner's language. He effectively decried the terms error, deviant, ill-formed, and ungrammatical in reference to this language on the grounds that they all imply a prejudicial reaction. They suggest failure to have learned the target language forms when the reality is that the target language rules simply are not yet known.

Corder's model for analyzing sentences from idiosyncratic dialects utilizes three stages. The first is the recognition of idiosyncrasy. That is, the model assumes that all sentences are idiosyncratic until proved otherwise. The model is based on a distinction between overtly and covertly idiosyncratic sentences. The former are clearly deviant from the target language, while the latter are superficially well-formed but inappropriate considering the context. In

either case, if the idea is understandable, a well-formed reconstruction in the target language should be made and compared with the original sentence. This is stage two. If the idiosyncratic sentence is not understandable, the sentence can be translated as is into the learner's native language, provided it is known. This may reveal the meaning. If so, it can be translated back into the target language. The third stage involves an explanation of the differences between the idiosyncratic dialect and the target language.

Nemser (1971) preferred the term "approximative system" to describe the output of a second language learner. He viewed such a system as an internally structured system which differs from both the source language (his term for native language) and the target language. The approximative system develops in a series of evolving stages from the time the learner first uses the target language to his closest approximation of it in his most advanced stage. Furthermore, at the same stages in learning, approximative systems of individuals will coincide, with some differences that can be ascribed to varying learning experiences. An important reason for studying approximative systems, according to Nemser, is to validate or invalidate the claims of contrastive analysis. This is especially important for its application to language teaching.

Selinker's (1972) theory is the most abstract in that he describes "interlanguage" as a "latent psychological

structure" in the brain that is activated when one tries to learn a second language. He makes this assumption, first, because successful learners cannot have been taught everything that they know since even linguists do not know all that is to be known about various languages. Hence, successful second language learners must have acquired their competence through their own efforts. A second reason for hypothesizing an interlanguage is that there is an observable difference between the utterances of a native speaker and those of a second language learner when, we assume, they are attempting to verbalize the same concept. Further support for Selinker's theory is found in his concept of fossilization--a mechanism assumed to exist in the latent psychological structure. This concept refers to various linguistic items or rules which speakers of particular native languages tend to keep in their interlanguage, no matter how much instruction the learner receives. Even when seemingly eradicated, they manifest themselves again, often when the speaker is nervous or emotionally charged in some way. What is pertinent about fossilization to interlanguage is that the backsliding from the second language is not random, but rather toward an interlanguage norm.

A new wave of research into second language acquisition resulted from the focus of interlanguage on learner generated errors. Most initial investigations involved categorizations of errors and lists of error frequencies. Accordingly, a plethora of information is available in these areas

today. Although there are, perhaps, as many ways of classifying errors as there are individual researchers, the data from these efforts have provided long-needed insights into interlanguage. The pedagogical impact has been tremendous. Today, the teacher of English as a second language can use these data for understanding student performance in general, as well as for generating ideas for specific planning. Especially insightful are the collections of Ravem (1968, 1974) for children and of Richards (1971) and Jain (1969) for adults.

Discovering whether errors stem from interlingual sources as predicted by contrastive analysis or from intralingual sources has been a major concern of this type of research. Interlingual errors are those stemming from interference of the native language. Some of these readily identify the native language "responsible" for the error. In Spanish, for example, subject pronouns may be deleted. Negative transfer of this kind of deletion into English results in an interlingual error in a Spanish-speaking learner's production. On the other hand, intralingual errors are developmental errors, such as overgeneralizations, within the target language itself. Often observed in children's first language acquisition, this phenomenon manifests itself in second language acquisition as well. An example is regularization of irregular past tense verb forms.

The error analysis position holds that errors are

attributable to all possible sources: e.g., from the native language itself; from strategies of acquiring the second language, such as overgeneralizations; from communication strategies; from the modality of learning, including teacher or text-generated errors; from individual styles of learning; from personality styles. (See especially Richards (1971), Richards and Sampson (1974), Selinker (1972)). Today most researchers agree that errors originate from multiple sources, although Dulay and Burt (1974) maintain that children under the age of puberty do not make errors that reflect the structure of their native language, but rather that reflect developmental errors of children acquiring their first language.

A vast bulk of data behind them, more recently researchers in error analysis have begun to investigate other aspects of errors--comprehensibility and irritability. That is, we know learners produce many errors. Despite this, can errors be understood by native speakers? Furthermore, are native speakers more bothered or irritated by particular kinds of errors? Such studies have shifted focus from the learner to the interlocutor. Clearly, the topics of comprehensibility and irritability are related; however, some research has focused on either one aspect or the other, while some has focused on both.

Behind both kinds of studies is the assumption that the pedagogical goal of ESL is to make second language learners communicatively competent. By this is meant that knowledge

of grammatical rules is not enough. Beyond rules lie other kinds of knowledge available to native speakers, but until now not made a part of foreign language curricula. Lack of this knowledge typically has caused second language learners to sound "bookish" if it has not completely broken down communication.

Helping students become communicatively competent means helping them learn the forms of language for the larger purpose of accomplishing the functions of language. This goal has, in many cases, replaced the goal of expecting linguistic perfection from students. Today, then, research seeks to investigate some ramifications of this newer goal. If perfection is not sought and errors are permissible, what are some possible results? Can native speakers understand non-natives' interlanguage, even though it may contain many errors? What kinds of errors are more likely to break down communication? Do some errors bother the listener more than other errors? Pursuit of answers to these and similar questions has led researchers to study measures of comprehensibility and irritability.

#### Focus of This Study

Most studies of comprehensibility reveal that errors do not hinder communication significantly. This finding serves as motivation for the present study into assessments of error gravity. Studies by Albrechtsen et al. (1980), Chastain (1980, 1981), Guntermann (1978), Galloway (1980),



and Piazza (1980) have revealed that even though native speakers understand most communicative attempts of non-native speakers, nonetheless, natives tend to consider some errors as unacceptable, and certain errors seem to "irritate" them more than others. For example, Chastain (1980) found that 23 of 48 errors made by non-native Spanish speakers were rated unacceptable by 50 percent or more of his native respondents from Madrid. Yet the errors caused problems in comprehension in only two of those cases.

The questions I was interested in were the following:

(1) Are some written errors more irritating than others to native speakers? That is, are reactions to certain errors stronger than reactions to others? Can we say, for example, that an error in the verb is a more serious or grave error than one in the use of a preposition? Is it more likely to bother the listener?

(2) Which written errors are more irritating? That is, do all errors, regardless of type, irritate native speakers to the same extent? Or do some errors cause more negative feelings than do others? The purpose of this study is to determine, via a questionnaire containing errors of non-native speakers, if any clear-cut hierarchical order of error gravity exists in the minds of native speakers.

Albrechtsen, Henriksen, and Faerch (1980) have said that one should not expect to find a hierarchy of errors with respect to irritation because such a hierarchy is related to the number of errors in a speech segment

rather than to error type. Such a generalization seems groundless in that it wipes away individual differences. While some people may consider all grammatical errors very serious, others may consider them not serious provided communication is achieved. Yet others may differentiate highly among various error types; for example, a linguistically sophisticated individual may consider "He ain't here," a much more irritating error than "I felt badly about your misfortune." While it seems reasonable to postulate that irritation increases proportionately with error number increase, it does not seem reasonable to lump all errors together regarding irritation across all speakers, at all times, under all circumstances.

Furthermore, in trying to account for the most unacceptable error, which in no way interfered with communication, Chastain (1980) concluded that it is the commonality and simplicity of the pattern that make it difficult for natives to sympathize with errors in its production. Thus a non-native whose speech is error-laden may come to be viewed as either poorly educated or not very intelligent. He suggests a commonality between this kind of thinking and the tendency in all languages to associate positive values with some dialects and negative with others. This can be seen clearly in the way most Americans feel about a Bostonian accent versus a "hillbilly" drawl or about a Black dialect. In summary, Chastain seems to be contradicting the position that all errors are equally serious and even suggests a

reason for some errors being considered more offensive than others.

### Rationale

The concept of native speakers being bothered by particular errors in written work is an interesting one worthy of investigation. If some errors are considered "worse" than others, which might these be? How do people--namely teachers--who encounter them on a daily basis react to errors? Might some errors be more humorous than others as Gunterman (1978) found? Would others make the writer seem uneducated or unintelligent as Chastain suggested? Do different groups of listeners have different ranges of tolerance for deviance from the target language as Tucker and Sarofim (1979) speculate?

Answers to these questions in conjunction with establishing a hierarchy of error gravity would certainly have pedagogical impact. As Chastain (1981:289) has said: "Additional findings are now needed to move in the direction of establishing hierarchies of error gravity in each of the productive language skills and for each language."

Perhaps this study, in combination with others, may contribute to establishing a hierarchy of error gravity. Teachers of English as a second language, especially composition teachers, may find such a hierarchy helpful in error correction.

## CHAPTER II

### REVIEW OF THE LITERATURE

Reviewing the literature on investigations into inter-language is a complicated matter because there have been many different approaches to studying native-speakers' assessments of non-native speakers' second language output. Nonetheless, some common features in the research exist. Many investigators have been interested in assessments of the comprehensibility of the learners' imperfect code or in measurements of irritability to or acceptability of that code. Others have focused on linguistic and paralinguistic communicative strategies that second-language learners may employ. Some have investigated reactions to personality factors of the non-native speakers. Most researchers elicited reactions from native speakers, while some sought reactions from non-native speakers as well. Reaction to both written and oral language have been made. The varieties of interlanguages that have been studied include not only English, but many other languages--French, Spanish, and Danish, for example.

Galloway (1980) was interested in which errors most impede communication and in the communicative competence of classroom-trained speakers. The speakers were

second-semester American university-level students of Spanish, who had been video-taped. The evaluators were native and non-native Spanish-speaking high school teachers, and non-teaching native Spanish-speakers. Of the latter group of respondents, one was living in Spain, the other in the United States.

Results of the study indicated that overall, the native speakers seemed more interested in the message; on the other hand, the non-native teachers focused more on grammatical accuracy. The students who utilized more non-verbal communication, i.e., gestures, smiles, moving closer to the listener, received more favorable reactions than those who did not. Yet, the non-native teachers were critical of this non-verbal behavior. The group of native speakers living in the United States revealed significantly less concern with pronunciation than did all other groups. Indeed, they were the most tolerant of all groups. Conversely, the non-native teachers were the most bothered by the slowness of some learners to verbalize their ideas. Some cultural differences surfaced because some native speakers did not like the content of the message. Galloway concluded from this that the teacher should be cognizant of cultural variations and alert the student to them.

Galloway found that errors were not a serious impediment to communication. Some types of errors, such as confusion of the two past tenses in Spanish, interfered with the comprehensibility of native speakers, but not of

non-native speakers. The same was true of certain erroneous lexical choices. Interestingly, one student, whose speech was filled with near pidginizations, but who gestured amply, was awarded by the native group from Spain a slightly higher comprehensibility score than the others.

Among other things, Galloway (1980) suggests that ... teachers should sacrifice some of the structural variety, idiomatic subtleties, and low-frequency tenses in order to concentrate on the mastery of fewer forms (such as the imperfect and preterit, ser and estar) which seem to be potential disruptors of communication (p. 433).

She further suggests that more research may help establish a hierarchy of error gravity to aid in classroom correction and evaluation procedures.

Albrechtsen, Henriksen, and Faerch's (1980) research involved playing oral samples of speech of Danish learners of English to 300 speakers of English from Great Britain. The subjects represented three different regions and several different socio-economic backgrounds--some academic, some non-academic. Ages varied also: some subjects were adults, others were sixteen- and seventeen-year-olds.

The nature of the research of Albrechtsen, Henriksen, and Faerch was somewhat different from that of others who sought native (and non-native) reactions to learners' inter-language. They did not have respondents rate errors as to comprehensibility or irritability. Instead, they asked

respondents to first answer two questions relating to the content of the text. This served the purpose of ascertaining whether or not the evaluators had understood the message. Secondly, Albrechtsen et al. asked the subjects for a subjective evaluation of the texts. Results revealed that age of subjects significantly affected comprehension scores but that region did not. Of the four factors yielded from their fifteen variables, only two, the language and the comprehension factors, did not contain unanticipated variables.

Next, a linguistic analysis of the oral texts was performed in order to compare this aspect with the respondents' evaluations. For each text a correlation coefficient was calculated representing the total number of errors identified. Albrechtsen et al. found a lack of correlation between comprehensibility and linguistic correctness but a significant correlation between most performing analysis measures and the language factor. This means that respondents made their subjective evaluations on the basis of the relative correctness of what they had heard.

Albrechtsen et al. hypothesized on the basis of their results, that the number of errors affects irritation, not the particular type of error. They concluded, however, that we need to know more about the effects of irritation.

Guntermann (1978) played a recording of deviant sentences representing errors of Peace Corps volunteers

studying Spanish in El Salvador. The learners had completed eight to ten weeks of instruction. Guntermann first had determined the most frequent categories of her learners' errors. She wanted to discover which errors were made most frequently by learners once they had reached a basic level of proficiency. She also wanted to know which of the high-frequency errors most interfered with comprehension and to ascertain how these errors were evaluated. The subjects were thirty members of the families with whom the volunteers had lived. None of the subjects spoke English.

Guntermann (1978) found that grammatical errors did not seriously impede communication even though the evaluators were presented with no further context than the deviant sentence. She concluded, however, that there may be other factors to consider besides comprehensibility:

... errors in grammar may be much more serious and worthy of avoidance and correction if learners wish to establish social and personal relationships with their interlocutors. It is probable that native listeners react more negatively to some errors than to others. (Indeed, the informants laughed spontaneously 43 percent of the time at sentences that contained errors in agreement, particularly when the subject matter was personal, as with the sentence 'Yo le dije que estaba muy bonita.') (p. 252)

The most serious errors from the perspective of



incomprehensibility were multiple errors involving verb tense, person, mode and confusions of ser, estar, and haber, (all of which are equivalent to some form of be). Errors in preposition, article, noun modifier and five other unnamed subtypes were least serious in that they were comprehensible in all cases.

In a second phase of the study, Guntermann asked seventy-eight native Spanish speakers, who were also beginning English students, to indicate which sentence of a pair they preferred. The findings revealed that errors of article omission were more acceptable than those of article agreement. Results of errors in person, tense, and confusion of ser and estar were not conclusive.

Chastain made two investigations into judgments of acceptability and comprehensibility. One involved sentences in written form (1980); the other contained paragraphs (1981). In both studies, errors of Americans learning Spanish were evaluated by native Spanish speakers in Madrid. The sentences containing errors in the first project were generated from lists of errors that instructors of Spanish had identified as typical of their intermediate students. Forty subjects were asked to rate the sentences (which contained from one to three errors) as comprehensible and acceptable, comprehensible but not acceptable, or not comprehensible.

Although the meanings of all the sentences except eight were understood by more than ninety percent of the raters, the data revealed that some errors were unacceptable despite

their comprehensibility. Most of these (items 1-6) involved a verb form. Chastain (1980) reports:

... Those errors rated in descending order of importance as unacceptable by over two-thirds of the respondents were: (1) not using the infinitive after a preposition; (2) not using the verb estar in a progressive format; (3) not using the past subjunctive in an if sentence; (4) not using the verb ser with a noun; (5) not using the gustar construction correctly; (6) not using the correct form of an irregular preterite to agree with the subject; (7) not using an indirect object pronoun; (8) not using para and por properly; (9) not using relative pronouns or the subjunctive correctly; and (10) not making the adjective in la agree with the noun and not using the correct form of an irregular past participle. (pp. 212-13)

Eighteen of the forty-eight errors were rated comprehensible and acceptable by over fifty percent of the subjects. At the top of the acceptable list were omission of the definite article after the verb gustar and use of the plural possessive with a singular noun. At the bottom of the acceptable list was lack of agreement of a demonstrative with a noun and omission of the definite article with a noun used in a general sense. Almost all the errors rated as acceptable involved misuse of a definite article or

noun-adjective agreement.

Chastain (1981) prefaced his 1981 investigation with remarks concerning the goal of communicative competence. If this goal is chosen, linguistic correctness is of less importance than is comprehensibility to a native speaker. He hypothesized that

... some errors would interfere with native-speaker comprehension more than others and that the obtained information would be useful in establishing a 'gravity hierarchy' of learner language errors.

(p. 289)

Chastain analyzed reactions to ten paragraphs which came from compositions of students in their fourth semester of Spanish at the University of Virginia. He found that the most frequently identified noun-phrase errors were spelling errors; the least noticeable were plural form errors. The most serious noun-phrase form errors were spelling. "Serious" as used here means "most incomprehensible." However, only eight of seventy-one respondents found this error incomprehensible. The most acceptable verb-phrase form errors were incorrect stem, misuse of a noun, and agreement errors. The most acceptable verb-phrase word errors were addition of an article. As with noun-phrase errors, many errors in the verb phrase went unnoticed.

Chastain's major finding was that most errors were comprehensible but not acceptable. The response given most often was comprehensible but not acceptable. Chastain saw

this fact as supportive of his hypothesis. Thus, he felt more research is necessary to determine precisely the gravity of specific errors.

Piazza (1980) studied French students' reactions to American learners' errors presented in both oral and written form. Her test included ratings for both comprehensibility and irritability. Piazza cautioned against generalizing from the results as her conclusions are based on her particular population and error types.

The subjects were two hundred sixty-four French lycee students, aged seventeen to eighteen, each with an average of 12.4 years of foreign language study. All were native French speakers. The subjects were asked to rate one hundred sentences representing twenty error-types commonly made by American learners plus twenty error-free sentences used as a control. Most of the deviant sentences came from actual dialogs and compositions; however, some were written by Piazza to illustrate a particular example.

Two different means were computed. One was for the error sentences grouped into twenty categories. In general, the more comprehensible an error-type, the less irritating it was rated and vice versa. However, irritation received harsher ratings than did lack of comprehensibility. The resultant hierarchies for the spoken and written versions were different for both comprehensibility and irritability.

Piazza obtained many results, but only those for irritability will be given here. The error type least

irritating for the written portion was tense--confusion of the past tenses. The most irritating was verb form--regularization of the irregular past perfect. On the spoken portion, tense--confusion of the two past tenses--was the least irritating. The most irritating was tense in a si clause.

A second measure consisted of means for the twenty error types combined into six broader categories. The hierarchy for the written sentences revealed the following in descending order from most to least serious: verb form, pronoun, noun markers, agreement, tense, usage, word order. The hierarchy for the spoken sentences matched that of the written portion only in the two most irritating positions--verb form, followed by pronoun.

A tolerance index was figured by combining the comprehensibility and irritability ratings. A completely tolerable sentence would have received one hundred percent on both scales: an intolerable sentence would have received zero percent on both scales. Somewhat surprisingly, errors were more tolerated when presented in the written than in the oral condition.

Turner (1980) conducted a study of both native and non-native English-speaker reactions to eleven morphological errors made by Spanish-speaking learners of English. His sentences were generated from real errors made by three adults. The three hundred sixteen subjects were either graduate or undergraduate students. They were asked to indicate which error of a pair sounded worse. The

pairs totaled fifty-five. Of the eleven error-types, two were errors involving the number of nouns; the rest involved the verb form.

Although the nature of Turner's design did not produce a hierarchy of gravity, several findings emerged. One was that the omission of the past copula was considered a worse error than omission of the present copula. Another was that omission of the auxiliary do was considered worse than omission of the auxiliary is. Turner speculated that some kind of feature system involving the semantic function of the verb could have affected the ratings.

An investigation into assessments of error gravity of German natives was made by Politzer (1978). He recorded sixty pairs of deviant German sentences which contained errors typically made by American learners. The subjects were one hundred forty-six German teenagers from three different schools. All had considerable though not identical exposure to foreign languages. He compared six different error categories against one another. Each category contained twenty example sentences. Each category was compared with the others two thousand nine hundred twenty times.

A hierarchy of error seriousness resulted that reflected how often categories were considered a worse mistake. The order from most to least serious is as follows: vocabulary, seventy-seven percent; verb morphology, fifty-five percent; word order, fifty-four percent; gender confusion, fifty-one percent; phonology, thirty-six percent; case ending, twenty-

eight percent.

Politzer (1978:258) states that German natives seem to know "intuitively that using the right word is the most important aspect of language use." Conversely, errors in case endings are not very serious inasmuch as they are redundant features of language.

Politzer was unable, however, to explain much of the variance in judgments. The particular school experience seemed to be the most important factor influencing responses; beyond that, he could offer no other explanation.

Tucker and Sarofim (1979) studied non-native speakers' assessments of grammaticality, acceptability, and irritability. They also included a native-speaker evaluation on the irritability portion of the study. Their method was interesting but the number of subjects was small (native speaker  $N = 10$ , non-native speaker  $N = 18$ ), tending to cast doubt on the reliability of the findings.

Probing non-native ESL students' metalinguistic awareness was the focus. The subjects were Egyptian ESL students in Cairo, in addition to the subjects for the irritability section, who were native English speakers from Canada. Data came from students' compositions so that errors reflected those typical of Egyptian learners. Two lists of twenty-eight sentences were constructed, each containing fourteen well-formed and fourteen deviant sentences. They were recorded by a male native speaker and a male non-native speaker. In the first task, subjects were asked to judge

the acceptability of the error-sentences. Only the data from the more advanced students was useful. The less advanced students gave incomplete or incomprehensible answers. Accordingly, Tucker and Sarofim did not report the findings. However, they interpreted the inability of the less advanced students to complete the task as evidence of the transitional stages through which second language learners pass en route to gaining competence.

The advanced non-native respondents rated the well-formed sentences as more correct than the error sentences and the well-formed sentences as more acceptable than the deviant ones. However, they rated the native-speakers' version as more correct than the non-native version, even though all sentences were deviant. As for the native speaker, there was a tendency to rate as acceptable some sentences which were rated as ungrammatical.

Regarding the irritability measure, the background of the speaker (native or non-native) was not significant. A well-defined hierarchy of irritability was established. The categories in descending order from most to least irritating were as follows: word order, other (this included errors typical of French Canadian learners), object pronoun deletion, number, preposition, and article.

More important to the study reported here are the results of the native English speakers' irritability rating. However, Tucker and Sarofim report the hierarchies for the two groups are remarkably similar. In descending order



beginning with strong irritation were the following: word order and object pronoun (tied for most irritating), other, tense, number, and preposition and articles (tied for least irritating).

Studies by both James (1977) and Sheorey (1981) are the most similar to mine. James was interested in understanding the processes involved in marking written work of ESL students. He viewed marking as taking place in two phases: (1) locating the error; (2) deciding how strongly to mark that error. His corpus of approximately one hundred errors, collected from speakers of many different languages, was ultimately reduced to fifty. (A requirement for errors was that they be recognizable from the context of the sentence alone.) The fifty errors were then placed under one of ten categories, which James felt may be the most recurrent error categories for English.

Twenty native and twenty non-native speakers of English served as respondents. They were told to underline the mistake, correct it, and rate its seriousness on a scale of 0 to 5. One finding was that non-natives rated errors more severely than did the natives. Another finding was that individual respondents tended to be consistent in their error judgments. This was determined by comparing responses on one-half of a given questionnaire with the responses on the second half. A third finding was that although individual judges showed considerable consistency

in their evaluations, the two groups of evaluators--native and non-native--had different ranges, means, and distributions of marks.

An item analysis revealed that the errors most penalized by non-natives were those of case and lexis, while natives most penalized tense and concord. James says that this confirms Richard's (1971) contention that native speakers are irritated by morphological errors in verbs. Furthermore, it suggests that natives tolerate lexical errors more than non-natives do.

James' hierarchy of gravity in descending order was the following: transformation, (which contained all types of omissions and additions), tense, concord, case, negation, article, word order, and lexis. There are some limitations on James' study, interesting though it is, which he himself states. The number of respondents was small, the corpus was small, and the statistical analysis was somewhat crude. However, it is a good spring-board for further research.

Sheorey (1981) solicited native and non-native English speakers' ratings of errors made by ESL learners. The sixty-six native evaluators were all teachers of either English, ESL, or linguistics. The thirty-five non-native evaluators were college teachers of ESL from India. The corpus was drawn from ninety-seven compositions of the ESL learners. Subjects were asked to judge the seriousness of twenty deviant sentences on a rating scale of 0 to 5.

In support of Tucker and Sarofim's findings, results

revealed that the non-native respondents judged error gravity more harshly than did native evaluators. The highest number of points deducted by non-natives was 91 (maximum = 100) as opposed to 72 for natives. The lowest number of points deducted by non-natives was 30 as opposed to 27 for natives. This made a range (the lowest minus the highest number of points deducted) of 61 for non-natives and 45 for natives.

Different hierarchies of gravity resulted for native and non-native evaluators, but calculations of inferential statistics indicated the categories of significant similarities were the following: tense, subject-verb agreement, preposition, indirect question, lexis, and spelling. The two most serious error categories for non-native speakers were tense and subject-verb agreement. For native speakers, question formation and subject-verb agreement were the most serious. Least serious for non-natives were spelling and article, while preposition and spelling were least serious for natives.

Viewed another way, from the rank order of individual sentences, subject-verb agreement was the most serious of all other individual sentences for native speakers. Second in gravity were two sentences with the same means, both representing tense. For non-native evaluators also, tense occupied the top two most serious positions, followed by subject-verb agreement. Natives ranked, in descending order, sentences with errors in article, spelling, and

preposition the least serious. Non-natives considered the least grave errors, in descending order, to be article, lexis, and article.

#### Summary

In summary, the bulk of evidence available reveals that errors do not interfere with communication to a significant degree. This is true even for errors of rather elementary learners. Guntermann's data, for example, reflected errors of Peace Corp volunteers who had undergone only eight to ten weeks of training. More important is the finding that there is a pervasive tendency to rate as unacceptable many errors which are comprehensible. Among those researchers who solicited irritability ratings, the verb played a prominent role in seriousness while prepositions, articles, and adjective-noun agreement errors were treated least seriously.

## CHAPTER III

### METHOD

#### Error Identification and Analysis

As mentioned in Chapter I, this study is concerned with how native speakers of English react to errors produced by non-natives. The method of evaluating these reactions was through a questionnaire containing actual errors written by non-native learners of English. Accordingly, the first step was to collect a corpus of serve as stimuli. The corpus was drawn from fifty compositions written by international students attending Oklahoma State University. Fifteen of these came from upper level students at the English Language Institute; thirty-five came from students enrolled in various sections of English Composition I for international students. There were twelve thousand twenty-nine words in the corpus which represented ten native languages: Spanish, Arabic, Korean, Malaysian, Indonesian, Chinese, Telugu, Urdu, Vietnamese, and Bengali.

Errors were then identified according to three different criteria. The first was Corder's (1967) distinction between "mistakes" and "errors." Mistakes represent performance lapses while errors are indicative of the learner's

ever developing competence. That is, errors reveal how much of the second language the learner has internalized and can now be said to "know." On the other hand, mistakes are not reflective of competence. They are lapses anyone can make in production of his native or non-native language. These kinds of non-fluencies are readily noticeable and correctable by the speaker. An error is not readily correctable in the same fashion. Distinguishing between the two is not always an easy task, as Corder cautions. The guideline followed in identifying errors in this study was the following: if a linguistic item was used incorrectly on a given occasion, yet correctly on other occasions, it was considered a mistake; if it was misused more often than not, it was considered an error.

A second useful criterion for error identification was Burt's (1975) distinction between global and local errors. Global errors, which tend to impede communication, affect the overall sentence organization. According to Burt, the most systematic of these fall into one of four categories: (1) wrong word order; (2) wrong, missing, or misplaced sentence connectors; (3) omission of syntactic cues that signal exceptions to pervasive rules (4) over-generalizations--specifically, failure to observe selectional restrictions on certain lexical items. Local errors affect individual constituents in a sentence rather than the entire sentence; hence, they do not usually interfere with communication. They may take many forms: errors in

inflectional endings, omissions and substitutions of prepositions and articles, errors in agreement, errors in question and negative formations, and many others.

The third criterion followed, set forth by James (1977), was that each error must be recognizable from the context of the sentence alone, i.e., without the total context of the entire composition. James states that without this requirement

... one cannot begin to study errors and their evaluation, since one admits indeterminacy: some people can say it is an error, others that it is not--and they are both right. For example, John felled here would normally be considered erroneous, fell being the word intended; but in the context of a lumberjack camp, it would be perfectly in order. (p. 116)

For the most part, this requirement had the effect of reducing the total number of errors, though very insignificantly, in that some errors relied on context for identification.

In total, seven hundred seventy-one errors were identified, of which only seventeen were considered global errors. Contrary to Burt's typology of global errors, the global errors in this corpus resulted for the most part from a poor choice of lexical item that could be interpreted in more than one way or which defied interpretation. For example:

- (1) \*One of a hunter from Australia was killed when he tried to shoot a tiger.<sup>1</sup>

(2) \*From that time on, I took my English tuition even though with an expensive fee.

(3) \*The former leads to the way to train culture and humanity required inner self developing.

Example (1) could be interpreted to mean one member of a hunting expedition or one hunter. Example (2) might mean I took my English classes or I paid my tuition. The third is difficult to interpret in any way and may be a result of poor formulation of idea.

The low percentage (seventeen of seven hundred seventy-one or two percent) of global errors in the data of this study is a pleasing finding, especially for those involved in TESL. It is, however, not a surprising finding in light of the results of the research mentioned previously. That is, errors were not serious impediments to communication in the results obtained by Albrechtsen, Henricksen, and Faerch (1980), Guntermann (1978), Galloway (1980), and Chastain (1980 and 1981).

Describing or analyzing errors for the purpose of setting them up in components was the second task, and a particularly difficult one in that there are many ways of viewing linguistic deviances. Two components, however, were ready made: global errors (above) and spelling errors. A total of one hundred twenty-eight spelling errors were identified, making this the largest group. Nonetheless, this was not considered important enough to be included in the questionnaire written later. Only two spelling errors



were deviant enough to be classified as global. (Burt [1975] did not consider spelling errors global.) Furthermore, in all the research examined, only Chastain (1981) included spelling errors in his data. Chastain found that even though spelling errors were considered the most serious error in a noun phrase for the reason that they were not comprehensible to a high percentage of respondents, this percentage reflected only eight of seventy-one respondents.

Burt and Kiparcky's (1972) method for analyzing errors one at a time in hierarchical fashion combined with Brown's (1980) description of errors according to four all-encompassing mathematical categories proved very useful. According to Burt and Kiparsky, global errors should be corrected first as they are the most serious impediments to communication. However, many times given sentences contain multiple errors. In these cases, errors should be corrected one at a time, beginning with the most serious. Brown suggests that on a general level all errors will fall under one (or more) of four categories: omission, addition, substitution, and ordering.

Analyzing errors through these perspectives helped create eight error components encompassing all seven hundred twenty-one errors identified except the one hundred twenty-eight spelling errors and nineteen minor errata which defied classification. The components and the number of errors identified for each were as follows: number of noun (one hundred seven), verb form (one hundred six), word

choice (ninety-one), preposition (eighty-nine), article (eighty-six), word form (fifty-seven), subject-verb agreement (forty-five), and subject omission (fifteen).

After identification of error components, the next step was selecting sentences for a questionnaire to represent each component. To this end, derived sentences were written, i.e., the original error to be illustrated was preserved while all other ungrammaticalities in the sentence were made grammatical, or the sentence was altered in other ways to make it short and easily read. Ultimately, two or three derived sentences were selected for each of the eight components.

An additional component composed of five sentences which represented errors typically committed by native speakers was created for the purpose of discovering whether reactions to native-speaker errors were different from reactions to non-native-speaker errors. This component was named "American error." In total, twenty-five sentences representing the above components were put into questionnaire form for a pre-test, details of which are described later.

### Description of Error Components

#### Word Choice

Brown's category of substitution described many lexical items put under this classification, which included several parts of speech: nouns, verbs, prepositions, adverbs, and adjectives. Often, the choice of words was

deviant in that an item (or items) from the learner's inter-language was substituted for what a native speaker might choose. The worst of these substitutions were considered global errors. They totaled seventeen of the ninety-one errors for this component. Some examples are the following:

- (1) \*The former leads the way to train culture and humanity required inner self developing, ...
- (2) \*By an expedition komodo is the left animals from 20 century that is very dangerous.

The idea of (1) is so poorly developed that communication is completely broken down. However, it is possible to guess the meaning of (2). By is a possible substitute for because while the left animals may be considered an error in ordering and omission--the only animals left--or a substitution of left for remaining. Although it is possible to guess the intended meaning of all the other global lexical errors as well, there is no guarantee that the guess is correct. Accordingly, these were considered global in nature.

Somewhat arbitrarily, eight other errors in this category were not considered global because they were easier to comprehend than the seventeen errors labeled global: e.g.,

- (3) \*From this certain reason, the student would think that America has a lot of experience in business.

In this sentence it is likely that certain is a substitute for specific.

Most errors in this component, however, did not lead to

a breakdown of communication; for that reason, no global error was put into the questionnaire. The context of the sentence itself provided sufficient clues for comprehension: e.g.,

(4) \*The money we use to have was no values at all in any other country.

(5) \*But I'm yet proud to be from Bangladesh.

In (4) was is an obvious substitute for had; in (5) yet most likely was substituted for still.

#### Word Form

An error was placed in this component if the correct word has been chosen but an inappropriate inflectional ending was attached to it. This kind of deviance in many cases may be considered a substitution of inflection. Most of these errors involved substitutions for adjective and noun forms; a few were confusions of present and past participle forms. Some examples are:

(6) \*Overall, I still feel that there is not much different between my country and this although I have encountered much surprisingly things.

(7) \*I found out that public transportation is practically none in existent.

The adjective different in (6) was a substitution for the noun difference; the adverb surprisingly clearly replaced the adjective surprising. Number (7) contained perhaps the most creative error of the entire corpus, the intention

being non-existent.

### Number of Noun

Confusions regarding countable and mass noun distinctions fell under this component, as well as other singular and plural noun errors. Errors in possessive inflection were also included. Generally speaking, this component contained either additions or omissions: e.g.

(8) \*Stillwater is a boring place with a few entertainments.

(9) \*One of the main reason I want to choose business as my major because I have influence from my father.

(10) \*Then I got my master degree.

Notice that in (8) there is a double error, few and entertainments, rather than little entertainment because the learner has internalized the rule for few/less. In both (9) and (10) the inflectional ending has been omitted, the plural in (9) and the possessive in (10). Most errors in this component involved omissions of the plural noun inflection.

### Article

Omission of the definite article occurred with the greatest frequency (thirty-three times) in this component, followed by indefinite article omission (twenty-nine times). All additions of articles but one involved definite articles.

This type error occurred in the third most frequent position for this component (nineteen). A few (seventeen) substitutions of definite articles for indefinite articles and vice versa were found as well as a few (two) definite article substitutions for personal pronouns. Examples corresponding to the above order are the following:

- (11) \*Freedom is most important thing to life.
- (12) \*We don't have health department to solve these problems like here in America.
- (13) \*First, I will enlarge my business with the trading other countries.
- (14) \*He works in a big office, dealing with the cars' company.
- (15) \*He didn't shaved the beard.

### Preposition

Errors of substitutions of prepositions occurred with the greatest frequency (forty-three) followed closely by preposition omission (thirty). There were also several unnecessary additions. This was the "neatest" category in that all the data fell into one of the above: e.g.

- (16) \*Sometimes we feel bothering with his tape recorder.
- (17) \*Everyone knows him because he likes help everyone.
- (18) \*He wants to get master degree in this semester.

In (16) with has been substituted for by while to has been

omitted from (17). In is unnecessary in (18).

### Verb Form

Verbs were considered an important enough linguistic form to merit a separate category apart from word form. Ample support for the verb's central role in comprehension processes comes from psycholinguistics. (See, for example, Foss and Hakes, 1978). Moreover, as far back as 1892, Gouin gave the verb the central position in teaching foreign languages. This idea has been updated in two newer foreign language teaching methods: Asher's total physical response<sup>2</sup> and situational reinforcement.<sup>3</sup> Support for the centrality of the verb in the sentence also comes from the field of semantics. Chafe (1970) reflects this position as does Fillmore (1968), who gives the verb a key position in his case grammar.

Most omissions in verbs in the data were failure to use a form of be, although a few were concerned with failure to use inflection to signal the passive. Many substitutions involved inappropriate tense formations. There were even a few additional be forms inserted. Examples of verb error sentences follow:

- (19) \*He really made me feel at home, never felt that I am away from home.
- (20) \*I feel that my skin getting dry.
- (21) \*By the way, I am very interest in the construction works since I was in school life.

- (22) \*Now I am missing him a lot, although we still write to each other.

Present tense am has been substituted for past tense was in (19). Sentence (20) illustrates be omission--is in this case. In sentence (21), present tense am has been substituted for present perfect have been. Sentence (22) is an example of confusion of present continuous with simple present (probably because of now), representing inadequate knowledge of restrictions on certain verbs.

#### Subject-Verb Agreement

All errors under this classification occurred in either third person singular or third person plural. The deviance was omission of inflection on the singular verb or addition of inflection on the plural verb or wrong choice of is/are: e.g.,

- (23) \*All of them is still single and so am I.  
 (24) \*This make the country both new and clean.  
 (25) \*Universities in America provides various courses and programs to all of students in the world.

#### Subject Omission

Although this component was included on the questionnaire of the pretest, it was later dropped from the actual questionnaire because it represented too few errors from the data. Almost all the errors in this classification occurred in the subordinate clause: e.g.,



(26) \*I think is the first city that I know that it doesn't have neither taxis nor buses.

(27) \*There are some traditional village huts appear at certain intervals along the beach.

The components of word order (twelve) and pronouns (sixteen) were not included in the questionnaire because they contained too few errors. Also excluded were a few difficult to classify additions and omissions (fourteen) and three awkward constructions. Some errors in word order may have interfered with comprehension: e.g.,

(28) \*First his day, I made his nickname.

Others were easy to understand: e.g.,

(29) \*The reason why I chose the America to study is to satisfy above both requirements.

In any event, the number of errors was too small to warrant inclusion.

Most errors in the pronoun category were reference errors. Here again, there were insufficient numbers for inclusion in the questionnaire.

#### American Error

The additional component containing five typical native American errors was created in an attempt to discover if there is any difference in the way natives view American versus non-native errors.<sup>4</sup> An effort was made to include errors obviously recognizable as native errors. Two are readily apparent and often identified with lack of education

or low socio-economic status:

(30) \*He ain't here now.

(31) \*John and me came early.

A third would go unnoticed in oral communication but is easily recognized (by educated people) in written work:

(32) \*He could of done the work.

Another one is very common even in the speech of an educated person, especially in this area of the country:

(33) \*He did good.

The last may be called an educated person's error in that there is a tendency to overgeneralize once a person has learned to add -ly to modifiers after verbs:

(34) \*I feel very badly about that.

The overgeneralization takes the form of -ly being added to all modifiers after verbs, selectional restrictions on linking verbs being ignored.

#### The Pretest Questionnaire

Twenty sentences from the error components established were selected for a questionnaire which served as a pretest. First, five to ten sentences were selected for each component. They were chosen to represent typical errors of the component, taking additions, omissions, and substitutions into account. However, derived sentences, as previously mentioned, were written from the original error sentences. The alterations were in order for several reasons. First, most sentences from the corpus contained

multiple errors, while the object of this study was to focus on individual errors. Second, the original sentences were often quite long. It was felt desirable to keep sentences short so as not to overly burden the respondents. (Turner, 1980, for example, kept the length of sentences in his questionnaire to between two to seven syllables.) The shorter, derived sentences permitted one error per sentence to be spotlighted with few interfering factors. Finally, between one to four sentences per category were selected to represent each of the eight components. To these were added the five sentences representing errors typical of native speakers of English, making a total of twenty-five sentences for the questionnaire.

Although this kind of questionnaire may be criticized as artificial, it can be defended for several reasons. Incorporating more than one error per sentence complicates the rating procedure if the intention is to examine the effect of individual errors. The only other way to present samples of deviance to respondents in a more natural way is to give them longer selections from the data, such as paragraphs. One disadvantage with this is that it is time-consuming for respondents who may either rush through the evaluation or never begin it at all.

Another objection to having respondents evaluate longer passages is that it is more difficult to control the kinds of errors the researcher is interested in. Furthermore, many errors may be overlooked when hidden in the context of

a paragraph. Chastain (1981), for example, found that he had to reduce the twenty-two paragraphs he had chosen for evaluation to only ten because, for one reason, evaluators did not notice all the errors. Thus, his summaries of noun and verb phrase errors reflect those items most to least often identified as errors, rather than how serious a respondent felt a particular classification of error was.

In conclusion, typical deviant sentences were chosen to represent each of the eight error components. All sentences were shortened in length and modified to illustrate only one error. The sentences assigned to each component are shown in Table I.

#### Subjects for the Pretest

Sixty-two teachers of English as a second language served as respondents to the pretest. They were participants at the first conference of Oklahoma Teachers of English as a Second Language. All were native speakers of English. (Evaluations of non-native teachers were not used.) Their teaching experience ranged from two months to eighteen years at various levels: elementary, secondary, intensive ESL programs, college or university, adult basic education, and technical schools. Many had experience at more than one level. This was a particularly effective group on which to try out the deviant sentences. Their keen awareness of the descriptive and prescriptive rules of

TABLE I  
PRETEST QUESTIONNAIRE SENTENCES

Error Component	Error Sentences
Subject-Verb Agreement	He always turn up his stereo. Tuition fees is low.
Word Choice	Two questions always repeating in my mind. He makes exercises for his body.
Number of Noun	To master English is my second wishes. One thing I don't like is the traffics. Both of them like music and sport.
Article	He wants to get Master's degree. There are many good universities in USA. Indonesia is a country where I come from.
Word Form	The U.S. is a leader in some tech- nology fields. Their father is so kindly. I am very interest in construction. After complete their studies, they shall return home.
Verb Form	This is one reason I was go abroad. He wants to work after he will be finished his studies.
American Error	He did good. He ain't here now. He could of done the work. John and me came early. I feel very badly about that.

TABLE I (Continued)

Error Component	Error Sentences
Preposition	I may have to speak him in the future. I arrived to Oklahoma City after dark. We suggested that she not to do that.
Subject Omission	Is hard to compare this country with others.

English was responsible for some of the alterations made in the final questionnaire.

### Results of the Pretest

A detailed statistical analysis of the pretest was not made since the purpose of pretesting was chiefly to focus on any trouble spots in the error statements of the questionnaire. Nonetheless, a hierarchy of error gravity by components was established and is given in Table II. Verb form fell into rank position 1 with a mean gravity score of 4.14, while number of noun, in last position, revealed a mean gravity score of 2.72. The overall mean gravity was 3.41, slightly higher than the middle on a 5-point scale.

### The Questionnaire

Several modifications were made in the sentences on the questionnaire. First, the component of subject omission was dropped as it reflected too few errors from the data. One more sentence was added to verb form, giving it three. A sentence from word form was dropped and a sentence was added to word choice. This provided a better balance in the number of sentences per components to the number of total errors contained in that component. Thus, all components but two contained three representative sentences. One exception was subject-verb agreement, which contained only two, but which also represented the smallest number of errors located in the data (forty-five occurrences). The

TABLE II  
MEAN GRAVITY RATINGS OF ERROR STATEMENT  
COMPONENTS FOR PRETEST

Error Component	Mean Gravity	Rank Position
Verb Form	4.14	1
Subject Omission	3.92	2
Subject-Verb Agreement	3.63	3.5
Word Choice	3.63	3.5
American Error	3.19	5
Preposition	3.16	6
Word Form	3.15	7
Article	2.81	8
Number of Noun	2.72	9
Mean Totals	3.41	



other exception was the special component of American error, which was designed to have five.

The results of the pretest revealed other trouble spots that could be avoided. One such was the following on the pretest representing word choice:

\*He makes exercises (sic) for his body.

Unfortunately this contained a typing error, thus giving that sentence two errors. It was impossible to determine, in some cases, whether the double error was affecting the gravity rating. Additionally, some respondents marked only the typing error, omitting the error in the word choice. Again, some respondents objected to for his body as redundant; others wanted to change it to for his health or to keep in shape. Because of these many problems, the sentence was revised as follows:

\*He makes exercises in the gym.

Although there were no particular problems with the following sentence of the pretest, number of noun, it was changed also. The reason was to include a representative of an error in the possessive. The pretest sentence and the revised version are respectively:

\*Both of them like music and sport.

\*Our country needs are increasing rapidly.

Two sentences were changed under the component of articles:

\*He wants to get Master's degree.

\*Indonesia is a country where I come from.

Again, there were no particular problems with the former, but a sentence illustrating an error in the indefinite article "an" was wanted. However, the pretest revealed several errors with the latter. In addition to locating the error, many evaluators also objected to where I come from, preferring, for example, from which I come, I come from, which I am from, that I am from and others. Considering the variety of corrections, plus not knowing how much the "second error" affected the gravity score, the sentence was dropped. The revised versions of the above were as follows:

\*One of them is undergraduate student.

\*He studies in the library on the Sunday afternoon.

One sentence from word form was dropped, primarily to reduce the number of sentences in that component to three. Of the sentences in word form, number six presented the most difficulty on the pretest; accordingly, it was the one dropped:

\*The U.S. is a leader in some technology fields.

Although most pretest evaluators changed technology to technological, six did not recognize the error, six others preferred fields of technology. Moreover, many other corrections were given.

Throughout all the sentences changed, the chief idea was to eliminate the sentences with errors that had been changed in multiple ways, and conversely, to retain those for which there was almost complete agreement about how

the error should be changed.

Another change came in a sentence representing word form error:

\*After complete their studies, they shall return home. Shall was changed to will since many evaluators had made that correction in addition to adding an inflectional -ing to complete. Again, it was not possible to determine if this affected the rating given.

The sentence added to verb form gave that component three representative error sentences. This was most appropriate considering that verb form was the second highest error category by only one error. The sentence added was the same one removed from subject omission on the pretest. However, a subject was added and the verb was dropped, producing:

\*It hard to compare America with Vietnam.

Under prepositions, the following sentence was dropped:

\*We suggested that she not to do that.

The reason was that several respondents objected to that; i.e. it needed clarification. Since the effect was a "double error" it was deemed better omitted. The replacement was:

\*My country still lacks of high technology.

The final sentences chosen for the questionnaire represented, then, a balance in addition, omission, and substitution, as well as the typical error types for each component. A detailed explanation for each component is shown

in Table III.

The seven components, together with the American error component, comprised the levels of the independent variable--error components. The response variable was the perceived error gravity as registered on a 5-point rating scale running from 1 (not very serious) to 5 (very serious).

Final preparation of the questionnaire involved randomly assigning a rank order position for each sentence. Then a cover letter was written to introduce the questionnaire and to solicit information regarding the respondents, instructors of all ranks in technological areas at Oklahoma State University. The subjects were queried about their field of specialization, whether they had ever studied a foreign language, and whether they were native speakers of English. Subjects were also asked about the average number of international students they typically had in class. Directions to respondents indicated that they should underline the error in each sentence, correct it, and rate how serious they thought each error was by circling a number on a scale of 1 to 5. (See Appendix A.)

### Subjects

As mentioned in the preceding paragraph, the respondents to the questionnaire (N = 119) were all instructors of various ranks in technological areas at Oklahoma State University. They were chosen because many international students typically enroll in technological fields. Many, if

TABLE III  
EXPLANATION OF ERROR COMPONENTS

Error Component	Sentences	Explanation of Error
Subject-Verb Agreement	<p>He always turn up his stereo.</p> <p>Tuition fees is low.</p>	<p>Omission of third person singular verb inflection.</p> <p>Substitution of singular for plural verb.</p>
Word Choice	<p>Two questions always repeating in my mind.</p> <p>He makes exercise in the gym.</p> <p>The engineer does an important part in a developing country.</p>	<p>Substitution of <u>always</u> for <u>kept</u>.</p> <p>Substitution of <u>makes</u> for <u>does</u>.</p> <p>Verb substitution--<u>does</u> for <u>plays</u>.</p>
Number of Noun	<p>To master English is my second wishes.</p> <p>Our country needs are increasing.</p> <p>One thing I don't like is the traffics.</p>	<p>Addition of plural noun inflection on a countable noun.</p> <p>Omission of possessive inflection.</p> <p>Addition of plural noun inflection to an uncountable noun.</p>

TABLE III (Continued)

Error Component	Sentences	Explanation of Error
Article	<p>He studies in the library on the Sunday afternoon.</p> <p>One of them is undergraduate student.</p> <p>There are many good universities in U.S.A.</p>	<p>Addition of the definite article.</p> <p>Omission of the indefinite article.</p> <p>Omission of the definite article.</p>
Word Form	<p>I am very interest in construction.</p> <p>After complete their studies they will return home.</p> <p>Their father is so kindly.</p>	<p>Omission of inflection on past participle.</p> <p>Omission of inflection on present participle.</p> <p>Addition of adverbial inflection on adjective.</p>
Preposition	<p>My country still lacks of high technology</p> <p>I may have to speak him in the future.</p> <p>I arrived to Oklahoma City after dark.</p>	<p>Addition of preposition.</p> <p>Omission of preposition.</p> <p>Substitution of preposition--<u>to</u> for <u>in</u>.</p>

TABLE III (Continued)

Error Component	Sentences	Explanation of Error
Verb Form	It hard to compare America with Vietnam.	Omission of <u>be</u> .
	This is one reason I was go abroad.	Substitution in past tense.
	He wants to work after he will be finished his studies.	Substitution in present tense.

not most students from the English Language Institute at Oklahoma State University customarily pursue a technological career. Approximately one thousand nine hundred international students were enrolled in technological courses at this university at the time the questionnaire was administered.

The schools of technology represented and the number of respondents from each were the following: Chemical Engineering (eight), Civil Engineering (eight), Electrical and Computer Engineering (nine), Mathematics (nineteen), Petroleum Engineering (ten), Animal Science (eighteen), Agronomy (twenty), Agricultural Economics (seventeen). All but four subjects (three percent) were native speakers of English, and all but thirteen (eleven percent) had studied a foreign language. Sixty-three subjects (fifty-three percent) typically had between one to ten international students in their classes. Twenty-one percent typically had between eleven to twenty international students in their classes, while another twenty-one percent typically had over twenty. In the latter group many had classes composed almost exclusively of international students. Only five percent typically had no international students at all.

In addition to answering the questionnaire, many respondents wrote comments about their views of international students' errors. (Sample comments are reproduced in Appendix C.) Many enclosed samples of both non-native and native students' writing as well.



## NOTES

<sup>1</sup>Asterisks preceding sentences indicate ungrammaticality.

<sup>2</sup>See James J. Asher. 1966. The learning strategy of the total physical response: a review. Modern Language Journal 50:79-84. Asher (p. 79) prefers the term "strategy" to describe how to teach languages through oral commands.

<sup>3</sup>See John Schumann. 1972. Communication techniques. TESOL Quarterly 6:143-6. Schumann describes the verb-centered method of "situational reinforcement" developed at the Institute of Modern Languages in Washington, D.C.

<sup>4</sup>American error denotes ungrammaticality as commonly described in most textbooks.

## CHAPTER IV

### FINDINGS: DIFFERENCES AMONG ERROR STATEMENTS, RESPONDENTS, AND ERROR COMPONENTS

#### Variation among Error Statements

Nearly three thousand error gravity scores were gathered in the course of this study. In one way or another, the analysis tools applied to data dealt with correlations, or the pattern, of ratings among the one hundred nineteen respondents, as they registered perceptions of error statements and the eight grammatical error components built into the attitude scale. The author was also interested in mean gravity differences among the twenty-five error statements and among the eight components to which various statements comported.

The analysis, then, emphasized not only the perceived similarities, but the perceived differences in individual error statements and the eight error components. They centered on the following research questions:

1. Was there a significant difference among respondents' mean seriousness ratings, overall? If so, this would indicate a substantially reliable scale, saying in

essence, that it measured one underlying variable, which purportedly was perceived as seriousness of grammatical error.

2. Were there significant differences in perceived seriousness of errors among error statements? In other words, were some grammatical errors statements deemed more serious than others? If so, which ones?

3. Were there significant differences among perceived seriousness of error components overall? If so, which ones?

4. Were there significant differences among perceived mean error gravities of statements comports to specific error components? If, let us say, three statements are presented as representative of the verb form error component, then their mean seriousness ratings should be similar, differing no more than could be expected by chance. This question, in essence, asks how representative of an error component were the statements corresponding to the component.

Since all one hundred nineteen respondents rendered repeated error gravity judgments of twenty-five statements, a treatments-by-subjects variance analysis was appropriate to determine critical differences in perceived error gravity among items overall.

An F-ratio of 47.84 ( $df = 24/2726$ ,  $p < .001$ ) suggested that a mean difference as large as that between the error statements judged least and most serious would occur by

chance in less than one in one thousand similar experiments involving a random sample of respondents from a defined population.<sup>1</sup> In fact, the variation in error statements accounted for twenty percent of the total variance in respondents' judgments.

Differences among respondents, themselves, accounted for thirty-two percent of the variation in error gravity judgments ( $F = 16.09$ ,  $df = 114/2726$ ,  $p < .001$ ), leaving forty-eight percent explained by interaction of respondents and error statements. The significant variation among respondents says, in essence, that the battery of error statements drew a significantly consistent response, in that a substantial number of respondents maintained their relative position to each other in rating the gravity of errors across a substantial number of items. To illustrate this point, respondent No. 5 rated twenty-two of the twenty-five statements as less grave than did respondent No. 6. One can say, then, that respondent No. 5 generally thought grammatical errors were less serious than did respondent No. 6. The test battery revealed this "cognitive consistency." Item measurement consistency is discussed later in this chapter.

#### Variation among Error Components

Of the twenty-five error statements, several purportedly were illustrative of each of eight error components listed in Table I. Since statements were rated on a

five-point scale, mean error gravity scores of any component could range from 1.00 through 5.00.

Mean error gravity and rank positions of the eight error components, in a hierarchy from most to least grave, are shown in Table IV. The mean total of all components shows that respondents perceived the eight types of error as moderately serious, as designated by the mean of 2.78 on a 5-point scale.

TABLE IV  
MEAN GRAVITY RATINGS OF ERROR STATEMENT COMPONENTS

Error Component	Mean Gravity Rating	Rank Position
Verb Form	3.46 <sup>a</sup>	1.0
Subject-Verb Agreement	2.90 <sup>b</sup>	2.0
Word Form	2.82 <sup>b</sup>	4.0
Word Choice	2.82 <sup>b</sup>	4.0
Number of Noun	2.82 <sup>b</sup>	4.0
Preposition	2.74 <sup>b</sup>	6.0
American Error	2.55 <sup>c</sup>	7.0
Articles	2.14 <sup>d</sup>	8.0
Mean Total	2.78	

Note: Critical difference between component mean gravity scores = .165,  $p < .05$ ,  $df = 7/826$ . Entries accompanied by the same letter indicate no significant differences in perceived error seriousness.

Verb form and article errors, for example, stand out as the most and least serious error components, with mean gravity scores of 3.46 and 2.14, respectively ( $F = 37.57$ ,  $p < .01$ ,  $df = 7/827$ ). Following verb form errors in degree of seriousness were: subject-verb agreement, word form, word choice, number of noun and preposition errors--all showing insignificant differences with mean gravity scores ranging from 2.90 to 2.74. Next-to-least serious was the American error component. Article errors were deemed least serious of all.

Correlation ratio eta showed the variation in mean gravity among the eight error components accounted for only seven percent of the total variation. The significantly greater and lesser seriousness of verb form and article errors, respectively, accounted most for the small variation that was explained by the eight error components.

Results of other similar, though not identical, research tends to support the idea that errors in the verb are perceived as graver than those in other linguistic categories. Conversely, errors in articles and prepositions are more tolerable than other error types. This is true for English as well as other languages.

For example, Guntermann (1978), for Spanish, measured seriousness indirectly in the form of comprehensibility. She found that errors in verb tense, person, mode and confusion of ser, estar and haber (all translatable as forms of be) were the most serious. On the other hand, preposition,

article, and noun modifier errors were deemed the least serious.

Chastain's (1980) study of Spanish-error acceptability revealed that the first six of ten error categories were occupied by verb forms. Politzer (1978), working with German, found that errors in verb morphology were the second most serious violation. Again, he did not solicit an error irritation rating per se, but rather sought which error of a pair of sentences represented the more serious deviation. Piazza (1980), for French, did ask for a direct judgment of irritation. Verb form resulted as the most serious error category in her hierarchy.

Similar findings are available for English in James (1977), and Tucker and Sarofim (1979). Errors in tense ranked second in James' hierarchy, the first most serious being a category he called transformation. Articles fell in the third to the bottom position of James' hierarchy. The least serious errors registered by Tucker and Sarofim were both preposition and article. They had asked for a judgment of the acceptability of the error statement.

#### Variations among Error Statements within Specific Components

The hierarchy of perceived error gravity in Table V does not disclose the variation within each error component; i.e., whether statements comporting to each of the eight components were perceived as comprising similar degrees of

TABLE V  
 RANK POSITIONS AND MEAN SERIOUSNESS SCORES:  
 BY TYPE OF ERROR AND ERROR STATEMENT NUMBER

Statement Number	Rank Position	Mean Gravity	Error Component Statement
11	1.0	3.61	Verb Form
15	3.0	3.40	Verb Form
8	3.0	3.39	Word Choice
2	3.0	3.36	Verb Form
19	6.0	3.24	American Error
7	6.0	3.23	Preposition
16	6.0	3.20	Subject-Verb Agreement
21	8.0	3.99	Word Form
17	10.0	2.97	Noun Number
1	11.0	2.93	Word Form
10	11.0	2.91	Word Choice
4	11.0	2.90	American Error
12	13.0	2.85	American Error
24	14.0	2.76	Noun Number
23	15.0	2.71	Noun Number
14	16.0	2.60	Subject-Verb Agreement
22	18.0	2.51	Preposition
6	19.0	2.49	Preposition
25	19.0	2.45	Word Form
20	19.0	2.44	Article
13	21.0	2.26	American Error
18	22.5	2.17	Word Choice
3	22.5	2.13	Article
5	24.0	1.86	Article
9	25.0	1.52	American Error

Note: Error statements not within the same rank position box differ significantly ( $p < .05$ ).



gravity. Table V shows the rank position of each error statement's mean error gravity. As the table reveals, several error statements in the "same family" hold widely different rank positions, as well as mean scores.

Post-hoc statistical tests for comparison of error statement totals enabled the author to determine which error statements did and did not differ significantly in perceived error gravity. The "Rank Position" column in Table V best illustrates the hierarchy of gravity.

One can see that several error component statements differ greatly in mean gravity and rank position thereof. For example, the three word choice errors held rank positions of 3.0, 11.0, and 22.5, respectively, in Table V. American errors also showed a wide spread in perceived error gravity, as did word form errors, etc.

To clarify Table V, the standard deviation of statement means for each error component was computed.<sup>2</sup> This provided a clear index of perceived homogeneity of error gravity for statements corresponding to each component. The lesser the standard deviation of component items from the component mean, the more similar was the error gravity of one statement to another. The mean and standard deviation are shown in Table VI.

Table VI can be understood very simply if one remembers that the lower the dispersion in the right column, the more representative is the component error gravity rating in the left column. To illustrate, if all error

statements corresponding to a component received the same error gravity rating, the standard deviation would be zero. In addition, the component's mean gravity rating would be identical to each statement's rating. Thus, if each verb form statement received a mean rating of 3.46, the standard deviation would be zero and the overall mean gravity would be 3.46, a truly representative portrayal of all verb form statement gravities.

TABLE VI  
MEAN AND STANDARD DEVIATIONS OF ERROR GRAVITY  
SCORES OF EIGHT ERROR COMPONENTS

Error Component	Mean Error Gravity	Standard Deviations of Statement Error Gravities
Verb Form	3.46	.13
Number of Noun	2.82	.14
Articles	2.14	.29
Word Form	2.82	.34
Preposition	2.74	.42
Subject-Verb Agreement	2.90	.43
Word Choice	2.82	.62
American Error	2.55	.67
Mean Totals	2.78	.38

Table VI shows that verb form and number of noun error statements "hung closest together" with standard deviations of .13 and .14, respectively. Number of noun error statements ranked ninth, fourteenth, and fifteenth in Table V, while one verb form error ranked first in seriousness and two ranked third.

Word choice and American error statements, on the other hand, were perceived as quite different in degree of seriousness, with respective standard deviations of .62 and .67. Word choice errors, as mentioned, ranged from rank positions 3.0 to 22.5 in Table V, while American error statements held rank positions 6.0, 11.0, 13.0, 21.0, and 25.0.

Preposition and subject-verb agreement error statements also varied substantially in seriousness with standard deviations of .42 and .43, respectively. Article and word form error statements, with standard deviations of .29 and .34, hovered just below the average standard deviation of .38.

Each error component's standard deviation and its relation to similarities and differences in error statement ratings outlined in Table V are discussed below.

Verb Form--Standard Deviation of  
Error Gravity .13

This component registered the highest overall mean error gravity of 3.46. The three statement means under this component registered a standard deviation of .13, the

lowest of the eight error components. The three verb form error statements and their mean error gravity scores were as follows:

No. 11	*This is one reason I was go abroad.	3.61a
No. 15	*He wants to work after he will be finished his studies.	3.40b
No. 2	*It hard to compare America with Vietnam.	3.36b

From Table V, statement No. 11 was perceived as significantly greater in gravity than any of the other twenty-four error statements. Statements No. 15 and No. 2 comprised two of the three statements tied for third in error gravity among the twenty-five statements.

In brief, verb form errors were perceived as the gravest and more similar to each other in gravity of error than errors in any other component. The high error gravity was due mostly to "This is one reason I was go abroad," since this statement differed significantly from its siblings.

Number of Noun--Standard Deviation of  
Error Gravity .14

Nearly as homogeneous as verb form errors in perceived gravity were the number of noun component errors. This component, however, was perceived as significantly less serious than the verb form errors. The three number of noun error statements and their mean error gravities were as

follows:

No. 17	*To master English is my second wishes.	2.97a
No. 24	*One thing I don't like is the traffics.	2.76b
No. 23	*Our country needs are increasing rapidly.	2.71b

Number of noun was tied with word choice and subject-verb agreement for the fourth most serious error component. However, Table V shows that, on a statement-by-statement basis, No. 17 was a significantly graver error than statements 23 and 24, which were not perceived as significantly different in gravity. The similarity seen between "One thing I don't like is the traffics," and "Our country needs are increasing rapidly," is primarily responsible for the relatively low standard deviation of the number of noun component.

In summary, the number of noun error component would have registered much less grave, had it not been for statement 17, "To master English is my second wishes," which was perceived as significantly more serious than its sibling statements. One might speculate why this is so. More will be said on this point later with regard to statement discriminatory power.

#### Article--Standard Deviation

Error Gravity .29

Least grave among the eight error components was

article. Though article error statement mean scores showed the third lowest standard deviation, each of them elicited significantly different mean error gravities. Article error statement and mean gravities comprised:

No. 20	*One of them is undergraduate student.	2.44a
No. 3	*He studies in the library on the Sunday afternoon.	2.13b
No. 5	*There are many good universities in U.S.A.	1.86c

From Table V, each of the above mean error gravities was significantly greater or lesser than the other, although all were in the bottom one-fourth in seriousness. Article errors, then, were seen as less serious, overall, than other errors, but were significantly different in perceived gravity.

Word Form--Standard Deviation of Error Gravity .34

This component also comprised statements which differed significantly, as shown in Table V. Word form, as a component, was tied with word choice for fourth place in error severity. The three word form error statements and mean error gravities included:

No. 21	*After complete their studies, they will return	3.09a
No. 1	*I am very interest in construction.	2.93b
No. 25	*Their father is so kindly	2.45c

The above error statements differed significantly in the order presented. The error statement "Their father is so kindly," played the largest role in detracting from the homogeneity of error gravity. "After complete their studies, they will return home," and "I am very interest in construction," were seen as much closer in error gravity, yet the difference between their means, as shown in Table V, was significant.

Word form errors, like article errors, were relatively homogeneous, though the differences among their mean error gravities exceeded chance expectations, especially in the case of the adverbial morpheme error in No. 25.

Preposition--Standard Deviation of  
Error Gravity .42

Preposition errors were perceived among the lowest three in mean error gravity (2.74, Table IV) but among the lowest four in homogeneity. Error statements were the following:

No. 7	*I may have to speak him in the future.	3.23a
No. 22	*I arrived to Oklahoma City after dark.	2.51b
No. 6	*My country still lacks of high technology.	2.49b

The least homogeneous prepositional error was "I may have to speak him in the future," since it deviated .49 from the overall mean of 2.74. Its mean error gravity of 3.23, as

shown above and in Table V, was significantly greater than those of "I arrived to Oklahoma City after dark," and "My country still lacks of high technology," which showed only chance differences between themselves.

Subject-Verb Agreement--Standard

Deviation of Error Gravity .43

Ranking second highest in mean error gravity (2.90, Table IV), this component's statements had the third highest standard deviation from the average of its two statements, which were:

- |        |                                |       |
|--------|--------------------------------|-------|
| No. 16 | *Tuition fees is low.          | 3.20a |
| No. 14 | *He always turn up his stereo. | 2.60b |

In Table V, the above two statements are shown to be three significant rank positions apart. They are equally "troublesome" in that No. 16 is .30 points above the over-all mean of 2.90, while No. 14 is .30 points below.

Word Choice--Standard Deviation of  
Error Gravity .62

Although the word choice component was tied for the fourth gravest in error, the standard deviation of its error statements was even greater; in fact, it was next to the highest. Error statements were:

- |        |   |       |
|--------|---|-------|
| No. 8  | *Two questions always repeating in my mind. | 3.39a |
| No. 10 | *He makes exercise in the gym.              | 2.91c |



No. 18 \*The engineer does an important  
part in a developing country. 2.16c

Table V shows error statement No. 8 "Two questions always repeating in my mind," as tied with two others and the second most serious in error gravity (rank position 3.0). Sentence No. 10, "He makes exercise in the gym," was significantly less serious, tied with two others as sixth most serious (rank position 11.0). Even less serious was No. 18, "The engineer does an important part in a developing country," ranked 22.5 in Table V, which was next to least in error gravity.

All the word choice error statements differed significantly from each other. "Two questions always repeating in my mind," and "The engineer does an important part in a developing country," contributed most to the relative heterogeneity of word choice error statements, deviating .59 and .66 points from the mean, respectively.

American Error--Standard Deviation of  
Error Gravity .67

Least homogeneous of all component error statements were American errors, ranging from 1.52 to 3.24 in mean error gravity, as follows:

No. 19	*He ain't here now.	3.24a
No. 4	*He could of done the work.	2.90b
No. 12	*John and me came early.	2.84c
No. 13	*He did good.	2.26d

No. 9 \*I feel very badly about that. 1.52e

Every American error statement differed significantly from each other in mean perceived gravity, and in the order listed above. It is interesting to note that the easily-recognized and highly-tabooed "ain't" and the not-so-well understood "feel very badly" contributed most to heterogeneity of American error statements.

The American error component was not perceived as very serious (next to least), but this was due mostly to "He did good," and "I feel very badly about that," which fell considerably below the mean gravity of 2.55.

#### Relationship between Error Components and Statements

The above discussion of error statement heterogeneity made it clear that seriousness of an error component, overall, was not strongly related to error gravity of individual corresponding statements. In other words, knowing the error gravity of a particular error component helped little to predict how grave respondents felt a particular error statement corresponding to that component was. In fact, the author's rank-order correlation between component means and corresponding standard deviations of statement means yielded a relationship of  $\rho = .33$ ,  $p > .05$ ,  $df = 7$ . If one squares the rho, the coefficient of determination is .11, which means that only eleven percent of the variation in component error gravity was explained by variation in error statements.

The rank positions of component gravities and statement deviations are shown in Table VII. The lower the rank position, the greater the error gravity and the less the disparity among error statements.

The "ideal" entry in Table VII is the verb form error component. The rank positions indicate that verb form errors were perceived as most serious, with a rank position of 1.00 and the variation in gravity elicited by verb form error statements was the lowest with a rank position of 1.00. Put another way, the verb form component's mean error gravity was a better indicator of specific error gravity than was the mean error gravity of any other component.

The second gravest error components involved subject-verb agreement errors. Subject-verb agreement statements, however, showed the sixth highest variation in error gravity. Put simply, the subject-verb agreement category, on the surface, showed up as second most serious, but specific error statements did not follow suit. It should be recalled that the subject-verb agreement statements "Tuition fees is low," and "He always turn up his stereo," fell considerably above and below the component mean, respectively.

Tied for the fourth most serious errors in Table VII are the word choice, word form and number of noun error components. But again, the error statements ratings did not follow the overall pattern. While word choice ranked as one of the fourth most serious, the variation among specific statement gravities was the seventh highest. This was due

TABLE VII

RANK POSITIONS OF COMPONENT MEAN ERROR GRAVITIES AND STANDARD  
DEVIATIONS OF CORRESPONDING ERROR STATEMENTS

Error Component	Rank Position of Component's Mean Error Gravity	Rank Position of Standard Deviation of Component's Statements	Rank Position Difference
Verb Form	1.00	1.00	.00
Subject-Verb Agreement	2.00	6.00	-4.00
American Error	7.00	8.00	-1.00
Word Choice	4.00	7.00	-3.00
Word Form	4.00	4.00	.00
Number of Noun	4.00	2.00	+2.00
Preposition	6.00	5.00	1.00
Article	8.00	3.00	5.00

Spearman rho correlation = .33,  $p > .05$ ,  $df = 7$ .

mostly to the statements "Two questions always repeating in my mind," and "The engineer does an important part in a developing country," which were perceived as substantially more and less grave than the average, respectively.

The gravity of word form errors and the variation among specific error statements in that component held the same reflective positions which also was fourth.

Number of noun component errors also were perceived as fourth most serious. Variation among error statements, however, were the second lowest, with a rank position of 2.00. The fact that the error component was rated more grave than the standard deviation rank indicated was due to one statement, namely, "To master English is my second wishes," which was seen as significantly more grave than the other two number of noun statement, which did not differ significantly.

The preposition error component was ranked third lowest in seriousness. The variation among statement gravities, however, was ranked the fifth highest. The higher variation in statements was due to the error statement No. 7, "I may have to speak him in the future," which was judged significantly more serious than the other two preposition errors, which differed within chance expectations.

Article errors, as seen in Table VII, were deemed least serious, with a rank position of 8.00. Deviation of statement scores was the third lowest. Still, all article error statements differed significantly and to about the same degree.

American errors ranked next to last in seriousness,

yet the error statements were perceived as most different in error severity. This was due to statements "He ain't here now," and "I feel very badly about that," which fell considerably above and below the average of the five American error statements, respectively.

#### Error Statement Measurement Consistency

Error statements, of course, varied in their "ability" to draw consistent responses from any given individual. In other words, some statements elicited some high gravity ratings from respondents who generally gave low gravity ratings and vice versa.

A statement's relative measurement consistency is determined by its discriminatory power. For each statement, the mean gravity rating of the twenty-five percent of respondents who recorded lowest ratings was computed. Similar means were computed for the highest twenty-five percent of respondents. The lowest and highest twenty-five percent comprised thirty respondents each.

One measure of a statement's discriminatory power is the difference between the mean error gravity recorded by the highest and lowest twenty-five percent of respondents. For example, as shown in Table VIII, the thirty highest raters recorded a mean gravity of 4.10 for statement No. 23, "Our country needs are increasing rapidly." The thirty lowest raters recorded a mean of 1.45 for this statement. The mean discriminatory power is represented by the

TABLE VIII

DISCRIMINATORY POWER OF EACH OF 25 ERROR STATEMENTS:  
BY MEAN, RATIO AND STANDARD SCORE

Error Statement	Mean Gravity 30 Highest Raters	Mean Gravity 30 Lowest Raters	Mean Discriminatory Power	Power Ratio	Power Ratio Standard (z)
23. Our country needs are increasing rapidly. (NN)	4.10	1.45	2.65	.53	1.92
24. One thing I don't like is the traffics. (NN)	3.93	1.47	2.46	.49	1.22
7. I may have to speak him in the future. (P)	4.30	1.87	2.43	.48	1.22
25. Their father is so kindly. (WF)	3.74	1.36	2.38	.48	1.05
12. John and me came early. (AE)	4.07	1.70	2.37	.47	.88
17. To master English is my second wishes. (NN)	4.13	1.80	2.33	.47	.88
19. He ain't here now. (AE)	4.36	2.03	2.33	.45	.53

TABLE VIII (Continued)

Error Statement	Mean Gravity 30 Highest Raters	Mean Gravity 30 Lowest Raters	Mean Discriminatory Power	Power Ratio	Power Ratio Standard (z)
21. After complete their studies, they will return home. (WF)	4.10	1.87	2.23	.45	.53
1. I am very interest in construction. (WF)	4.03	1.63	2.40	.45	.53
2. It hard to compare America with Vietnam. (VF)	4.20	1.93	2.27	.45	.53
5. There are many good universities in U.S.A. (Art)	3.34	1.14	2.20	.44	.35
14. He always turn up his stereo. (SVA)	3.64	1.50	2.14	.43	.18
15. He wants to work after he will be finished his studies. (VF)	4.30	2.17	2.13	.43	.18
8. Two questions always repeating in my mind. (WC)	4.33	2.25	2.08	.42	.00



TABLE VIII (Continued)

Error Statement	Mean Gravity 30 Highest Raters	Mean Gravity 30 Lowest Raters	Mean Discriminatory Power	Power Ratio	Power Ratio Standard (z)
18. The civil engineer does an important part in a developing country. (WC)	3.56	1.46	2.10	.42	.00
16. Tuition fees is low. (SVA)	4.00	1.97	2.03	.41	- .18
20. One of them is undergraduate stu- dent. (Art)	3.57	1.52	2.05	.41	- .18
22. I arrived to Okla- home City after dark. (P)	3.57	1.50	2.07	.41	- .18
11. This is one reason I was go abroad. (VF)	4.20	2.13	2.07	.41	- .18
6. My country still lacks of high technology. (P)	3.50	1.47	2.03	.41	- .18
4. He could of done the work. (AE)	3.84	1.83	2.01	.40	- .35

TABLE VIII (Continued)

Error Statements	Mean Gravity 30 Highest Raters	Mean Gravity 30 Lowest Raters	Mean Discriminatory Power	Power Ratio	Power Ratio Standard (z)
13. He did good. (AE)	3.80	1.56	1.74	.35	-1.32
9. I feel very badly about that. (AE)	3.62	2.04	1.58	.32	-1.75
3. He studies in the library on the Sunday afternoon. (Art)	2.87	1.33	1.54	.31	-1.92
10. He makes exercise in the gym. (WC)	3.56	2.13	1.43	.29	-2.28

Parentheses key: NN = Number of noun error      VF = Verb form error  
                   P = Preposition error              Art = Article error  
                   WF = Word form error              SVA = Subject-verb agreement error  
                   AE = American error                WC = Word choice error

difference between these two means in column 3: 2.65.

From this mean discriminatory power, the Power Ratio of .53, shown in column 4 of Table VIII, was computed.<sup>3</sup> The 1.92 in the far right column represents the Standardized Power Ratio of error statement No. 23.<sup>4</sup> Standard Power Ratios are listed from highest to lowest.

The most significant figures in Table VIII are in the far right column. They tell how many standard deviation units each error statement's discriminatory power lies above and below the mean of all statements' discriminatory powers. For example, the first row of Table VIII shows that statement 23 has a standard power score of 1.92. This means that the power of statement 23 to separate the highest and lowest raters stood nearly two standard deviations above the mean separation power of all twenty-five statements. This can be considered a measure of the reliability, or consistency in measurement.

Designating unreliable items uneventfully is an arbitrary matter. Some students of the subject suggest that any power ratio of .20 or more substantially is reliable.<sup>5</sup> In the present study the author has designated all statements below the horizontal line in Table VIII as candidates for questionable reliability. Their power scores lie below the mean. Thus, the possibility arises that these error statements measure something other than perceived seriousness of grammatical errors, per se.

Could it be that some of these less reliable statements

bring forth images of particular ethnic groups of nationalities for which widespread prejudice is held? For example, the misuse of a form of be in sentence No. 16 "Tuition fees is low," may sound like usage common in non-standard English (such as that typically associated with American Blacks), an "inferior" form of speech according to some and suggestive of lack of intelligence or education. Perhaps some of these less reliable statements make the writer sound unintelligent in other ways. For example, the verb in sentence No. 22, "This is one reason I was go abroad," is clearly deviant from what a native speaker would say. Perhaps it is difficult to understand how someone could make such a flagrant error. Accordingly, someone who says or writes this might be considered stupid. As mentioned in Chapter I, Chastain (1980) suggests that the simplicity of the pattern used ungrammatically is what may provoke reactions of high irritation. Many such intervening variables could interact with the error statement at hand. If so, then both the highest and lowest raters might give similar responses to such a statement.

#### Similarity among Error Components

In addition to mean differences in gravity ratings among the eight error components, the author was interested in their similarities: i.e., the correlations among the mean ratings the components elicited from the one hundred nineteen respondents. Mean gravity ratings by respondents

for each possible pair of error components  $[(8 \times 7)/2 = 28$  pairs] were intercorrelated and are reported in Table IX. With a critical coefficient of .254,  $p < .01$ ,  $df = 117$ , one can see that all components show moderate to high correlations ranging from .67 to .86.

McQuitty's elementary linkage and factor analysis uncovered only one cluster of components from coefficients in Table IX.<sup>6</sup> This means the eight components measured one underlying variable, which, the author assumed, was gravity of grammatical errors. The cluster accounted for 57 percent of the total variation in mean gravity scores on the components.

If one were to choose the component best representing the pattern of gravity ratings for all components, it would be word form, since it showed the highest average correlation with the other seven components (.81). In fact, the bottom row of Table IX shows that sixty-five percent of the average total variance in gravity ratings of all components was explained by the variation in word form ratings.

Second highest predictor component was number of noun, which explained an average of sixty percent of the variation in other components' error gravity ratings. The two lowest, yet substantial, predictors were American and article errors, which explained fifty-one and fifty-two percent of other components' variance respectively.

TABLE IX  
 PRODUCT-MOMENT CORRELATIONS OF MEAN GRAVITY SCORES  
 AMONG EIGHT ERROR COMPONENTS

	WF	NN	WC	VF	P	SV	ART	AE
WF	--	.86	.78	.83	.80	.77	.81	.79
NN	.86	--	.77	.76	.80	.79	.74	.72
WC	.78	.77	--	.81	.79	.71	.69	.70
VF	.83	.76	.81	--	.70	.74	.73	.69
P	.80	.80	.79	.70	--	.73	.70	.70
SV	.77	.79	.71	.74	.73	--	.71	.74
ART	.81	.74	.69	.73	.70	.71	00	.67
AE	.79	.72	.70	.69	.70	.74	.67	--
Mean Correlations	.81	.78	.75	.75	.74	.74	.72	.71
Explained Variance (%)*	.65	.60	.57	.57	.56	.55	.52	.51

Note:  $r \geq .254$  or  $>$ ,  $p < .01$ ,  $df = 117$ .

\*Explained variance refers to the amount of variance shared between any two variables. It is found by squaring the mean correlation.

## NOTES

<sup>1</sup>The reader should be circumspect about variance analysis findings, since sample respondents were not drawn at random. However, as Kerlinger (1973:197) points out, even biased measures usually are less biased than are authoritative and intuitive judgment. He recommends use of statistics in such cases, as well as a reserve--a willingness to disbelieve if evidence indicates.

<sup>2</sup>Standard deviations represent the square root of the sum of squared deviations of a component's error statement gravity rating after the sum is divided by  $N - 1$ . The standard deviation can be viewed as the degree of homogeneity of error statements' perceived seriousness.

<sup>3</sup>Power ratio of a statement represents the mean discriminatory power divided by the maximum value of the rating scale being used. In statement No. 23 in Table VIII, the power ratio =  $2.65/5.00 = .53$ .

<sup>4</sup>Power ratio standard score of a statement represents the number of standard deviation units the statement's power ratio stands above or below the mean power ratio. The standard deviation of the twenty-five power ratios in Table VIII is .057 and the mean is .42. The power ratio for statement No. 23, for example, stands .11 points above the

mean of .42. Hence,  $.11/.057 = 1.92$  standard deviation units above the mean.

<sup>5</sup>Thomas J. Sheehan. 1971. An introduction to the evaluation of measurement data in physical education. Reading, Mass. p. 212.

<sup>6</sup>Louis L. McQuitty. 1957. Elementary linkage analysis for isolating orthogonal and oblique types and typical relevancies. Educational and Psychological Measurement. 17:207-29.



## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

From the foregoing analyses, each of the eight component research questions on Pages 59 and 60 was answered and, at the same time, posed even more questions suggesting further and potentially more fruitful research.

First, Table IV (Page 62) showed that the overall perceived mean gravity of seriousness of the twenty-five error statements was 2.78, which lies near the moderate gravity level on a 5-point scale. But the range of item gravity as shown in Table V, (Page 65) was 1.52 to 3.61-- indicating that the lower figure, representing an article error, was not very serious and that 3.61, representing a verb form error, was quite serious.

But even more important, regarding the conceptual aspect of the research instrument, we see that a substantial number of error statements showed a consistency of measurement which indicated the attitude scale was reliable. They sufficiently separated respondents who truly felt different about the gravity of seriousness of grammatical errors.

Further, when statements were grouped into error

components to which they purportedly belonged, the instrument again displayed a significant degree of measurement consistency, in that the eight error components separated the high and low gravity raters. At the same time, some error components differed significantly in the degree of perceived seriousness they elicited. Component mean gravity ranged from 1.54 for article errors to 3.61 for a verb form error.

However, the error statements within each component varied significantly in mean perceived seriousness. In fact, five out of eight error components--articles, word form, subject-verb agreement, word choice, and American errors--carried corresponding error statements, all of which differed significantly in perceived seriousness of error. The other three error components--verb form, number of noun, and preposition--showed one error statement out of three deviating significantly from the other two. As stated on Page 76 and shown in Table VII, the relation between the seriousness of an error component and its corresponding error statements was minimal ( $\rho = .33$ ). In other words, the seriousness of a particular component was not a very efficient predictor of the seriousness of specific examples of that type of error.

Though the grammatical error scale was reliable overall, Table VIII, Pages 80-3, showed that ten of the twenty-five error statements possessed questionable discriminatory power, in that "normally" highly critical respondents gave

them relatively low error gravity ratings, while several less critical respondents saw the same statements as quite serious.

Inconsistencies notwithstanding, one must conclude the author's measuring instrument, with some refinements, holds promise as a spring board for further research. As shown in Table IX, the error components did measure one underlying variable, which, in the abstract, involved perception of seriousness or gravity of grammatical errors.

#### Conclusions and Recommendations

The aim of this thesis was not to prove that communication takes place despite grammatical errors. Rather, it centered on movement in direction of the goal of communicative competence. With this goal, teachers of ESL possibly can place linguistic deviances in a more appropriate perspective in lieu of futilely trying to eradicate every grammatical error. This broader goal could diminish significantly the shock some teachers experience when advanced students of English as a foreign language make what are considered to be elementary errors.

This does not imply that ESL teachers should abandon all standards and accept errors without comment. But errors might be viewed more realistically from the perspective of a non-language-teaching native speaker who seems to be interested primarily in communication and who perceives that certain errors are more irritating than others.

Such a perspective seems justified by some of the comments made by the respondents whose own teaching responsibilities were in the fields of technology. Some samples follow:

None of these is a serious error. The major problem is inability to write precise, logical, concise, direct sentences.

My opinion is that either they speak and write good [sic] English or they don't. If I can understand them, OK, but, if they write poorly, they turn me off.

I correct my international students' English on term papers, theses, etc., but I don't deduct points for incorrect English. If I can understand what they're trying to say, that's sufficient.

If they communicate, we do not try to make Americans out of these students.

I personally feel most of these errors are serious. However, I have answered from the standpoint of whether I feel the error would cause a problem of interpretation for the reader or listener.

Almost invariably, the comments mentioned the word communicate. Nonetheless, results of other investigations reveal that certain errors provoke irritation among receivers, in addition to the hierarchy established here. Indisputedly, this author's findings reveal that errors in verb form were considered the most serious ( $M = 3.46$ ), errors in articles, the least serious ( $M = 2.14$ ). Errors in prepositions were considered moderately serious ( $M = 2.74$ ) as were subject-verb agreement, word form, word choice, and number of noun errors ( $M_s = 2.90, 2.82, 2.82,$  and  $2.82$ , respectively). American errors, next to least serious, elicited a mean gravity of 2.55.

Furthermore, as Table VIII reveals, ten error component statements of the eight categories did not have much discriminatory power (not to be interpreted as error gravity). This means that they seemed to be measuring something other than reactions to the linguistic code. Of these statements, two represented articles, two represented prepositions, one each represented verb form, subject-verb agreement, and word choice, and three represented American error.

Although the three non-discriminatory American error sentences need not concern the ESL teacher, it is interesting to speculate about what they were measuring. Probably statement No. 9, "I feel very badly about that," contained the least easily recognizable of all twenty-five errors. In fact, it registered twenty-five "no responses" on the scale, which might be interpreted as a statement of the nuance of usage. Sentence No. 4, "He could of done the work," and No. 13, "He did good," possibly are in the speech patterns of some of the respondents. Perhaps these factors may account in part for these three sentences measuring something other than what was sought.

Again, one can only speculate about what the other seven non-native error statements were measuring. Of special concern is sentence No. 11, "This is one reason I was go abroad," a verb form component error. This statement accounted more than the other two for the verb form component's high error gravity rating. Perhaps all that can be said about this item, as well as the other six,

is that, for some interlocutors, there invariably are errors of all linguistic types that evoke "unscientific" reactions--reactions that most likely are involved with stereotypical views of ethnic groups, etc., who commonly use these linguistic patterns in spoken and written expression.

Certainly the ESL teacher cannot control the factors contributing to irritability. What conclusions, then, can be drawn for teaching in the daily classroom? Although it would seem that the observed hierarchy establishes priorities, no error truly can be dismissed, even for an error component low in seriousness, provided one wishes to avoid possible negative emotional reactions. Certainly, the verb reigns supreme and deserves special emphasis in the daily lesson as Gouin observed many years ago. Perhaps teachers should examine more closely Asher's (1982) total physical response or other verb-centered methods to ascertain what parts of these are applicable to their particular situation. Undoubtedly, the ESL teacher should make many contrasts and comparisons when teaching tenses and provide for as many communicative experiences as possible using verbs in all ways. In correction of errors in oral and written communication, errors in verbs deserve high penalization.

Overall, the hierarchy of error gravity is the most applicable to grading students' written compositions. Carl James set out to discover what was involved in grading

ESL students' written work with his error gravity study in 1971. To his effort can be added the perspective of this study. Errors in verb form primarily, and subject-verb agreement secondarily, should be graded with much more severity than lapses in prepositions or articles. (Of course, it must be kept in mind that we are not talking about global errors that impede communication. They deserve first priority.) Information from the hierarchy might be given to students themselves to help them monitor their own production. It could be used as a self-check list.

In summary, the hierarchy of error gravity established here can direct the teacher's efforts in error correction rather than allowing it to be a haphazard affair. This is true for written compositions and for oral correction as well. In addition, the hierarchy can illustrate areas of greater or lesser emphasis for teaching grammar.

Further research is necessary to corroborate these findings. It would be useful to discover if, by using the same categories but different component sentences, similar findings would occur. Varying the population of respondents would also be interesting. In this study, the evaluators were highly educated--most had Ph.Ds. Would a less-educated population produce the same results? Also, this study was somewhat artificial in that each sentence contained only one error. Yet we know that ESL students' written work often contains sentences with

multiple errors. Perhaps some method for rating sentences with multiple errors can be devised. These and other concerns remain for the future researcher of error gravity.

Finally, the failure of error statements to "hang together" under their component headings suggests the components are not mutually exclusive. The heterogeneity of seriousness perceived among "blood-relative" error statements also implies problems with exhaustiveness of component subsets, as well as the level of discourse regarding the dependent variable (perception of error gravity) itself.

In the author's analytical design, the assumption was that differences potentially existed in perceived seriousness of error among the eight error components. In other words, I sought to set up independent error components so that variation in the dependent response (perceived gravity of seriousness) could be detected. It was assumed the components were disjointed, so to speak. But mutual exclusiveness of grammatical error components, as outlined in textbooks or conceived by the author, are not as clearcut in people's perceptions as, say, the independence of male and female as subsets of the variable sex. Simply stated, it was difficult to maximize the systematic variance, a basic requirement in any research design.

Why, for example, would one word choice error



statement rank second; another eleventh and another twenty-second in order of seriousness? Yet, at the same time, one word choice error was tied with verb form, another with word form and an American error, and still another with an article error? (See Table V.) Further, how well can a respondent distinguish between the seriousness of say, "He is so kindly," and "He feels very badly"? Yet, these errors are classified as word form and American error, respectively.

Moreover, how many so-called grammatical "purists" are caught saying "John and me went to the movie?," but would use "ain't" only behind closed doors--and then only with a tinge of guilt! Yet, both of these were classified as American errors. And the "ain't" error was rated significantly more serious than the "John and me . . ." error in Table V. In fact, all American errors differed from each other beyond chance expectations.

The point here is that component headings in some ways were too broad--broad enough to induce compound variables. American errors comprise errors that might appropriately be labeled "case," "slang," "substitution of adjective for adverb," etc.

It appears unexplained factors are involved in statements other than the formal errors stated in the components under which the statements were placed. And perhaps some of these factors were more obvious to the respondents than were the primary errors alluded to by

the author. Serious thought must be given to renaming error components that will accommodate variables in error statements not accounted for in this study.

## REFERENCES

- Albrechtsen, Dorte, Henricksen, Brigit, and Faerch, Claus. 1980. Native speaker reactions to learners' spoken interlanguage. Language Learning 30(2):365-369.
- Asher, James J. 1966. The learning strategy of the total physical response: a review. Modern Language Journal 50(6):79-84.
- Asher, James J. 1982. Learning another language through actions: the complete teacher's guidebook. (2nd ed.). Los Gatos, CA: Sky Oaks Productions, Inc.
- Brown, H. Douglas. 1980. Principles of language learning and teaching. Englewood Cliffs, NJ: Prentice-Hall.
- Burt, Marina K. 1975. Error analysis in the adult EFL classroom. TESOL Quarterly 9(1):53-63.
- Burt, Marina K. and Kiparsky, Carol. 1972. The gooficon: a repair manual for English. Rowley, MA: Newbury House.
- Chafe, Wallace. 1970. Meaning and the structure of language. Chicago: The University of Chicago Press.
- Chastain, Kenneth. 1980. Native speaker reaction to instructor identified student second-language errors. Modern Language Journal 64(1):210-215.
- Chastain, Kenneth. 1981. Native speaker evaluation of

- student composition errors. Modern Language Journal. 65 (3):288-294.
- Corder, S. P. 1967. The significance of learner's errors. IRAL 10(4):161-170.
- Corder, S. P. 1971. Idiosyncratic dialects and error analysis. In Jack C. Richards (Ed.). Error analysis Perspectives on second language acquisition. 19-27. London: Longman.
- Dulay, Heidi, C. and Burt, Marina, K. 1974. You can't learn without goofing: an analysis of children's second language "errors." In Jack C. Richards (Ed.). Error analysis: perspectives on second language acquisition. 95-123. London: Longman.
- Fillmore, Charles J. 1968. The case for case. In E. Bach and R. T. Harnes (Eds.), Universals in linguistic theory. 1-88. New York: Holt, Rinehart, and Winston, Inc.
- Foss, Donald J. and Hakes, David T. 1978. Psycholinguistics: an introduction to the psychology of language. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Galloway, Vicki B. 1980. Perceptions of the communicative efforts of American students of Spanish. Modern Language Journal 64 (4):428-433.
- Gouin, Francois. 1892. The art of teaching and studying languages. trans. H. Swan and V. Betis. London: George Philip and Son: New York: Charles Scribner's Sons.

- Grice, H. P. 1975. Logic and conversation. In F. Cole and J. L. Morgan (Eds.). Syntax and semantics: Speech acts 3:41-58.
- Guntermann, Gail. 1978. A study of the frequency and communicative effects of errors in Spanish. Modern Language Journal 62(5-6):249-253.
- Jain, M. P. 1974. Error analysis: source, cause, and significance. In Jack C. Richards (Ed.). Error analysis: Perspectives on second language acquisition. 189-215. London: Longman.
- Johansson, Stig. 1975. The identification and evaluation of errors in foreign language: A functional approach. In Claes Schaar and Jan Swartvik (Eds.). Papers in contrastive linguistics and language testing. 22-33. Lund, Sweden: CWK Gleerup.
- Joos, Martin. 1961. The five clocks. New York: Harcourt, Brace and World.
- Kerlinger, Fred N. 1973. Foundations of behavioral research. New York: Holt, Rinehart, and Winston.
- Lindquist, E. F. 1953. Design and analysis of experiments in psychology and education. Boston: Houghton Mifflin Co.
- McQuitty, Louis L. 1957. Elementary linkage analysis for isolating orthogonal and oblique types and typal relevancies. Educational and a Psychological Measurement. 17:207-29.
- Nemser, William. 1971. Approximative system of foreign

- language learners. In Jack C. Richards (Ed.). Error analysis: Perspectives on second language acquisition. 55-63. London: Longman.
- Piazza, Linda. 1980. French tolerance for grammatical errors made by Americans. Modern Language Journal 64(4):422-427.
- Politzer, Robert L. 1978. Errors of English speakers of German as perceived and evaluated by German natives. Modern Language Journal 62(5-6):253-261.
- Ravem, Roar. 1968. Language acquisition in a second language environment. In Jack C. Richards (Ed.). Error analysis: Perspectives on second language acquisition. 124-133. London: Longman.
- Ravem, Roar. 1974. The development of wh- questions in first and second language learners. In Jack C. Richards (Ed.). Error analysis: Perspectives on second language acquisition. 34-55. London: Longman.
- Richards, Jack C. 1971. A non-contractive approach to error analysis. English Language Teaching 25(2): 204-219.
- Richards, Jack C. and Sampson, Gloria P. 1974. The study of learner English. In Jack C. Richards (Ed.). Error analysis: Perspectives on second language acquisition. 3-18. London: Longman.
- Schumann, John. 1972. Communication techniques. TESOL Quarterly 6(2):143-6.

- Selinker, Larry. 1972. Interlanguage. IRAL 10(2):209-31.
- Sheehan, Thomas J. 1971. An introduction to the evaluation of measurement data in physical education. Reading, MA: Addison-Wesley Publishing Co.
- Sheorey, Ravi. 1982. Native vs. non-native perception of error gravity. Paper presented at The Second Midwest Regional TESOL Conference, Indianapolis, IN, April 2, 1982.
- Tucker, Richard G. and Sarofim, Marian. 1979. Investigating linguistic acceptability with Egyptian EFL students. TESOL Quarterly 13(1):29-39.
- Turner, Jr., David A. 1980. Native speakers; reactions to non-native speakers' morphological errors. TESL TALK 11:52-58.

APPENDIX A

ERROR JUDGMENT QUESTIONNAIRE



TO:

FROM: Mary Ann Ward (Extn. 7519; home: 377-5481)

DATE: January 24, 1983

SUBJECT: Enclosed Questionnaire

Approximately 1,900 international students are currently enrolled at OSU, many in technological fields. Not all of them have a complete command of the English language, and many make various kinds of errors in speaking and writing English.

As a teacher of English as a second language, I am interested in finding out how OSU instructors react to the errors of their international students. To that end, I have devised the enclosed questionnaire. The results of this survey will be incorporated into my master's thesis in Teaching English as a Second Language, being directed by Dr. Ravi Sheorey of the English Department.

I would appreciate your completing the enclosed form and returning it to me (along with this cover letter) in the enclosed envelope.

Would you please answer the following questions first?

1. What is your field of specialization? \_\_\_\_\_  
\_\_\_\_\_
2. Are you a native speaker of English? Yes \_\_\_ No \_\_\_
3. Have you ever studied a foreign language?  
Yes \_\_\_ No \_\_\_ If yes, for how long? \_\_\_\_\_
4. Do you often have international students in any of your classes? If you do, what is the average number of international students per semester in all of your classes?  

_____ None	_____ 11-20
_____ 1-10	_____ more than 20

PLEASE COMPLETE THIS QUESTIONNAIRE EVEN IF YOU HAVE NO INTERNATIONAL STUDENTS.

## Error Judgment Questionnaire

Directions: Given below are 25 sentences representing some recurrent types of errors in written English made by students of English as a second language. After reading each sentence, please do the following:

1. Underline the error.
2. Write a correction in the space provided below the sentence.
3. Circle the number which shows how serious you think the error is. Number "1" indicates that the error is not serious. Number "5" indicates that the error is very serious.
4. If you do not recognize any error, please write "no error" in the space below the sentence.

	<u>Not Serious</u>			<u>Very Serious</u>	
1. I am very interest in construction.	1	2	3	4	5
2. It hard to compare America with Vietnam.	1	2	3	4	5
3. He studies in the library on the Sunday afternoon.	1	2	3	4	5
4. He could of done the work.	1	2	3	4	5
5. There are many good universities in U.S.A.	1	2	3	4	5
6. My country still lacks of high technology.	1	2	3	4	5
7. I may have to speak him in the future.	1	2	3	4	5
8. Two questions always repeating in my mind.	1	2	3	4	5

	<u>Not Serious</u>			<u>Very Serious</u>	
9. I feel very badly about that.	1	2	3	4	5
10. He makes exercises in the gym.	1	2	3	4	5
11. This is one reason I was go abroad.	1	2	3	4	5
12. John and me came early.	1	2	3	4	5
13. He did good.	1	2	3	4	5
14. He always turn up his stereo.	1	2	3	4	5
15. He wants to work after he will be finished his studies.	1	2	3	4	5
16. Tuition fees is low.	1	2	3	4	5
17. To master English is my second wishes.	1	2	3	4	5
18. The civil engineer does an important part in a developing country.	1	2	3	4	5
19. He ain't here now.	1	2	3	4	5
20. One of them is undergraduate student.	1	2	3	4	5
21. After complete their studies, they will return home.	1	2	3	4	5
22. I arrived to Oklahoma City after dark.	1	2	3	4	5
23. Our country needs are increasing rapidly.	1	2	3	4	5
24. One thing I don't like is the traffics.	1	2	3	4	5
25. Their father is so kindly.	1	2	3	4	5

APPENDIX B

PRETEST QUESTIONNAIRE

TO: All OKTESL Conference Participants

FROM: Mary Ann Ward  
English Language Institute & OSU TESL Program

DATE: November 6, 1982

SUBJECT: Enclosed questionnaire

In the interest of research in TESOL, would you please complete the enclosed questionnaire and return it to one of the OSU Conference Facilitators? Thank you.

Please answer the following questions before you complete the questionnaire:

1. Are you a native speaker of English? \_\_\_\_\_
2. At what level(s) and for how long have you taught ESL?

<u>Level</u>	<u>Years/months</u>
___ Elementary	_____
___ Secondary	_____
___ Intensive English	_____
___ College of University	_____

## Error Judgment Questionnaire

Directions: Given below are 25 sentences, representing some recurrent types of errors in written English made by ESL students. After reading each sentence, please do the following:

1. Underline the word(s) which contain the error.
2. Write a correction in the space provided below the sentence.
3. Circle the number which shows how serious you think the error is. Number "1" indicates that the error is not serious. Number "5" indicates that the error is very serious.

	<u>Not Serious</u>			<u>Very Serious</u>	
1. He always turn up his stereo.	1	2	3	4	5
2. He could of done the work.	1	2	3	4	5
3. He makes exercises for his body.	1	2	3	4	5
4. To master English is my second wishes.	1	2	3	4	5
5. One thing I don't like is the traffics.	1	2	3	4	5
6. The U.S. is a leader in some technology fields.	1	2	3	4	5
7. He wants to get Master's degree.	1	2	3	4	5
8. There are many good universities in U.S.A.	1	2	3	4	5
9. He did good.	1	2	3	4	5
10. He ain't here now.	1	2	3	4	5

	<u>Not Serious</u>			<u>Very Serious</u>	
11. Their father is so kindly.	1	2	3	4	5
12. Indonesia is a country where I come from.	1	2	3	4	5
13. After complete their studies, they shall return home.	1	2	3	4	5
14. Both of them like music and sport.	1	2	3	4	5
15. I am very interest in construction.	1	2	3	4	5
16. John and me came early.	1	2	3	4	5
17. Tuition fees is low.	1	2	3	4	5
18. Is hard to compare this country with others.	1	2	3	4	5
19. Two questions always repeating in my mind.	1	2	3	4	5
20. This is one reason I was go abroad.	1	2	3	4	5
21. I may have to speak him in the future.	1	2	3	4	5
22. I feel very badly about that.	1	2	3	4	5
23. He wants to work after he will be finished his studies.	1	2	3	4	5
24. I arrived to Okla-home City after dark.	1	2	3	4	5
25. We suggested that she not to do that.	1	2	3	4	5

APPENDIX C

RESPONDENTS' COMMENTS



These errors are not serious inasmuch as the meaning is obvious in each instance.

A difficulty which international students face is the composition of a chain of sentences into a paragraph and paragraphs into an essay. All of the above sentences can be understood in spite of the range of errors. Place these errors throughout an essay and understanding is much more difficult.

In mathematics I am less concerned with correct grammatical usage (unless it is so poor as to be misunderstood) than the students ability to understand what I say.

Since I teach a laboratory in which the students report on their observations, it is my considered opinion that any grammatical or spelling errors are serious.

This includes both Oklahomans and international students. The students at OSU are receiving a degree from a major Am. university; therefore, they should as a minimum be able to read, write and converse in good English.

I feel all mistakes are important, and not only with foreign students.

As long as I can understand a student, I am happy. Your examples invariably can be understood as far as their meaning is concerned.

I find misuse of articles and wrong verb tense make up some 50% of the errors that are characteristic of international students.

Most of these errors, although horrible enough in written form, would pass almost unnoticed in oral communication. The worst of the above are those allowing different interpretation (#s 7, 10, 14 for example).

Although the errors are obvious, the idea has not been lost in these sentences.

How serious for what? Answering an exam question, writing a thesis, or writing an article for a professional journal? I rated the seriousness in terms of answering an exam question or maybe a term paper. I would consider all the errors more serious if used in a thesis or technical journal article.

None of these are serious. Most spoken English produces similar mistakes from native Americans.

From the standpoint of effective communication these

errors are trivial because the meaning is quite clear in all cases. However, improper usage is jangling to the eye and ear and destroys the pleasure of reading and listening (of course, many native-born students make similar or worse errors, and this really upsets me).

Generally, I find that foreign students have a better grasp of correct grammar, spelling, etc., than the bottom one-quarter of our American students.

When grammar interferes with concept transfer, then it is serious. Unfortunately, the synergism of dialect or scratchy handwriting and grammar errors increases the difficulty in communication.

None of these is a serious error. The major problem is inability to write precise, logical, concise, direct sentences. Sentence construction is a disaster.

The level at which the student is, and what his major area of study is, would determine the seriousness of these errors. I graded them on an undergraduate basis, assuming that his interest would be in a technical field. For more advanced programs, or language programs, move up one to two levels of seriousness.

My opinion is that either they speak/write good English or they don't. If I can understand them OK, but if they write poorly, they turn me off. I doubt that I am very consistent in what I rank as "serious" or "not serious" errors.

I correct my international students' English on term papers, theses, etc.; but I don't deduct points for incorrect English. If I can understand what they're trying to say, that's sufficient. If I were teaching English, it would probably be a different matter.

If they communicate, we do not try to make Americans out of these students.

I personally feel most of the errors are serious. However, I have answered from the standpoint of whether I feel the error would cause a problem of interpretation for the reader or listener. I am not familiar with your objective in teaching English as a second language. As you striving for perfection? If so, then I feel the international students have a long way to go, even the "good" ones. On the other hand, I see considerable variation in simple ability to communicate, and I assume this is what you are striving for. It is from this view that I have answered the questionnaire. If I am wrong in that assumption, I will be glad to repeat it for you.

All errors are equally serious. None of them are severe enough to cloud the intended meaning on an essay exam, however. Most of my contact with international students (written assignments) indicates over use of "the" in sentence construction (as in example 24). I have seen most of these errors on exams but they have not been restricted to the international student papers.

VITA

Mary Ann Ward

Candidate for the Degree of

Master of Arts

Thesis: NATIVE-SPEAKER REACTIONS TO THE INTERLANGUAGE OF  
NON-NATIVE STUDENTS: A STUDY IN ERROR GRAVITY

Major Field: English

Biographical:

Personal Data: Born in Cleveland, Ohio, June 16, 1938,  
the daughter of Mr. and Mrs. Anthony Giuliano.

Education: Graduated from Highland High School, Medina  
County, Ohio, in May, 1956; received Bachelor of  
Arts degree in Spanish from Kent State University  
in 1960; attended University of the Americas,  
Mexico City, Mexico, winter quarter of 1957; at-  
tended the University of Akron summers of 1961  
and 1962; completed requirements for the Master  
of Arts degree at Oklahoma State University in  
December, 1983.

Professional Experience: Reading Counselor at The  
Reading Laboratory of Philadelphia, 1960-1961;  
teacher, Windham High School, Windham, Ohio,  
1961-1962; teacher, North High School, Akron,  
Ohio, 1962-1964; teacher, West Branch High School,  
West Branch, Iowa, 1964-1966; teacher, Mebane  
School, Alachua County, Florida, 1966-1967;  
teacher, Stillwater Junior High, Stillwater,  
Oklahoma, 1967-1970; instructor, English Lang-  
uage Institute, 1976 to present.