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presented by

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SAUDI STUDENTS' REVISING STRATEGIES IN ARABIC AND ENGLISH ESSAYS

BY

OTHMAN R. AL-SEMARI

A DISSERTATION

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ABSTRACT

SAUDI STUDENTS' REVISING STRATEGIES IN ARABIC AND ENGLISH ESSAYS

By

Othman R. Al-Semari

The study investigated the revising behaviors of eight advanced Saudi students in Arabic and English. The subjects were required to write and think aloud as they composed and revised two argumentative essays: one in Arabic and one in English. The were given two sixty-minute sessions to write and revise each essay. Quality ratings of the subjects first and final drafts in Arabic and English provided additional data for this study. Arabic or English revisions were analyzed according to type, purpose, and phase, based on the video tapes of the writing sessions, participants drafts, and think-aloud protocols.

The similarities in revising strategies in both the Arabic and English writing tasks were many and striking. The subjects made the same revision types and revised for the same purposes; in both Arabic and English the majority of revisions occurred as the students were producing drafts rather than when they were reading them; the overwhelming majority of changes were surface changes; the subjects were substantially more likely to make expansion changes than deletion changes; they were much more likely to make microstructure reorganization or expansion changes than meaning-preserving reorganization or expansion changes;

revision occurred both on paper and in the students' minds.

Also, revisions significantly improved the quality of
writing in both the Arabic and English writing tasks.

The study also found a number of noticeable differences between the students' Arabic and English revising behaviors. Formal changes were much more frequent in English than in Arabic. Concerning revision purposes, reorganization and deletion changes appeared more frequently in Arabic than in English. But grammatical and mechanical changes were much more numerous in English than in Arabic.

The study indicates that advanced ESL learners use more or less one pattern of revising strategies in L1 and L2. It concludes that although the participants displayed several features of advanced L1 and L2 revisers, Arabic and ESL composition teachers should stress the importance of more extensive revising of the organization, expansion and coherence aspects of writing even when dealing with advanced writers.

DEDICATION

To my mother and father with love, to my wife and children (Yazeed, Hadeel, and Aseel) with gratitude, to my relatives, and to my friends in East Lansing and elsewhere with best wishes of success to all.

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TABLE OF CONTENTS

TABLE OF	CONTENTS	vi
CHAPTER:		
1. INTRO	OUCTION AND REVIEW OF THE LITERATURE	1
	Introduction	1
	Review of Revision Studies in First Language Research	4 17 21
	Contrastive Rhetoric	32 34
	Rationale Importance of the Study and Purpose of	37
	the Study	38
	Questions of the Study	38
	Limitations of the Study	39 40
	Definition of Terms	-20
2. METHO	OOLOGY	4 1
	jects	42 43
Proc	cedure	43
	Writing Tasks	43
	The Video-Recording Procedure	46
	Think-Aloud Data	46
	Pilot Study	48 50
D-4	a Analysis	
Data	a Analysis	52
	Types of Revisions	52
	Surface Changes	53 54
	Purposes of Revisions	56

	Coherence Changes Expansion Changes Reorganization Changes Deletion Changes Vocabulary Changes Emphasis Changes Grammatical, Mechanical and Sentence Structure Changes	57 61 63 64 65 66
	Where Revisions Occurred in the Writing Process How Revisions Were Identified and Classified	73 74
3.	RESULTS OF THE STUDY	76
	Types of revisions in Arabic and English	77
	Kinds of Revisions in Arabic and English Frequency of Types of Revisions in Arabic	77
	and English	78
	Surface Changes and Text-Base Changes in Arabic and English	78 80
	in Arabic and English	
	Formal Changes	80
	Meaning-Preserving Changes	82
	Microstructure Changes Macrostructure Changes	82 83
	Similarities between Arabic and English in the Frequency of Types of	
	Revisions	84
	English in the Frequency of Types	0.5
	of Revisions	85
	Where Revisions Occur in the Writing Process	88
	Formal Changes	90
	Meaning-Preserving Changes	91
	Microstructure Changes	92
	Macrostructure Changes	92
	Purposes of Revisions in Arabic and English	93
	Why Are the Revisions Made by the	
	Students?	94
	Similarities and Differences Between Arabic	
	and English Revision Purposes	95

Arabic and English Coherence Changes Arabic and English Expansion Changes	
Arabic and English Reorganization Changes	
Arabic and English Deletion Changes	
Arabic and English Emphasis Changes	. 111
Arabic and English Vocabulary Changes . Arabic and English Correction of Grammar and Mechanics and Improvement	. 113
in Sentence Structures	. 114
Ratings of Quality in Arabic and English The Subjects' Revision Knowledge in	
Arabic and English	. 120
Behaviors in Arabic and English	. 129
4. CONCLUSIONS	. 134
Regarding Revising Strategies	. 135
Think-Aloud Protocols	. 133
Faigley and Witte's Revision Taxonomy	. 137
Implications of the Study	. 142
Suggestions for Further Research	
APPENDICES	. 148
1. FAIGLEY AND WITTE'S REVISION TAXONOMY	. 148
2. TOPICS OF WRITING ASSIGNMENTS	. 149
Topic One	. 149
Topic Two	. 149
3. INSTRUCTIONS GIVEN TO STUDENTS	. 150
4. ENGLISH TRANSLATION OF THE MATH PROBLEM'S	
THINK-ALOUD PROTOCOL	. 152
5. THE FIRST AND FINAL DRAFTS OF SAMPLE ARABIC AND ENGLISH ESSAYS	. 157
	• 157
Ali's Arabic First Draft (Including Between-	150
Draft Revisions)	. 158
Ali's Arabic Final Draft	. 164
Ali's English First Draft (Including Between-	
Draft Revisions)	. 170
Ali's English Final Draft	. 174
BIBLIOGRAPHY	. 178

LIST OF TABLES

TABLE:

1.	Names, Levels and GPAs of the Eight Subjects	43
2.	Percentages and Frequencies of Surface and Text-base Changes in Arabic and English	79
3.	Frequencies and Percentages of Surface and Text-base Changes in Arabic and English for Individual Subjects	81
4.	Total Frequencies and Percentages of All of the Subjects' Formal, Meaning-preserving, Microstructure and Macrostructure Changes in Arabic and in English	83
5.	Total Frequencies and Percentages of Individual Subjects' Formal, Meaning-preserving, Microstructure and Macrostructure Changes in Arabic	85
6.	Total Frequencies and Percentages of the Individual Subjects' Formal, Meaning-preserving, Microstructure, and Macrostructure Changes in English	87
7.	Total Frequencies and Percentages of Where Revisions of All Types Occurred in the Writing Process in Arabic and English	90
8.	Frequencies and Percentages of Total Types of Revisions and Where They Occurred in Arabic and English	93
9.	Total Frequencies and Percentages of Revision Purposes in the Study	94
10	. Total Frequencies and Percentages of Arabic and English Revision Purposes	96
11	. Frequencies and Percentages of the Arabic and English Sub-purposes	97
12	. Frequencies of Revision Purposes and Sub-purposes	102

13.	Frequencies of Revision Purposes and Sub-purposes for Each Writer in English	102
14.	The Saudi Doctoral Students' Ratings for the Arabic First and Final Drafts	117
15.	The Saudi Doctoral Students' Ratings for the English First and Final Drafts	118
16.	The Native Speakers' Ratings for Four English Essays	119

LIST OF FIGURES

FIGURE:							
1.	Faigley	and	Witte's	Revision	Taxonomy	• • • • • • • • • • • • •	148

CHAPTER 1 INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

Revision is a very important component of the writing process (Taylor, 1981; Boiarsky, 1984; Murray, 1978; Fitzgerald, 1987, 1988; Gentry, 1982; Nold, 1981; Faigley and Witte, 1981; Sommers, 1981, 1980; Berkwowitz and Watkins-Goffman, 1988, Lowenthal, 1980; Chenoweth, 1987; Della-Piana, 1978; Crowhurst, 1986; Scardamalia and Bereiter, 1986). This conclusion seems, as a number of researchers like Gaskill (1986) have noted, to be influenced by, among other things, the finding of process oriented studies of composing, namely that writing is a discovery process. In other words, such studies indicated that when writers write their ideas and reread what they have written, they discover new and relevant ideas; and the process of revision allows them to incorporate such ideas in their essays (Perl, 1980; Emig, 1971; Hayes and Flower, 1986).

And research into the revision process suggests that it is extremely useful and productive. Indeed, many writing researchers and a number of studies suggest that revision helps writers (re)shape the form, content and voice of their texts (Della-Piana, 1978; Scardamalia and Bereiter, 1985);

Zamel, 1984; Berkwowitz and Watkins-Goffman, 1988; Elbow, 1981; Murray, 1978; Sommers, 1980). Furthermore, some studies indicate that revision can enhance the quality of a composition (Gaskill, 1986; Bracewell, Scardamalia, and Bereiter, 1978; Bridwell, 1980; Ash, 1983). Moreover, revision has been shown to enable writers to organize what they know to find a line of argument, learn and discover what they did not know before (Fitzgerald, 1987; Sommers, 1980; Scardamalia and Bereiter, 1985; Murray, 1978).

Even though most (if not all) of the above researchers and many other writing experts consider revision to be an integral part of the composing process, it is worth noting that early or traditional researchers did not seem to acknowledge the importance of the role played by revision in the composing process (Fitzgerald, 1987). For example, Tressler (1912) seems to reduce the functions of revisions to those of error detection and error correction. Furthermore, early researchers regarded revision as the final stage in the writing task. For instance, Rohman (1965) proposes a model of writing which consists of three stages: pre-writing, writing and re-writing (i.e., revising a draft). His model was linear; the writer first generates ideas and plans a text, then s/he composes a draft and finally s/he refines the draft by revising and editing. The problem with this model is that by placing revision at the end of the writing process, it overlooks the contribution of revision to the formation of ideas (Hall, 1987; Faigley and

Witte, 1981). Indeed, Murray (1978) states that it is through writing and revision that writers discover what they want to say. Moreover, Rohman's model of writing and similar linear models are oversimplified and inappropriate since the findings of numerous studies (e.g., Sommers, 1980, 1981; Bridwell, 1980; Hall, 1987) indicate that revision (the third stage in Rohman's model) is a recursive process. In other words, writers have been shown to revise not only at the end of a piece, but also to do so when they plan, when they read, and when they revise.

Unfortunately, no one has attempted to investigate how Saudi or Arab students revise in Arabic, what they know about revision in Arabic, or how the same subjects revise in English and Arabic. Consequently, what they know about revision is not known. And what they need to know about the revision process cannot be determined unless we find out first what they already know about revision in Arabic or English on the basis of observing and analyzing their actual revising strategies in the two languages. The purpose of this study is threefold:

- 1) To investigate the actual revising behaviors of advanced Saudi students as they perform Arabic and English writing tasks with respect to the kinds of revisions made, the frequency of revisions made, where revision occurs in the writing process and why revision occurs.
- 2) To find out the similarities and differences between their revising behaviors in Arabic and English.

3) To comment on what their revision behaviors tell us about the amount of knowledge of revision they possess as well as what they might need to learn.

Review of the Literature

Review of Revision Studies in First Language Research

This part presents a review of studies dealing with revision in English as a first language. Arabic first language studies of revision are not reviewed simply because there are none.

Stallard (1974) compared the composing behaviors of fifteen good senior high school student writers with those of fifteen average writers. Using interviews with the subjects and observations of the students' behaviors and examining their essays, Stallard found a number of differences in composing behaviors between the good and average writers. For example, the good writers spent more time prewriting. Furthermore, the good writers were generally more concerned about having a purpose in their writing than the average writers.

In terms of revision, Stallard categorized revisions that occurred in his study into a number of levels, including: spelling, punctuation, syntactic changes, single word changes, multiple word changes and paragraph changes. He reported that good writers differed from average writers (the comparison group) in the nature and amount of revision. The good writers made substantially more revisions than the

comparison group; the good high school writers averaged 12.24 revisions per paper as compared to 4.26 per paper for average writers. Furthermore, the study found that good writers were more concerned about mechanics than some studies show. Moreover, he observed that although most of the revisions made by the good and average subjects involved single word changes, the good writers made significantly more multiple word and even paragraph revisions than the comparison group.

Beach (1976) divided his twenty-six university subjects into extensive revisers or non-revisers on the basis of short papers the subjects wrote. He defines extensive revision as "one in which the writer substantially changed the content or form of the previous draft" (p. 160). Nonrevisers, on the other hand, were those students whose drafts were not "substantially changed or altered" (p. 161). He examined the subjects self-evaluations of their writing behaviors and noted many differences between the two groups. The extensive revisers tended to think about their papers on a more abstract level than the other group, and to deal with the writing tasks in a holistic manner. They conceived of revising as involving major changes in the substance and content of their papers and were able to detach themselves and more objectively evaluate their essays. Also, they were able to generalize from one draft and to think ahead about or predict changes in the subsequent ones. When it comes to the non-revisers, Beach's study found that they tended to

view revising as "polishing" and making minor changes in form. Unlike the extensive reviser group, the non-revisers tended to view each draft separately. Furthermore, they lost interest in their papers and felt no need to further revise them. The study also showed that the non-revisers were prematurely concerned with mechanics and wording.

Beach's findings support the findings of the studies dealing with skilled and unskilled writers. Although Beach claims that extensive revisers are superior to non-revisers, he does not provide us with quality ratings of the essays of the two groups. Hence, while his findings are extremely reasonable, it is not clear, as Gaskill (1986) notes, that the extensive revisers actually produced better essays.

Perl (1979) carries out a case study of the writing behaviors of five unskilled college writers. The subjects' revising behaviors indicated that they were much more concerned with form than with content, since most of their revisions involved surface changes such as spelling and punctuation rather than content changes. Like the non-revisers in Beach's (1976) study, Perl's subjects were prematurely concerned with form of their writing.

Consequently, they failed to generate enough discourse to approximate the ideas they had. They seemed to believe or assume that revising was primarily editing or "error hunting". She pointed out that the five writers' premature editing broke the rhythm generated by thinking and writing and caused these writers to lose track of their ideas.

Another interesting finding of her study was that the poor writers were not concerned about "outside readers'" understanding of their essays.

Sommers (1980) examined the revision processes of twenty university student writers and twenty experienced adult writers (i.e., journalists, editors and academics) in a case study. Each participant wrote three kinds of essays (expressive, explanatory, and persuasive) and rewrote each essay twice. She interviewed her subjects and analyzed their essays to determine what they were concerned with while revising. She reported that there were significant differences between the two groups with regard to how they define revision. While the student writers view revision as primarily a rewording activity and believe that all text problems can be solved by rewording and rephrasing activities, the experienced writers presented a number of definitions of the revision process which indicated that they consider the revising process as a very useful and productive technique through which they can reshape the content and meaning of their texts. The study also showed that the student writers were prematurely concerned with lexical changes, and the most frequent types of revisions that they made were changes at the lexical level, a finding that is consistent with their definitions of the revision process. In contrast, the experienced writers changed complete sentences to create new meaning. Moreover, Sommers found that whereas the student writers did not attend to

audience concerns, the experienced writers tended to "imagine a reader ... whose existence and expectations influence their revision process" (p. 385). Furthermore, while the students revised an already finished, produced, and communicated meaning, experienced writers viewed revision as a recursive process that takes several cycles with each cycle involving different objectives to complete. The finding of the study concerning recursiveness of revision corroborates Della-Piana's (1978) argument concerning the recursive nature of revision. It also supports what Perl's (1980) study found regarding the recursiveness of the components of the writing process.

Bridwell (1980) investigated the revising strategies used by 100 twelfth grade students. In the writing assignment, the students were asked to describe something they knew well. They were given two sessions to write and revise their essays. To identify and deal with the revisions made by those subjects, she developed a detailed revision classification scheme. Her scheme classified revisions according to linguistic structures and operations performed on these structures. Consequently, she identified seven levels, but her actual analysis of her subjects' revisions used the following six linguistic levels:

- 1. Surface Level,
- 2. Lexical Level,
- 3. Phrase Level,
- 4. Clause Level,

- 5. Sentence Level,
- 6. Multi-Sentence Level.

Furthermore, her scheme included a number of operations under each level including addition, deletion, and substitution. Also, she classified or analyzed revisions with respect to where they occurred during the composing process. Three stages were identified: 1) Stage A or first draft revisions (i.e., revisions that students made when they were in the process of writing the first draft of their writing task), 2) Stage B or between-draft revisions (i.e., revisions that the subjects made on the first draft at a later date) and 3) Stage C or second draft changes (i.e., revisions that students made when they were in the process of writing the second draft). The study found that most of the revisions the students made were word level changes, a finding that supports Sommers's (1980) finding concerning the revising behaviors of her student writers. It also showed that there was no significant correlation between extensive revising and high ratings on subjects' texts, thus contradicting Beach's (1976) claim that extensive revisers are better writers or evaluators of their essays. Furthermore, Bridwell's study, like that of Sommers (1980), found that revision occurred recursively (and also linearly) throughout the composing process. Finally, it showed that the students revised their texts by changing drafts in progress more often than during the reading of completed drafts.

Land (1984) conducted a study to determine whether older students would make more revisions in their essays, more types of revisions or bigger revisions than younger students. The subjects of his study were randomly selected and included thirty seventh graders and thirty eleven grade students. The subjects were asked to write and twice revise texts in which they described a place. Using a scheme adapted from Bridwell (1980) for categorizing revisions, Land counted and categorized revisions into linguistic size (i.e., sentence level, lexical level, etc.) and operations like addition, deletion, reordering and so on. He found that "although the frequency and variety of revisions remain constant across grade levels, size of revision did not" (p. 5). The eleventh graders made many more sub-sentence level revisions and fewer sentence-level revisions than the seventh graders. However, Land (1984, pp. 8-9) noted that the eleventh graders' revisions tended to "modify the existing vision" and sharpen, refine or produce more coherent essays, while those of the seven grade students were "less purposeful". Land's examples of revisions by a seventh grader and those by an eleventh grader lent support to this explanation.

Monahan's (1984) study described the revision strategies of four basic and four competent twelfth-grade writers. The subjects were asked to write two compositions. The audience for the first composition was identified as the teacher, whereas that of the second composition was the

students' peers. The participants were asked to compose aloud. To analyze revisions, Monahan used a more comprehensive scheme than that of Bridwell (1980), since it includes elements such as purposes of revision, points of revision, types of revision and levels of revision, while Bridwell's (1980) classification scheme includes only the last three elements. Monahan's study showed that the basic writers made more revisions for the teacher audience, while the competent writers revised more for the peer audience. Furthermore, it found that competent writers revised in extended episodes, while basic writers frequently made isolated revisions and seldom revised in episodes. Moreover, the findings of Monahan's study indicated that the competent writers made revisions at all phases of writing, while the basic writers limited revising to first and final draft phases of composing.

Faigley and Witte (1981, 1984) convincingly argue that revision classification schemes such as Bridwell's (1980) scheme--which classified changes according to linguistic structure and operations (e.g., deletion, substitution, etc.)--and Sommers's (1980) revision classification scheme (which classified revisions by length and by type of operations) do not adequately describe the nature of revisions or the effects revisions have on the meaning of a text. Faigley and Witte develop a scheme or taxonomy for analyzing revision which classifies revisions according to their effects on the meaning or semantic structure of a

text. (The scheme will be described in greater detail in Chapter Two since I will use it in my analysis of revisions.) Their taxonomy consists of two general categories: surface changes and text-base changes. They point out that surface changes are revisions that do not change the meaning of a text (e.g., spelling, punctuation, and modality). Text-base changes, on the other hand, alter the meaning of a text. Furthermore, their taxonomy, like that of Bridwell and Sommers, classifies revisions according to operations such as addition, deletion, substitution and so on.

Seeking to apply and test their new taxonomy, Faigley and Witte (1981) analyzed the revisions of six inexperienced writers, six advanced student writers and six expert adult writers. The findings of the study in general support those of the above studies (e.q., Sommers, 1980) which analyzed the revisions of skilled and unskilled writers. Their study found that the inexperienced writers made more surface changes than meaning changes. The advanced students and the expert adult writers made more text-base changes or meaning changes, especially revisions that made a major difference in the meaning of their essays, than the inexperienced writers. Expert writers made an average of 19.6 major meaning changes per 1000 words of text, advanced student writers made an average of 23.1 major meaning changes, whereas the inexperienced writers made only 1.3 major meaning revisions per 1000 words of text. The expert adult

writers made the fewest surface changes.

Faigley and Witte (1981) also noticed that the three groups differed with regard to where revisions occurred in the writing process. While the expert adult writers and the advanced student writers delayed surface changes until the second draft after they had appropriately dealt with their subjects, "by this point inexperienced students had largely quit revising" (p. 409). Faigley and Witte also found that the expert adult writers made fewer revisions at all levels than advanced student writers. And they provided a very reasonable justification for this finding, namely that the expert writers were able to develop a text in their heads and to do mental operations before committing them to paper. Hence, they made fewer observable revisions than the advanced student writers. Although Faigley and Witte's taxonomy takes into account the effects revisions have on the semantic structure of a text, Boiarsky (1984) noted that it does not attempt to deal with why writers make changes in their texts.

The major conclusion that can be drawn from the above first language revision studies is that skilled or experienced writers use strikingly different revision strategies and have different definitions of revision, compared with unskilled writers. The skilled writers focus on content in revision and use revision to reshape the content and form of their essays, while unskilled writers confuse revision with editing and focus on surface, low-

level issues such as mechanics, grammar, spelling and vocabulary. This conclusion (along with the findings of Land's study concerning the differences between the revising behaviors of seventh graders and eleventh graders) suggests that revision follows a developmental process. In other words, it appears that as writers become more mature, more skilled or competent writers they are increasingly likely to focus their attention on content and how to improve it. Indeed, the findings of Crowhurst's (1986) study of students' revision strategies at three grade levels (i.e., grades 5, 7 and 11) indicate that the revision process is affected by factors such as age and ability; students at higher grades were found to make fewer formal changes and more changes affecting larger segments of text (e.g., sentence-level changes) than younger writers.

First language research on revision also has dealt with components of the revision process or how the revision process works. For example, Bartlett (1982) states that revision includes three essential components or processes: detection, identification and correction. The detection process involves a comparison between an existing text and a body of knowledge (including conventional linguistic knowledge, recollection of original goals and intended meanings) from which text alternatives could be produced. The second component (i.e., the identification process) can occur together with detection, but Bartlett notes that the identification process requires different abilities. To

identify what is wrong with a text, writers should be aware of writing goals, skills, and strategies and possess knowledge of things that must be done in the production process of a written text and what can go wrong when one writes. The last component is the correction process.

Although successful correction of a text problem requires that appropriate detection and identification activities be made, Bartlett stresses that adequate detection and identification will not necessarily appropriately correct a text problem, since (in addition to their identification and detection skills) writers must possess certain types of knowledge to help them successfully correct a problem in a text. For example, they should be aware of the syntactic and semantic properties of linguistic structures or expressions and the effects of the writing context on their use.

Scardamalia and Bereiter (1983) propose a compare, diagnose, and operate (CDO) model of revision which is similar to that of Bartlett (1982). In the compare phase, writers detect or evaluate problems in their texts by comparing the intended meanings with the written or generated texts. But in the diagnose phase writers diagnose or determine what changes need to be made and alternatives for how the changes can be made. Writers then operate or actually attempt to fix the text problem by making changes in their texts.

By comparing the two models, we notice that they are similar to each other. Bartlett's detection, identification

and correction components are similar to Scardamalia and Bereiter's compare, diagnose and operate phases, respectively. Hayes and Flower (1986, pp. 1110-1111) suggest that when writers detect and diagnose problems in a text they can use two strategies (i.e., rewrite or revise) depending on the text:

The rewrite strategy is generally preferable when (a) it is not important to save the original text, (b) there are many problems in the original text so that diagnosis involves much effort, or (c) the purpose of the text is clear and not problematic so that extracting the gist and inventing an alternative text is easy. The revise strategy is preferable when (a) it is important to save as much of the original text as possible, (b) there are few problems in the text so that diagnosis is easy, or (c) the purpose of the text is unclear or problematic so that identification of the qist and inventing the alternative text is not easy. In such cases, diagnosis may provide the only effective means for identifying the gist or resolving problems and therefore for inventing an improved alternative text.

The above models and Flower and Hayes's argument demonstrate quite clearly that revising is a complex process since it involves not only a detection activity but also identification (or diagnosis) and correction operations. Furthermore, it is a decision making process, for writers have to decide whether, after detecting problems in a text, it is more productive to rewrite it or revise it.

First language revising research also discusses the cues or initiating conditions for revision. Several researchers have suggested that revision is triggered by writers' perception of a dissonance or incongruity between what a writer wants to express and what appears on the page

(Bridwell, 1980; Sommers, 1980; Della-Piana, 1978; Perl, 1980; Flower and Hayes, 1981; Flower, Hayes, Carey, Schriver and Stratman, 1986). What Nold (1982) said concerning intentional and conventional revisions shows that sources of dissonance can be conventions of the language -- such as spelling, grammar, punctuation and vocabulary--and writers' intentions. To deal with conventional dissonance, writers match their texts against the rules of spelling, grammar, punctuation and usage. On the other hand, to correct dissonance of intentions, writers must match their essays against the decisions they made about purpose, topic, goals and audience. Other researchers point out, like Nold (1982), that revision also can result from writers' concerns for audience (Flower, 1979; Monahan, 1984). This perception of dissonance leads writers to match their actual or initiated texts with their goals or intended texts. However, it is worth noting that Hayes and Flower (1986) persuasively argue that revision is not only triggered by the discovery of a dissonance between intention and a text but also by the discovery of better things to say, by the negative evaluation of a plan and by failure to comprehend a text.

ESL Revision Research

On the whole, there is little research on the revising behaviors of ESL students. In her study of the composing processes of ESL students, Zamel (1983) investigated the revising behaviors of one unskilled and five skilled ESL

students. She found that revision took place throughout the composing process and that there were differences between the unskilled and skilled writers with respect to their revising strategies. The skilled writers tended to make global changes and focus on global problems in their texts. Zamel (1983, pp. 173-174) noted that in the case of skilled writers:

Sentences were deleted or added to clarify ideas and make them more concrete; sentences were rewritten until they expressed the writer's intention more accurately; paragraphs or parts of paragraphs were shifted around until writers realized that they were related to ideas presented elsewhere in their texts; new paragraphs were formed as thoughts were developed and expanded.

The study showed that both the skilled and unskilled writers attended to surface-level features and changes. But while the skilled writers tended to address such surface issues at the end of the process, the unskilled writer was "distracted by local problems from the very beginning, changing words or phrases but rarely making changes that affected meaning" (Zamel, 1983, p. 174).

Asking her subjects to think-aloud as they composed,
Raimes (1985) also examined the revising strategies of eight
unskilled ESL writers in her study of the composing
strategies of ESL unskilled writers. The subjects included
four speakers of Chinese, two of Greek, one of Spanish and
one of Burmese. She found that the students made few changes
in the content or organization of their compositions. She
also found that most of the changes the students made were
surface changes, which occurred during the writing of

sentences.

Heuring (1984) conducted a study to determine the similarities and differences between the revising strategies of two unskilled ESL writers, one semi-skilled writer and two skilled writers. He videotaped the five students as they wrote the first and final drafts of their essays during a two-hour period. To analyze the students' revisions, Heuring used the Faigley and Witte's (1981) revision taxonomy and Bridwell's (1980) stages or points of revisions (i.e., first-draft revisions, between-draft revisions, and finaldraft revisions). The findings of his study indicate that the skilled writers arranged their priorities to give revision a productive role in the writing process, while the unskilled writers used revision inefficiently. The study also showed that unskilled writers were preoccupied with revisions that affected the surface structure of the texts. Skilled writers, on the other hand, made revisions which affected both "the surface [aspects] as well as the inherent deep structure meanings of the text" (p. 78).

Jones (1983) examined the composing processes of a proficient ESL writer and those of an ESL poor writer. With regard to the revising behaviors of the two subjects, Jones notes that the proficient writer avoided interrupting her idea generation process with premature editing. However, the poor writer did not postpone editing, since she seems to believe that "before she can generate the next piece of text, she must have the current piece right" (Jones, 1983,

p. 137).

Asking her students to think aloud as they wrote two different writing tasks, Raimes (1987) attempted to describe the composing strategies of eight ESL students at different levels of instruction. Of the eight students, four were enrolled in remedial ESL writing courses and four were enrolled in college-level writing courses. Regarding revising behaviors, she found, like some of the above studies, that in both assignments the nonremedial students were involved in making more content changes than the remedial group. She also noted that students with greater writing ability in English tended to make more content changes than students with lower writing ability.

The findings of the studies reviewed above indicated, just like the findings of first language revision studies, that there are major differences between skilled and poor writers with regard to revising behaviors. While skilled writers make changes that affect and reshape the content of their texts, poor ESL writers tended to be more concerned with surface revisions than content revisions.

Even though most of the above few studies dealt with the revision strategies of ESL students, it is important to keep in mind that most of the studies reviewed in this section (i.e., Zamel, 1983; Raimes, 1985, 1987) tended to have general objectives such as investigating the general composing processes of ESL students as well as other issues. Hence, they provide us with little information about the

revising behaviors of ESL students; consequently, a detailed picture of the ESL students' revising behaviors is incomplete, since such studies with the exception of Heuring's (1984) study did not focus on revision. Furthermore, the above studies do not tell us about the revising or even composing behaviors of ESL students in their native languages or whether the subjects transfer their native language composing behaviors to English or not. But this issue is extremely important because ESL students are often biliterates. They are rarely devoid of any kind of knowledge in their first languages. And they bring to the task of composing in a second language their first language writing behaviors (Raimes, 1987; Brooks, 1985). Hence, we need to investigate the role played by their writing abilities and behaviors in their mother tonque. In short, in order to have a comprehensive view of the revising behaviors of ESL students, we need, as the studies reviewed in the following section suggest, to examine the relationship between L1 and L2 revising strategies of ESL students, investigate the possibility of transfer, and the similarities or differences between L1 and L2 revision behaviors of ESL students.

Research on Transfer of L1 Writing Behaviors

Transfer has been defined by Olshtain (1983) as denoting "the learner's strategy of incorporating native-language-based elements in target-language production and

behavior" (p. 23). In relation to the notion of transfer, one question arises: why do second or foreign language learners transfer some of their native language forms or behaviors to the target language, or in other words what is the rationale behind the notion of transfer? Brown (1987) tries to answer the question by stating that human beings tend to handle any new problem with "an existing set of cognitive structures and ... call upon whatever prior experiences they have had and whatever cognitive structures they possess to attempt a solution" (p. 81). That seems more or less what happens with (adult) foreign and second language learners. They usually encounter a new writing system that they may not have sufficient knowledge of, and would therefore try to transfer some of their native language strategies to help them perform tasks in the target language.

Cummins (1980, 1981) argues that L1 and L2 academic/cognitive proficiency is interdependent. He (1981, p. 29) claims that:

to the extent that instruction in Lx is effective in promoting (academic) proficiency in Lx, transfer of this proficiency to Ly will occur provided there is [sic] adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly.

Cummins's claim suggests that learners' acquisition or development of literacy skills in L2 will be influenced by their literacy skills in L1. He also emphasizes that a language learner should acquire a threshold level of

literacy skills in the first and second languages to permit successful performance in the second language.

There are a number of studies which investigated the relationship between the composing processes in L1 and L2 (Silva, 1989). However, as this section will show, the studies that dealt with the revising behaviors of ESL students as they compose in the native languages and English are very few and they have some shortcomings.

Jones and Tetroe (1987) investigated the transfer effect in the composing processes of six Spanish-speaking ESL writers, all of whom were preparing to enter graduate schools in North America. They collected compose-aloud data on four different occasions over a period of time which extended from November to May. The subjects were asked to write essays in English and essays in Spanish. But Tetroe and Jones's investigation focused only on the planning component in composing. They hypothesized that "there would be a relation between the pattern of planning in the two languages, but that possibly the quality and certainly the quantity of planning in the second would be less than in the first" (p. 40). Their data indicate that transfer of first language planning strategies to the second language writing tasks does take place. Tetroe and Jones also found that proficiency in the second language was an important variable, since although it did not significantly affect the effectiveness or quality of the planning process, the quantity of planning was less in English, the subjects'

second language, than in Spanish, the students' native language. Consequently, they concluded that "the quality, though not the quantity, of planning transfers from L1 to L2" (p. 56). However, the limitation of the Tetroe and Jones study is that it focused exclusively on the planning process, leaving us with little (if any) information about how the same subjects revise or deal with other composing components in English or Spanish.

Gaskill's (1986) case study on revising in Spanish and English compared L1 and L2 revising strategies of four undergraduate ESL students, each of whom wrote one argumentative essay in English and one in Spanish. He classified the subjects as either less or more proficient according to their writing abilities. The students were videotaped as they wrote the Spanish and English essays. Using the video-recordings and the written products, he analyzed the revisions according to Faigley and Witte's revision taxonomy.

The study revealed that all four students revised more during the actual writing of their drafts than before or between drafts and that the majority of revisions in both Spanish and English were concerned with surface changes rather than with changes in favor of meaning or organization. On the basis of the results of the study, Gaskill concluded that revisions in English were similar to those in Spanish. Although Gaskill's study suggests that the first language revising behaviors transfer to the second

language, his classification scheme does not include purposes of revision. Hence, his study does not make it clear if the students' revisions in Spanish and English were motivated by similar reasons or not.

Using a case study design, Hall (1987, 1990) examines the revising behaviors of four ESL students in controlled L1 and L2 writing tasks. His subjects were advanced learners of English with different first languages. Each subject wrote two argumentative essays in his/ her native language and two in English. For each writing task, two ninety-minute writing sessions were individually scheduled. The subjects were asked to compose and revise first and final drafts during those two sessions. To generate data on the subjects' revising behaviors, Hall used videotapes, analyzed the revisions that the subjects made in their drafts, interviewed the four students, and had them fill out post writing questionnaires. He found that the subjects used a single system to revise across languages. According to Hall, this system seemed to be initially shaped by the first language and subsequently transferred to the second. He also found that L1 and L2 knowledge and experience interact in the revising process of advanced ESL students. However, Hall's study noted some differences between the subjects' first and second language revising behaviors. In addition, it found that L2 revisions were more time-consuming and numerous, which suggests that composing "in a second language places a far greater burden on revision while

managing the complexity of text production" (Hall, 1990, p. 56). The problem with Hall's study is that he does not provide us with the quality ratings of the subjects' first and second language texts. Without such ratings we do not know to what extent their revising behaviors were successful in English and their native languages, to what degree their revisions improved their native or second language essays, and whether or not their native language essays received significantly better ratings than their English texts.

Brooks (1985) examined the writing processes of five unskilled ESL writers and found that students who had written extensively in one language were able to bring those competencies to writing in English. According to Brooks (1985), such students "had developed a sense of audience, a variety of composing strategies, and a fund of implicit models" (p. 10). Furthermore, Brooks's study indicates that the subjects who did not write competently in their native language had difficulty performing competently in English. it also indicates that L1 composing strategies do transfer to L2; however, she seemed only to rely on interviews with the students and their self-reports about their native language writing behaviors and experiences. In other words, she did not seem to observe their actual composing or revising behaviors as they handled writing tasks in their native languages; and what people say is sometimes different from what they actually do. To find out the composing or revising strategies of ESL students, what they know about

revision in English or their mother tongues and whether revising strategies transfer across languages, subjects should write essays in both English and their native languages. The study then should address issues such as the quality of their L1 and L2 texts and the similarities or differences between their revising behaviors when they write in their native languages and in English. The present study will follow these suggestions.

Lay (1982, 1983) analyzed the essays and accompanying compose-aloud data of Chinese ESL students. She also interviewed her subjects to find out their writing backgrounds and their perceptions of writing. She found that the subjects translated key words into Chinese to get a stronger impression and association of ideas for their compositions and that essays containing more native language switches at levels of words or phrases tended to have better ideas, organization and details.

Another process-oriented study which attempts to investigate the composing processes in L1 and L2 is that of Arndt (1987). She examines the composing activities of six Chinese post graduate EFL writers as they produced academic written texts in English and Chinese. The subjects were asked to think aloud as they composed and were interviewed by the researcher in order to find out their feelings and perceptions about writing. The study reveals, like the above studies, that the composing behaviors of each writer remained consistant across languages. However, the writers

as a group displayed different writing processes. But with respect to revision, Arndt's study gives us very little information on how the subjects revised their Chinese or English texts, whether their revisions focused on surface issues or content ones, etc.

Edelsky (1982) conducted a product-oriented study to determine the relationship between first and second language writing among children. Nine first, second and third graders enrolled in a Spanish-English bilingual program participated in her study. Her data consist of writing pieces collected from each subject over a period of one school year. She found that the children's skills in the native language such as knowledge of spelling or use of style helped them accomplish writing tasks in the second language. And she concluded that knowledge of L1 writing "forms the basis of new hypotheses rather than interferes with writing in another language" (p. 227). Edelsky's study suggests that L1 composing behaviors transfer to (and even assist) L2 composing, thus corroborating the findings of the studies of transfer of composing processes across languages reviewed in this section.

Similarly, Canale, Frenette and Belanger's (1988) study compared 32 Franco-Ontarian high school students' writing performance in French as a first language (FL1) and English as a second language (EL2), seeking to determine the extent to which the students' FL1 writing abilities are reflected in their EL2 writing. The study found that there was "a

significant relationship between writing performance in FL1 and EL2" (p. 157). However, their study is, like that of Edelsky, product-oriented since it considered the subjects' writing scores in FL1 and EL2 and did not comment on their writing processes. Nonetheless, its findings suggest that first language writing abilities transfer to second language.

Carson, Carrell, Silberstein, Kroll and Kuehn (1990) did a study to find out, among other things, the relationship between first and second language writing abilities among ESL students. Forty-eight native speakers of Chinese and fifty-seven native speakers of Japanese participated in the study. Using TOEFL scores or Michigan Test Scores as a criterion for determining their subjects' level of English proficiency, they reported that the subjects' proficiency in English ranged from lowintermediate to advanced. Concerning the participants' level of eduction in their native languages, most of the subjects had completed some university coursework in their native languages. The subjects were asked to write essays in their native languages and essays in English. The subjects' first language essays (i.e., Chinese and Japanese essays) and their English essays were evaluated by native speakers of those languages. The correlations between L1 and L2 writing scores indicate that "interlingual transfer can occur" (p. 250). The findings of the study of Carson, Carrell, Silberstein, Kroll and Kuehn are important for writing

research, since it shed some light on the relationship between the first and second language writing abilities by investigating the correlations between the subjects' first language writing scores with those of the second language and drew our attention to the importance of the issue of transfer when we want to analyze ESL students' composing or revising processes. However, it, like those of Edelsky and Canale et al. (1988), does not examine the first and second language composing behaviors of the subjects.

What the above process- or product-oriented studies show is that there is a relationship between the language learner's writing abilities or behaviors in L1 and L2. The findings of the studies reviewed above indicate that transfer of writing abilities and strategies from the first language to the second language does occur. The studies also imply that to deal adequately and effectively with the composing or revising abilities or behaviors of ESL students, writing researchers should investigate their ESL subjects' writing behaviors or abilities in their native languages as well as their writing strategies or abilities in English. Indeed, Carson, Carrell, Silberstein, Kroll and Kuehn (1990) convincingly argue that adult language learners who are already literate in their first language can draw on their literacy skills and knowledge of literacy practices from their first language. Therefore, they stress that an adequate analysis of second language literacy skills or development must describe what learners utilize from their

first language [i.e., interlingual transfer of literacy skills from L1 to L2] and comment on "the relationships between literacy skills across languages (from L1 to L2)" (p. 248).

From what Carson et al. said and the findings of the studies reviewed above, it is quite clear that ESL writers who are already literate in their native languages bring with them to the task of writing in the second language their first language writing abilities and strategies.

Hence, ESL writing researchers interested in investigating the revising or composing processes of ESL students should find out what their subjects' writing first language abilities and behaviors and how they relate to their composing processes in English, their second language.

But when we take a closer look at the above studies we notice that there were only two studies that dealt with how ESL students revise in their native languages and in English. And none of their subjects was a native speaker of Arabic. Furthermore, there were a number of limitations of the two studies. For example, Gaskill's study used a revision classification scheme that did not account for why revisions occur. Hall's revision study, on the other hand, did not present the quality ratings of its subjects' essays in English or their native languages. He points out that his subjects were advanced ESL writers but we do not know if the revisions they made in their English texts enabled them to receive scores similar to the scores their native language

essays received or not. Moreover, without such quality ratings it is hard to determine if their revision strategies were successful and helped improve their ESL texts as well as their native language essays or not. As a result of these limitations, we seem to lack a comprehensive picture of ESL students' revising behaviors.

But the present study will attempt to avoid these limitations. Although I will, like Gaskill, use Faigley and Witte's revision classification scheme, I will add to this scheme the sound reasons for revisions presented by Boiarsky (1984). I will also have my students' Arabic and English essays evaluated holistically by native speakers of these languages to determine if the revisions made by the subjects in the drafts of their Arabic or English essays will lead to improvements in the final drafts of such essays or not. Here it should be noted that issues of quality and improvement will be limited to holistic assessment of the entire essays rather than to discrete portions or points of the essays.

Contrastive Rhetoric

In this section, research dealing with rhetorical differences or similarities between Arabic and English is reviewed. Kaplan (1980) claims that in Arabic, paragraph development is achieved by a complex series of parallel constructions and excessive use of coordination. Likewise, Koch-Johnstone (1981, 1987) argues that in addition to displaying a great deal of coordination and very little

subordination, Arabic persuasive written discourse attempts to convince its readers by stating an idea, restating it, and paraphrasing it.

While these writers suggest that there are major rhetorical differences between Arabic and English, there are some problems with their claims. For example, Kaplan does not tell us about the English proficiency level of his subjects. Therefore, we cannot be sure that the rhetorical problems in his subjects' English essays were due to interference from Arabic rhetoric or caused by their low proficiency in English. Moreover, there are several recent studies which suggest that writing in Arabic and English is more or less the same. For instance, Fareh (1988) conducted a study to contrast Arabic and English paragraph structures in expository discourse. She analyzed forty expository paragraphs in each language in terms of their thematic patterns, logical relations and lexical cohesive devices. She found that Arabic and English paragraphs were similar to some extent in these aspects. Al-Jamhoor (1992) examined topicality and paragraph structures in Arabic and English. His data included twenty essays written by monolingual Arabic speakers, twenty essays composed by English monolingual writers and twenty English essays written by Arab ESL learners in the US. Al-Jamhoor's results indicated that the concept of topicality in Arabic is similar to that of English in that the subjects used both topic sentences and thesis statements in both Arabic and English.

Koch-Johnstone (1981, 1987), on the other hand, appears to unjustifiably base her argument on only four Arabic persuasive texts which are clearly not representative of Arabic persuasive written discourse. Her claims are weakened by the fact that Arabic academic composition books (e.g., Al-Shanti, 1992; Al-Furaih and Ridwan, 1984) stress that Arab students should avoid repeating lexical items or sentences in their Arabic essays. Therefore, the fact that few persuasive texts (which appeared to be produced for nonacademic purposes) supported her claim does not necessarily mean that her claim is true of all Arabic written persuasive discourse.

The Think-Aloud Procedure

The think-aloud technique is a powerful tool by which researchers can identify otherwise invisible cognitive processes (Ericsson and Simon, 1984; Hayes and Flower, 1980; Afflerbach and Johnston, 1984). Ericsson and Simon (1980) distinguish between concurrent and retrospective verbal reports. In retrospective verbal reporting, subjects report on what they remember thinking or doing during the experimental task. Concurrent verbal reports, on the other hand, are uttered simultaneously by the subjects with the performance of the task. Hayes and Flower (1983) further distinguish between two types of concurrent verbalization: directed reports and think-aloud protocols. In directed reports, subjects report on specified behaviors while

performing the task. In think-aloud protocols, a subject reports on every thought that comes to his or her mind. According to Hayes and Flower (1980), a protocol is "a description of the activities, ordered in time, which a subject engages in while performing a task" (p. 4). After collecting think-aloud data, researchers engage in an activity called protocol analysis, a procedure aimed at identifying and describing the psychological processes that a subject uses to perform a task (Newell and Simon, 1972; Hayes and Flower, 1980). Hayes and Flower (1983, pp. 212-218) give some advantages of using think-aloud protocols, including:

- 1. They provide direct evidence about processes.
- 2. They yield rich data and thus promote scientific exploration of cognitive processes.
- 3. They detect processes that are invisible to other methods.

And Smagorinsky (1989) and Silva (1989) agree with some of these advantages.

However, there are a number of limitations of the use of verbal reporting. Garner (1982) mentions some of these limitations. First of all, there is always the uncertainty that people do not have the ability to describe the processes they perform. Secondly, there is the concern that verbal-reporting may hinder learners who have limited linguistic skills. Thirdly, subjects may talk about what they should do rather than what they are actually doing.

Another limitation that could be added to Garner's list is concurrent reporting, a procedure that is used in this study, demands that subjects do a number of tasks at the same time. For example, in my study the subjects will be asked to write Arabic and English essays, report on the processes they follow in revising such essays, and mention the reasons behind the revisions that they will make in their texts. Therefore, some interference that distorts or affects the amount of the data collected may happen. Indeed, Faigley and Witte (1981) argue that verbal reports require writers to do two things simultaneously (i.e., they must write and they must verbalize what they are thinking of as they write) and that many writers "find that analyzing orally what they are doing as they write interferes with their normal composing processes, interrupting their train of thoughts" (p. 412). Arndt (1987) makes a similar claim.

However, Smagorinsky (1989) points out that some studies have indicated that verbalization does not interfere with or alter cognitive processes. And he mentions that the findings of Karpf's (1972) study and those of Langer's (1986) study do not support the claim that verbal reports interfere with, alter or interrupt the cognitive processes involved in a task. It is also worth noting that Ericsson and Simon (1980) found no evidence that think-aloud protocols change the course or the structure of the task being studied.

Cooper and Holzman (1983) and Faigley and Witte (1981)

also criticize protocols, arguing that they do not reveal the whole process that generates writing, for subjects will not utter all of their thoughts. In reply to this criticism, Hayes and Flower (1983) and Smagorinsky (1989) emphasize that data collected through the use of the thinkaloud procedure are more complete than data collected through any other method.

Although the validity and reliability of think-aloud protocols have been criticized by a number of researchers (Smagorinsky, 1987), there are many writing researchers who support them, including Heuring (1984), Raimes (1985, 1987), Jones and Tetroe (1987) Fitzgerald (1987) and Silva (1989).

Rationale

Although revision plays a significant role in the composing process, and although many studies suggest that there is a significant relationship between L1 writing behaviors and L2 writing behaviors, there is little research on how ESL writers revise in English and in their native languages. The two studies (i.e., Gaskill's and Hall's studies) that dealt with the issue have some limitations. Hence, we lack a comprehensive view of how ESL students revise in their native languages and English. Also, research on the revising behaviors of Arab students in Arabic or English is, to the best of my knowledge, nonexistent. This study is needed to investigate how the Saudi students revise in Arabic and English, the

similarities and differences between the subjects' Arabic and English revising behaviors, what their revising behaviors tell us about the level of their revision knowledge or revision abilities in Arabic or English, as well as other issues. Furthermore, it attempts to deal with issues that were overlooked by the above two studies of revision in L1 and L2.

Importance of the Study and Purpose of the Study

This study intends to address issues that are neglected in the literature on revision. How Saudi students revise in Arabic or English is unknown. This study examines how Saudi students revise in Arabic and English, investigates the similarities and differences between the students' English and Arabic revising behaviors with respect to the kinds of revisions made, where they are made, why they occur and how frequently they occur. It also attempts to infer the amount of revision knowledge that the subjects possess on the basis of their revising behaviors in the two languages. It also considers whether revisions would improve their Arabic and English texts or not. Furthermore, it will consider the relationship between the students' revising behaviors in the two languages.

Questions of the Study

1) What kinds of revisions do the subjects make in English and Arabic writing tasks? Are there differences between the

- students' Arabic and English revising behaviors with respect to revision type, frequency of revisions and where they occur in the composing process?
- 2) Why are the revisions made by the students? What are the similarities and differences between the reasons behind the students' Arabic and English revisions?
- 3) To what extent do the revisions made by the subjects as they write affect the "holistic" quality of the entire essays? Do the Arabic essays receive significantly better quality ratings than the English essays or the reverse?
- 4) What do the subjects know about revision in Arabic and English on the basis of an analysis of the changes they made in their texts?
- 5) What does the study tell us about the relationship between the subjects' L1 revising behaviors and their L2 revising behaviors?

Limitations of the Study

- 1. The study's treatment of issues of quality and improvement will be restricted to holistic assessment of the entire compositions rather than to discrete parts of the essays. In other words, this study will not deal with whether or not individual changes resulted in improvements.
- 2. The study will focus on male Saudi students only. Other research should concentrate on females and on other Arab nationalities.

Definition of Terms

Explicit, comprehensive and detailed definitions of revision are rare in the revision literature (Fitzgerald, 1987). But in this paper, revision denotes a thinking process regarding the making of changes at any point in the writing process (Fitzgerald and Stamm, 1990; Scardamalia and Bereiter, 1983; Sommers, 1980; Gentry, 1982; Flower and Hayes, 1981; Zamel, 1984; Fitzgerlad, 1989). It involves detecting and identifying discrepancies between intended and written or actual texts, deciding what should be changed in a text and how to make necessary changes and then making the necessary changes, (Scardamalia and Bereiter, 1983; Fitzgerald, 1988, 1989). Changes may or may not affect the meaning of a text and they can be major or minor (Faigley and Witte, 1981, 1984; Scardamalia and Bereiter, 1986).

CHAPTER 2 METHODOLOGY

This chapter presents the methods that were used to answer the following questions:

- 1) What kinds of revisions do the subjects make in English and Arabic writing tasks? Are there differences between the students' Arabic and English revising behaviors with respect to revision type, frequency of revisions and where they occur in the composing process?
- 2) Why are the revisions made by the students? What are the similarities and differences between the reasons behind the students' Arabic and English revisions?
- 3) To what extent do the revisions made by the subjects as they write affect the "holistic" quality of the entire essays? Do the Arabic essays receive significantly better quality ratings than the English essays or the reverse?
- 4) What do the subjects know about revision in Arabic and English on the basis of an analysis of the changes they made in their texts?
- 5) What does the study tell us about the relationship between the subjects' L1 revising behaviors and their L2 revising behaviors?

Subjects

Eight Saudi male students--Mohammed, Ali, Khalid, Waleed, Mubarak, Ahmed, Abdullah, and Omar--studying at Michigan State University during the Spring Semester of 1993 participated in the study. (In this study, fictitious names are used to refer to the subjects to protect their real identities.) The subjects ranged in age from 24 to 36. They were assumed to be advanced ESL writers for a number of reasons. First, all of them had met the university's language requirements. Indeed, they were judged by both the intensive language program and their academic departments to be proficient enough in English to engage in full time study with no restrictions. Second, their GPAs, as Table 1 shows, suggest that they were in very good, if not excellent, standing in their different (M.A. or Ph. D.) majors. As Table 1 also indicates, of the eight subjects, four (Mohammed, Ali, Khalid and Waleed) were doctoral students whereas the other four (Mubarak, Ahmed, Abdullah and Omar) were M.A. students. The participants were also considered to be proficient Arabic writers, since all of the subjects received B.A. degrees from Saudi colleges in which Arabic was the language of instruction. Furthermore, each subject pointed out that in addition to doing several Arabic writing assignments at the intermediate and high school levels, he was required at the undergraduate level to write at least four major college papers in Arabic in Saudi Arabia.

Table 1
Names, levels and GPAs of the Eight Subjects

Subject	Level	GPA
Mohammed	Ph.D.	3.82
Ali	Ph.D.	3.70
Khalid	Ph.D.	3.88
Waleed	Ph.D.	3.63
Mubarak	M.A.	3.55
Ahmed	M.A.	3.75
Abdullah	M.A.	4.00
Omar	M.A.	3.50

Procedure

Writing Tasks

The subjects were required to write and think aloud as they composed and revised two argumentative essays: one in Arabic and one in English. They were given two sixty-minute sessions to write and revise each essay. The Arabic writing sessions preceded the English writing sessions.

The subjects who agreed initially to participate in the study were given the instructions sheets (see Appendix 3) at least five days in advance so that: 1) they knew exactly what they would be asked to do--excluding the essay topics--and the materials that would be provided for them in the study and 2) they could bring the Arabic, English or bilingual dictionaries that they liked to use while they were doing the Arabic and English writing and revising tasks. Individual appointments were made for participants to compose at convenient times (for them). The writing sessions

were held in a quiet, private and well-lit room.

Although the participants were given the instructions in advance of their participation, they were not given the English or Arabic topic until they signaled that they were ready to start writing. They were asked to write two argumentative essays: one in Arabic, their native language, and one in English. Argumentative essays have been chosen in this study because research has shown that argumentative tasks elicit more revisions than other writing tasks (Hall, 1987). They also increase awareness of audience (Hays, Durham, Brandt, and Raitz, 1990). Indeed, Raimes's (1985) study which used narrative writing tasks found that, in general, they generated or elicited few revisions from her subjects. One of the implications of Raimes's study is that future revision studies should use other kinds of writing assignments.

The two topics that were used in this study are controversial in nature so that the subjects could write a great deal on them and have something to revise (see Appendix 2). The topics deal with academic issues that the students are familiar with. To control for the effect of topics, four students were randomly chosen and asked to write on topic one in English and topic two in Arabic. The other four students were asked to write on topic one in Arabic and topic two in English. This procedure allows the researcher to determine whether the problems faced by subjects as they wrote—if there were any problems—were

caused by their English writing abilities or by the difficulty of the topic.

The instructions given to the subjects (Appendix 3) in advance stated that the topics would take the forms of statements that they should argue for or against and that they should present their position clearly and support it. The instructions also pointed out that the audience for as well as the graders of the Arabic and English essays were Saudi doctoral students in the Department of Englishat Michigan State University.

At the end of the first writing session for each essay, the subjects' drafts with their revisions were collected and photocopied by the researcher. Then two days later the original drafts were returned to the participants. They were then given another sixty-minute session to make revisions in their first drafts and start writing and making the necessary changes in their final drafts.

To easily distinguish changes made on first or final drafts from changes made between drafts, I used a technique similar to those used by Faigley and Witte (1981) and Bridwell (1980), namely the use of pens with different color inks in the first and second writing sessions. While first drafts and final drafts were produced by black pens, the participants used red pens to make between-draft changes.

The Video-Recording Procedure

Throughout the writing sessions, a video-camera was used to record all the writing and verbal comments that took place during the sessions. The camera was focused on an area on a writing table in which the subjects were asked to place their writing materials as they wrote and revised. The camera was positioned above but behind the writing table so that the Saudi students could write and revise without facing it. The camera was turned on when the participant indicated that he was ready to start writing and was stopped when he indicated that he was finished writing or the sixtyminute period was over. The subjects were provided with paper, pens and an English-English dictionary.

During the writing sessions, the researcher was present in the room as the subjects were performing the writing and revising tasks. I responded to questions aimed at a clarification of a topic or the assignment instructions. But I avoided answering questions about how the essays should be organized or developed and making any evaluative comments about the participants' writing.

Think-Aloud Data

Since the subjects' verbal comments on their revising processes are important for this study, a number of techniques were used to help students verbalize about their revising processes. First of all, the subjects were provided with a list of some of the things they should verbalize

about revising (see Appendix 3). However, they were told that the list was incomplete; it was only intended to remind them of some of the things that they should say aloud as they revised their compositions. Secondly, to present thinking aloud in a realistic situation, the researcher told the subjects in the instructions that they needed to pretend that they were explaining how to revise to someone who did not know anything about the revising process. Finally, to further prepare the participants for the think-aloud technique, the researcher showed the subjects individually a video-recording of a Saudi graduate student solving a mathematical problem in Arabic. English translation of his full think-aloud protocol is presented in Appendix 4. It is worth mentioning that Ericsson and Simon (1984, pp. 375-379) suggest that mathematical problems are a good technique for "warming up" or preparing subjects to think aloud. The subjects were shown this video-recording before the beginning of their first Arabic writing session to make sure that the subjects were familiar and well-prepared for the think-aloud procedure. A demonstration of how a think-aloud protocol appears in an actual writing and revising session like that used by Gaskill (1986) was avoided by the researcher, lest it would significantly affect the originality of the content of the think-aloud protocols produced by the subjects in the study.

The participants' think-aloud protocols were transcribed using Berkenkotter's (1983) conventions.

Italicized material indicates that the subject was speaking while he was writing. But italicized and underlined lines denote that the participants were (re)reading or reviewing what they had written. Un-italicized as well as ununderlined lines indicate that the participants were speaking or thinking only. The subjects' think-aloud protocols were analyzed to find out the reasons why revisions occurred, the kinds of revisions that might have occurred before pen met paper, and what the subjects were concerned with as they were revising their texts.

Pilot Study

A pilot study using two Saudi male graduate students studying at Michigan State University was conducted to test the adequacy of the above-mentioned (three) techniques to prepare the subjects to think aloud as they composed and revised. The pilot study tested the adequacy of the positioning of the camera in a comfortable and a non-threatening location for the subjects and also tested whether or not the two argumentative topics would be interesting to the participants and would, therefore, permit them to produce Arabic and English essays consistent in length and quality with their academic level. The participants in the pilot study were required, like the eight participants in this study, to write one argumentative essay in Arabic and one argumentative essay in English.

Likewise, they were given two sixty-minute sessions to write

and revise each composition.

The pilot study showed that the three methods would adequately prepare the eight subjects to think aloud as they wrote and revised in this study. It also found that the two argumentative statements were interesting and involving to the Saudi students at this academic level, since they deal with familiar and extremely important issues concerning the development and future of their country. The two students' revising and writing behaviors showed that the topics were important for them; and their concern was not just meeting the required number of pages. Rather, the pilot study showed that they were mostly concerned with explaining their position and then properly and sufficiently supporting it. Therefore, the two students did their best in the Arabic and English tasks and produced in the two sixty-minute sessions given for each essay what the instructions and the researcher required them to do.

Concerning where the video-recording camera was placed in the pilot study, the two subjects individually stated that being faced with the videotaping equipment was distracting and somewhat threatening even though it was focused on their papers. But they were relaxed and satisfied when the camera was placed above and behind their writing table and focused on their writing materials. Hence, the pilot study writing sessions and, as mentioned above, all of the writing sessions in the actual study were videotaped with the camera placed in this rear location.

Among the most important findings of the pilot study was the importance of requiring the subjects think aloud as they wrote and revised because the two subjects made many changes even before pen met paper, a finding that supports Fitzgerald's (1988) claim that revision may occur before putting pen to paper. This finding suggests that revision studies which seem to rely heavily on observation (e.g., Gaskill, 1986; Hall, 1987) of what the subjects do as they compose and revise may have missed many changes made in the participants' minds.

Ratings of Quality

Because one of the aims of this study was to determine whether revision improves the quality of the eight Saudi graduate students' essays, it used a procedure similar to those used by Gaskill (1986) and Bridwell (1980). Copies of both the first and final drafts of the participants' English and Arabic essays were graded by Saudi doctoral students in the Department of English at Michigan State University using the ESL Composition Profile (Jacobs, Zingraf, Warmuth, Hartfiel and Hughey, 1981) in order to determine: 1) whether or not they would notice improvements between the first and final drafts, and 2) whether or not there would be major differences in quality between the Arabic and English essays, thus suggesting that they were better revisers in their native language. Therefore, in this study the ESL Composition Profile was used to grade Arabic essays even

though it is intended mainly for grading ESL compositions. Furthermore, the researcher asked experienced ESL teachers who are native speakers of English to rate copies of the first and final drafts of four English compositions chosen at random to see if the native speakers of English would notice improvements in the final drafts of the four subjects' English compositions. The native speakers of English were aware that the intended audience was Saudi doctoral students majoring in English at Michigan State University.

According to Jacobs, Zingraf, Warmuth, Hartfiel and Hughe (1981), each composition should be read by two raters. They also suggest that when raters' scores of an essay differ by more than ten points, that essay should be submitted to a third grader, and the average of the closest scores within a ten-point range should be considered the final score. A copy of the profile was attached to the back of the first and final drafts of each essay. The subjects' first and final drafts were then submitted to the raters in envelopes. The order of the participants' first and final drafts was mixed in these envelopes. In other words, the raters were not told or given any indication concerning whether the drafts that they were asked to grade were actually first or final drafts.

Data Analysis

In this study each Arabic or English revision was analyzed with respect to its type, purpose, and where it occurred in the writing process. In this section, I will discuss Faigley and Witte's (1981) revision taxonomy that was used to classify revisions in this study, revision purposes and points at which revisions occurred in the writing process.

Types of Revisions

Faigley and Witte's (1981) revision taxonomy was used to categorize the revisions that occurred in the Arabic and English essays. Gaskill (1986) made several modifications in a number of areas in the taxonomy which made it more detailed and allowed it to account for "a variety of other changes commonly found in the writing of non-native speakers of English" (p.61). Therefore, Gaskill's changes in the taxonomy were also used to categorize the revisions that occurred in the study.

Unlike Bridwell's (1980) revision classification scheme, which categorizes revisions according to linguistic structures and operations that can affect such structures, Faigley and Witte's (1981, 1984) taxonomy was designed to analyze the effects that revisions have on the meaning of a text, namely whether they affect surface aspects or the meaning and content of the text. In the taxonomy, revisions are divided into two major categories: surface changes and

text-base changes (See Appendix 1).

Surface Changes

Surface changes, Faigley and Witte point out, do not change the meaning of a text. Surface changes are made up of two types of revisions: formal changes and meaningpreserving changes. Formal revisions, according to Faigley and Witte (1981), include changes involving syntax or other writing conventions such as spelling, tense, number, modality, abbreviations, punctuation and format. (The examples given in this section generally include two parts. The first part, which precedes the arrow, consists of the information before the revisions under consideration took place, whereas the part following the arrow presents the same information after the changes were made. Revisions are included in brackets. It should also be noted that the examples given in this chapter reflect the subjects' actual spelling and grammar; no attempts were made by the researcher to correct spelling or grammar mistakes in these examples.) Consider the following spelling change: English shoud .. ====> English [should].. In the area of formal surface changes, Gaskill (1986, p. 61) listed additional changes which were also used in the analysis of the revisions made in this study, including: articles, capitalization, prepositions, subject/verb agreement, word order and miswrites, which denote cases in which writers write something other than what they have in

mind.

Meaning-preserving surface changes, on the other hand, refer to revisions which paraphrase the concepts in a text but do not alter them; they are revisions or improvements that do not change the meaning of a text. Very frequently, they consist of, as Faigley and Witte (1981) noticed, the replacement of a word or phrase with another that has the same meaning. For example:

- ..to the U.S. and other developed countries. ====>>
- .. to the U.S. and other [advanced] countries.

In this area, Gaskill convincingly argues that the category of meaning-preserving changes should also include revisions like intensifiers and transitional expressions.

Text-base Changes

Unlike surface changes, text-base changes alter the meaning of a text. They consist of, according to Faigley and Witte (1981, 1984), two types of revisions: macrostructure changes and microstructure revisions. A macrostructure change is a major content or meaning change that significantly alters the summary or gist of a text, as illustrated by the following example taken from Khalid's Arbaic between draft essay:

[A lot of people [Some] may think that giving scholarships, in spite of their recognition of its importance and benefits, must be reduced because it causes a great psychological separation for the student. As for me [But] I think that their claim is false because we know that US cities, for instance, have many Saudi student clubs and Islamic centers. And

this means that the separation factor has been minimized to its minimum level. In addition, the separation factor is a very weak factor and should not be compared with the important [vital] benefits of scholarships.]

Microstructure changes, on the other hand, are meaning changes that do not affect the summary of a text. That is, they involve changes in details that would not be mentioned in a summary of the text. Faigley and Witte state that while meaning-preserving changes preserve concepts, microstructure revisions involve changes in concepts. Gaskill (1986, p. 66) was more specific with respect to the types of revisions that are included in this category:

Microstructure changes consisted of three general types: 1) changes adding or deleting information which essentially would not result in a change in the summary of a composition, 2) changes in paragraphing, including the decision to make a paragraph break where there had previously been none and the movement of a paragraph from one location to another, and 3) changes which resulted in the addition, deletion, or modification of a topic or concluding sentence, a title or a heading. Although the third type of change often did not add to or subtract from textual information, it frequently made the content and the organization more salient.

For example, the following change was made by Mubarak in English in the between-draft phase and was considered a microstrucure change because meaning was affected:

I do not think that the ministry of education has the financial ability to do that every year. ===>> I do not think that the ministry of education has the financial ability to do that every year. [Furthermore, those foriegn teachers are not well qualified to teach English.]

It is important to note that although Faigley and Witte (1984) consider changes in paragraphing to be format revisions under the category of formal surface changes in

their taxonomy, Gaskill (1986, p. 60) argues convincingly that they should be classified as microstructure changes since "at the very least subtle meaning changes are suggested when existing paragraphs are divided or moved". Therefore, paragraphing changes were categorized as microstructure revisions in this study. And, as in Gaskill (1986), format changes in this study denoted the addition or omission of underlines, brackets, asterisks and other notations, whose occurrence does not produce a change in the meaning of a text.

The taxonomy also includes operations such as addition, deletion and substitution. However, these operations were not dealt with in this study. Even though Gaskill (1986) made several useful modifications in Faigley and Witte's (1981) revision taxonomy, yet his modifications, like the taxonomy itself, failed to account, as Boiarsky (1984) convincingly notes, for why revisions occur.

Purposes of Revisions

Since this study is also interested in investigating why revisions are made by the Saudi ESL students, the researcher used Boiarsky's (1984) purposes to account for why revisions were made in this study. It should be noted that although Boiarsky (1984, pp. 77-78) gives several reasons for revision, I selected only the most important purposes that satisfactorily account for why revisions occurred in the subjects' essays. They were as follows:

- 1. Improvement of coherence.
- 2. Expansion of information.
- 3. Reorganization of information.
- 4. Deletion of information.
- 5. Emphasis of information.
- 6. Improvement in vocabulary.
- 7. Correction of grammar and mechanics and improvement in sentence structures.

Due to the fact that Boiarsky (1984) does not discuss in detail the kinds of revisions that can be motivated by her list of the purposes of revision and gave only one example for each revision purpose, in this study substantial additions were necessary to help the researcher and the assistant classify appropriately and more easily the revisions made by the subjects with respect to why they occurred. In this section, each purpose is explained. Also, examples of the revision types motivated by such purposes are given and briefly discussed.

Coherence Changes

Coherence revisions involved meaning-preserving changes which were made in an attempt to provide cohesive ties to make grammatical units of an essay mutually connected and hang together. Halliday and Hasan (1976) claim that cohesive ties are the primary source of textual cohesion; they give a number of kinds of cohesive ties, including reference, conjunctions, and lexical cohesion. Referential cohesion

revisions involved revising in pronominal, demonstrative or comparative constructions. The following example, taken from Mohammed's English final draft, illustrates a referential cohesive tie achieved by using a pronominal construction:

The fact is that if we really are willing to prepare students to enter scieitific colleges we have to start teaching English from an early age. Se[i]x years of teaching English when students are already older is not at all enough... ====> The fact is that if we really are willing to prepare students to enter scieitific colleges we have to start teaching English from an early age. Six years of teaching English when [they] are already older is not at all enough...

In this example, a change was made so that the second sentence depends on the first sentence for the referent for the pronoun they. As a result, the two sentences hang together because the pronoun they can be understood only if it is taken to refer to the noun students in the first sentence.

As for conjunctional cohesion revisions, they involve changes occurring for the purposes of adding appropriate subordinating and coordinating conjunctions or transitions as well as changing transitions or connectors in sentences in an essay to show how what follows is related to what came before. For example, one of the final-draft changes that Omar made in his English essay was the addition of therefore in the following passage:

All in all, scholarships may be harmful to the Saudi society, both in the country's wealth and the educational system. We have to be careful with them especially for the undergraduate students. ===>> All in all, scholarships may be harmful to the Saudi society, both in the country's wealth and the educational system. [Therefore] [,] we have to be

careful with them especially for the undergraduate students.

By adding the transitional word therefore in the revised version of the above example, the subject was able to show how the information in the second sentence in the revised version was related to the information in the first sentence. According to Leki (1989) and Hughey, Wormuth, Hartfiel and Jacobs (1983) such connectors tie not only sentences (or ideas), as in the above example, but also paragraphs together. Lexical cohesion, on the other hand, included revising to repeat key words and phrases (exact words, synonyms, etc.) relating to the main ideas in the topic sentences in the paragraphs of a composition. Such repetitions, as Reid (1988) notes, help to "make [a] paragraph seem smoother" (p. 69).

However, Johns (1986), Reid (1988) and Bleuze (1991) state that the provision of cohesive ties among sentences and cohesion, in general, are only one element of coherence and that there are other important elements of coherence that operate at a more global level (than cohesion), such as having a clear discourse theme or thesis, topic identification, relevance, and unity, "i.e., sticking to the point" (Johns, 1986, p. 248). Consequently, in this study coherence revisions included microstructure changes such as giving or adding a thesis or topic sentences, changing the topic sentences in an essay to make them more coherent with the thesis or changing the thesis to make it more clearly

reflect the main idea of an essay. Hughey et al. (1983),
Reid (1988, p. 51 & p. 69) and Bleuze (1991) suggest that
for writers to achieve coherence and unity in a piece of
writing there should be a thesis statement (that carries or
presents the main idea of a composition) and topic sentences
(which include the main ideas of the paragraphs in which
they are located, and which are related to and deal with the
controlling ideas of the thesis). For instance, as Mohammed
was providing initial support for his position, he realized
that he had not given a thesis statement. Therefore, he went
back to the last section of his long introductory paragraph
and added the following statement, e.g.:

[In my opinion, the Kingdom is still in need of increasing the numbers of those who are given scholarships because of its urgent need for an academic [and trained] staff from the sons of the country.]

This change was considered a microstructure change motivated by improvement of coherence. This is supported by what the subject himself mentioned in Arabic in his accompanying Arabic first writing session think-aloud protocol:

I didn't put a thesis... The essay is mm.. in this form not organized ..mm... It is not logical for one to support a position that he did not give. I must give a thesis here to fix the essay.

This change and other microstructure revisions made by the subjects to improve the coherence of a composition give the essay a sense of logic and make it unified; as a result of such revisions, compositions will most likely become more coherent and easier to understand and read.

Expansion Changes

The second function of revision, expansion of information, focuses on changes which add information to a piece of writing. In this study, such changes consist of three types: meaning-preserving, microstructure or macrostructure changes. Examples of these types are given below. First of all, an example of a meaning-preserving expansion change:

On the other hand, the number of scholarships should be decreased in fields such as psicology, sociology, history and many other humanety sciences, since we already have good departments which offer these programs at M.A. and PhD levels. ====>> On the other hand, the number of scholarships should be decreased in fields such as psicology, sociology, history and many other humanety sciences, since we already have good departments [in the Saudi universities] which offer these programs at M.A. and PhD levels.

Even though Ahmed in his English final draft added in the revised portion of the above example the phrase in the Saudi universities, the general meanings of both sentences are the same.

Secondly, students made microstructure changes motivated by the need of expansion of information, e.g.:

And its highly recommended for our students to participate in these programs instead of going to another country. ====>> And it['s] highly recommended for our students to participate in these programs instead of going to another country [because this is going to improve the quality of the offered programs].

In the revised sentence, the subject provided a reason that was lacking in the first part of the example above regarding why Saudi students at the undergraduate level should not be given scholarships by the Saudi government to study in the

US or other developed countries. This change which expands on the information given in the essay was considered a microstructure change because the meaning of the sentence was clearly affected by this revision. Other microstructure expansion changes that were triggered by the need to give more information included the addition of details such as definitions.

Macrostructure changes can also occur to provide more information in a composition. For instance, while Ali, one of the participants, was writing the final draft of his Arabic essay and before writing the conclusion, he decided to add another idea to further support his argument against making English a required subject at the elementary level in the Saudi public schools:

[Among the other reasons that occurred in my mind is that teaching English at an early stage does not indicate [, contrary to what the supporters say,] the development or advancement of the country, since there are developed countries like Japan, China, Russia, and Germany, and so on that do not teach English [pay as much attention to teaching English] at the initial (early) age [stages] as they give to their native [national] language.]

This addition was regarded as a macrostructure revision triggered by the need to provide more support for the main argument of the essay because it affected the gist or summary of the main ideas of the composition, which appears to consist of the following ideas:

- 1. Children at the early stage of their life are not competent or proficient in their mother tongue (Arabic).
- 2. Learning or teaching English at the elementary stage may

negatively affect the Saudi children's ideas and culture in a manner that many not be consistent with the principles of Islam.

- 3. It is not completely proven that children acquire a foreign (second) language faster and better than older students.
- 4. Competent English language teachers are rare and appropriate textbooks for customs and culture of our Islamic country are lacking.
- 5. The Saudi society as a whole does not speak English as a basic (first) language.
- 6. Teaching English at an early stage is not a sign of development of a country.
- 7. Because of these reasons, I do not agree with the argument that English should be a required subject at the elementary level.

Reorganization Changes

Reorganization of information deals with changes relating to the rearrangement of minor or major parts of an essay. Reorganization changes included meaning-preserving changes. For example:

Since the US and the developed other countries like China, Britain, France and Germany are advanced in the field of medicine it is an urgent matter to send more students to those countries to meet Saudi Arabia's urgent need for qualified medical staff.====>> Since the US and the [other] developed countries like [Britain, France, Germany and China] are advanced in the field of medicine[,] [therefore] it is an urgent matter to send more students to those countries to meet

Saudi Arabia's pressing need for qualified medical staff.

Like some of the above examples, a number of changes were made in the revised sentence, but what is important here is that although the order of the developed countries "in the field of medicine" was changed, the meaning of the two sentences was not affected by this revision. This purpose also triggered microstructure changes, including, as Gaskill (1986) mentions above, revisions involving breaks in existing paragraphs to produce new ones, the movement of a paragraph from one location to another or the joining of two previously separate paragraphs.

Deletion Changes

The fourth function, deletion of information, included revisions involving deletion of material. Such revisions can be meaning-preserving as in the following example which was taken from Ali's Arabic final draft:

To refute these people's idea one can say that children at an early age do not necessarily acquire the English language better and faster since there are researchers who argue that the foreign (second) language can be acquired even at an older age quickly and well. ====>> To refute these people's idea[,] one can say that children at an early age do not necessarily acquire the English language better and faster[,] since there are researchers who argue that the foreign []language can be acquired even at an older age quickly and well.

The deletion of the term **second** in the revised sentence did not affect the general meaning of the two sentences. The fourth function also leads to microstructure changes. For instance, one of the between-draft revisions that one

participant (i.e., Omar) made as he was reviewing the first draft of his English essay was that he crossed out the following idea in the third paragraph in his English essay (this idea did not appear in Omar's English final draft):

[On the other hand, we are going to spend money on this, which means this useless scholarships are uneconomic.]

This deletion was considered a microstructure change. Macrostructure changes can also occur for this purpose. For example, one of Mubarak's between-draft revisions was the omission of a main idea in his Arabic essay, a revision that affected the gist of his Arabic essay:

[Also, being sent to study abroad for students may give them the chance to see and learn about the other cultures from which many of the students may benefit.]

Vocabulary Changes

The improvement in vocabulary purpose denotes writers' attempts to replace lexical items with others to better express their ideas, e.g.,:

Therefore, most of the magazines and books are written in English. ====>> Therefore, most of the [periodicals] and books [in science] are [published] in English.

Among the changes that occurred in the above revised sentence, the two words magazines and written in the original sentence were substituted with periodicals and published in the revised sentence, respectively. Such

changes at the lexical level (i.e., revisions involving substitution of a word or a phrase with another that has essentially the same meaning) are considered, according to the taxonomy, meaning-preserving revisions.

Emphasis Changes

Some revisions occur for the purpose of emphasis of information in a text. Several emphasizing devices can be used to meet this need in writing. They involve formal surface changes like capitals, underlining, etc. (Troyka, 1987; Quirk, Greenbaum, Leech and Svartvik, 1985; Boiarsky, 1984). For example:

Those achievements need a strong and modern army to protect them... ====>> Those achievements need a strong and [modern] army to protect them...

Here Waleed's purpose for making such a surface change in the final draft of his Arabic essay was to stress his point about modernity in the revised version of the above example.

Changes to emphasize information can also include, as Quirk et al. (1985), Celce-Murcia and Larsen-Freeman (1983) and Leech and Svartvik (1975) note, the addition of several meaning-preserving constructions to serve this function, including:

1. emphatic do, e.g.:

As a result, I think that teaching English in the Saudi elementary schools is imperative. =====>> As a result, I [do] think that teaching English in the Saudi elementary schools is imperative.

2. Emphatic adjectives--like certain, definite, true, pure, etc.--or adverbs such as definitely, absolutely, really or indeed. For instance:

I think that English should be a required subject in Saudi Arabia elementry school. ====>> I [Truely] think that English should be a required subject in Saudi Arabia elementry school.

3. A common emphasizing construction in Arabic is inna which, according to Owens (1988, p. 325), means "indeed" in English and serves as discourse emphasizer, e.g.,:

Teaching this language at the elementary level is an excellent chance to plant the basic elements of the English language in the student. ====>> [Indeed] teaching this language at the elementary level is an excellent chance to plant the basic elements of the English language in the student.

4. Emphatic reflexive pronouns, e.g.:

I saw Ali. ===>> I saw Ali [himself].

5. Cleft sentences can also be used to highlight or emphasize parts of a sentence. For example, in the following sentence the focus is on John:

John caused the accident. ====>> It was John who caused the accident.

6. Reordering of parts of a sentence so that the constituent appearing in the initial (and sometimes the final) position in a sentence receives special emphasis. Consider the following example:

Ahmed speaks English very proficiently. ====>> [Very proficiently,] Ahmed speaks English.

According to Celce-Murcia and Larsen-Freeman (1983, p. 404) and Leech and Svartvik (1975), the fronting of the adverbial

of manner very proficiently to the sentence-initial position in the above example gives it special emphasis. In other words, due to such a change, it receives "greater focus" in the discourse. The reasoning behind this is that sentence-initial position is the starting point of the sentence; "[i]t is as if the speaker says the most important thing in his mind first, adding the rest of the sentence as an afterthought" (Leech and Svartvik, 1975, p. 176).

But in some cases moving parts of a sentence to sentence-final positions also serves to emphasize those parts. For example, Celce-Murcia and Larsen-Freeman state that there is evidence that subjects can be placed in the final position of a sentence for emphasis, e.g.:

In Riyadh Ali lives. ====>> In Riyadh lives Ali.

The delayed subject in the revised sentence receives
emphasis by virtue of occurring in the sentence-final
position. In relation to the importance of these two
positions in written discourse, Troyka (1987, p. 384)
asserts that brain research shows that readers are more
likely to retain the message at the beginning or the end of
a sentence.

Grammatical, Mechanical and Sentence Structure Changes

The final purpose of revision, correction of grammar and mechanics and improvement in sentence structures, is concerned with the subjects' attempts to make formal surface

corrections in their essays with respect to spelling (e.g.,.. between midical practices..===>>..between medical practices...), punctuation (e.g., In conclusion since ... ====>> In conclusion, since...) and grammar (e.g.,...it will contributes in... =====>> ... it will ... contribute[] in...). The second part of this function included the meaning-preserving revisions made by the subjects to improve the sentence structures in their compositions. Here it is worth mentioning that Boiarsky called the second part of this last purpose "improvement in prosody" and considered it a separate purpose. But in this study, it was added to the correction of grammar and mechanics function since I agree with Reid (1988) who argues that such changes are grammar changes. Therefore, in this study rather than treating improvement in sentence structures as a separate purpose as does Boiarsky (1984), it was added to the end of the correction of grammar and mechanics function to show that they are closely related (i.e., in that they focus on grammar-oriented changes). Thus, the new seventh purpose reads: correction of grammar and mechanics and improvement in sentence structures.

The second component of the seventh purpose includes, like the improvement of prosody function in Boiarsky (1984), changes made to improve--not to correct--sentence structures in an essay, including:

1. The replacement of passive sentences with active sentences or the reverse. For instance:

Also, there is a need to teach sciences that every one needs like the computer. ====>> Also, there is a need to teach sciences that [are needed] like the computer.

Here Ahmed replaced the active voice construction in his first Arabic draft with the passive voice construction in the revised version. But the general meanings of the two sentences remain the same.

2. Changes involving the breaking of long sentences into two or more sentences, e.g.,:

Also, before six or seven centuries Europe was living in the stage of the middle ages or the dark ages as they call them, at a time when Muslims were enjoying the age of a prosperous civilization and a group of European orientalists started learning the Arabic language and transferring the Islamic civilization to Europe and they succeeded in doing that, without the need for all Europeans to learn the Arabic language. ====>> Also, before six or seven centuries Europe was living in the stage of the middle ages or the dark ages as they call them, at a time when Muslims were enjoying the age of a prosperous civilization[.] [Then] a group of European orientalists started learning the Arabic language and transferring the Islamic civilization to Europe and they succeeded in doing that, without the need for all Europeans to learn the Arabic language.

In the above example, the subject (Ahmed) felt as he was working between drafts in his Arabic essay that he had written a long sentence. Therefore, he broke the sentence in the revised version into two sentences and made another change. However, the meaning of the two sentences, the researcher and the assistant judged, was not affected by this revision.

3. Revisions which occurred because the subjects wanted to avoid repetitions of certain structures, e.g.,:

In fact, there are many advantages for sending students to study in developed countries. ====>> In fact, [sending students to study in developed countries has many advantages].

In the example just above, as Abdullah was writing the final draft of his English essay, he noticed that the structure there are would appear twice on the same page. Therefore, he replaced the structure in the original sentence with a similar structure to avoid structural repetition.

4. Changes made to get rid of wordiness by deleting extra, unnecessary words or phrases to express an idea or remove redundant sentences, phrases or words in an essay. For example:

..the percentage of the students who are pursuing their higher education, or those who do business abroad or spend their vacations abroad is very small.===>> ..the percentage of the students who are pursuing their higher education, or those who do business or spend their vacations abroad is very small.

Here the participant deleted the first occurrence of the word abroad in his first Arabic draft because it was redundant, a revision that did not change the general meanings of the two sentences.

The word improvement was kept because such sentence structure changes aim at improving the structure of the sentence, not at correcting it. However, it should be noted that although the grammar and mechanics changes are classified by the taxonomy as formal surface changes, sentence structure changes were considered, as the above examples show, meaning-preserving surface changes, as the general meanings of both the original and revised sentence

structures that occurred in this study were judged to be more or less the same.

Boiarsky (1984) lists other purposes for revision (i.e., alteration of form, subordination, and creation of immediacy) but they were not used in the analysis of the Saudi ESL students' revisions for a number of reasons: 1. These specific reasons are not listed as major reasons for revision in the revision research literature. For example, Hall (1987) and Monahan (1984) give several purposes for revision that do not include such purposes. 2. The other purposes for revision given by Boiarsky (1984) seemed to me to be, based on the (limited) examples she gives for each revision function, subsumed and can even be better accounted for by her major seven reasons for revision used in this study. For instance, the concerns of the purpose of creation of immediacy are dealt with by the more general function of improvement of vocabulary. Similarly, subordination is closely related to improvement of coherence since researchers consider it a cohesive tie (Troyka, 1987, p. 316; Halliday and Hasan, 1976). In other words, it serves to link sentences or ideas together and show (or communicate) relationships between the ideas conveyed in those sentences. Therefore, it was not used as a separate purpose here. Likewise, alteration of form (which based on the example Boiarsky provided involves changes in an angle-i.e., the main idea or thesis--for an essay) was not used in the analysis of why revisions occurred in this study because the researcher thought that this purpose is, in fact, satisfactorily accounted for by the more general reason of improvement in coherence. Indeed, Boiarsky herself seems to actually note that there are some problems with these three purposes. For instance, she states that an alteration of form or angle of an essay occurred in the example she provided in her article when it did not "provide an effective means of coherence" (p. 77). Therefore, one can convincingly argue that such changes in the angle or "form" of an essay--mainly by replacing one angle with another--are actually motivated by improvement in coherence rather than by alteration of form.

Where Revisions Occurred in the Writing Process

In addition to identifying revisions, categorizing them according to Faigley and Witte's (1981) taxonomy and determining why each revision was made, revisions were analyzed with respect to where they occurred in the writing process, a procedure that was introduced by Bridwell (1980) and used by other revision researchers such as Faigley and Witte (1981) and Heuring (1984). In this study, on the basis of where they occurred, revisions were divided into three groups: first-draft revisions, between-draft revisions and final-draft revisions. First-draft revisions refer to revisions that occurred when the first drafts were composed in the first writing sessions, and also include changes, like Gaskill's (1986) first-draft revisions, made to notes

or outlines before the first draft was composed. Between-draft revisions consist of revisions that were made while the subjects were reading their first drafts in the second writing sessions. Final-draft revisions include those changes that were made during the actual writing of the final drafts in the second writing sessions. I used some of Gaskill's terms to refer to the points at which revisions occurred in the writing processes of the eight Saudi students because Bridwell (1980), Faigley and Witte (1981) and Hall (1990) describe these points as stages; and the word stage implies a linear model of the composing process (Sommers, 1980).

How Revisions Were Identified and Classified

The revisions made by the Saudi students in this study were identified and categorized with respect to their types, and where and why they occurred, by the researcher and a Saudi doctoral student who was not a participant in the study.

The information and examples concerning the types of revisions in Faigley and Witte's (1981) revision taxonomy, revision phases and purposes presented in this chapter were used to train the assistant. Although definitions and examples of each revision purpose, type and phase were provided to the assistant to make the classification process easier for him, prior to discussing the cases of disagreement the researcher made no attempts to influence or

interfere with the assistant's classifications of revisions according to type, purpose, or phase.

To identify and categorize the revisions that occurred in the study, we independently (in different locations) went over the transcripts of the subjects' think-aloud protocols, viewed the video tapes and examined the Arabic and English essays. We independently agreed on the classification of 87% of the total revisions in the study. Cases of disagreement (13%) were thoroughly discussed until we arrived at agreements concerning appropriate and mutually acceptable classifications of them. The discussion of the few cases of disagreement took place in a pressure-free environment.

CHAPTER 3 RESULTS OF THE STUDY

The purpose of this revision study was to answer the following questions:

- What kinds of revisions do the subjects make in English and Arabic writing tasks? Are there differences between the students' Arabic and English revising behaviors with respect to revision type, frequency of revisions and where they occur in the composing process?
- Why are the revisions made by the students? What are the similarities and differences between the reasons behind the students' Arabic and English revisions?
- To what extent do the revisions made by the subjects as they write affect the "holistic" quality of the entire essays? Do the Arabic essays receive significantly better quality ratings than the English essays or the reverse?
- What do the subjects know about revision in Arabic and English on the basis of an analysis of the changes they made in their texts?
- What does the study tell us about the relationship between the subjects' L1 revising behaviors and their L2 revising behaviors?

The purpose of this chapter is to present the findings regarding these five questions. The five headings below are used to represent the five questions. Subheadings represent the subquestions within each major question.

- Types of revisions in Arabic and English.
- Purposes of Revisions in Arabic and English.
- Ratings of Quality in Arabic and English.
- The subjects' revision knowledge in Arabic and English.
- The relationship between the subjects' revising behaviors in Arabic and English.

Types of Revisions in Arabic and English Kinds of Revisions in Arabic and English

Revisions in Faigley and Witte's (1981) taxonomy are divided into, as Chapter Two has shown, two major categories: surface and text-base changes. Surface revisions do not change meaning and include formal and meaning-preserving revisions. Text-base changes, on the other hand, affect meaning and consist of microstructure and macrostructure changes.

When Arabic and English revisions are classified according to the two major categories of the taxonomy, in both the Arabic and English writing assignments, as demonstrated in Table 2, the same two major types of revisions were made. Similarly, when the revisions are categorized into the smallest types of the taxonomy (i.e., formal, meaning-preserving, microstructure, and

macrostructure changes), the same types of revisions, as

Table 4 shows, occurred in Arabic and English. Consequently,
regarding revision types in the Arabic and English writing
assignments the eight writers used the same revising
strategies. In other words, in both languages the surface
and text-base aspects of the essays were revised. Also, in
both the Arabic and English writing tasks, revisions were
made at the formal, meaning-preserving, microstructure and
macrostructure levels.

Frequency of Types of Revisions in Arabic and English

Like the previous section, this section begins by making a comparison between Arabic and English according to the two major categories of Faigley and Witte's (1981) revision taxonomy: surface changes and text-base changes. Following this, revisions in both languages will be analyzed according to the frequency of the smallest parts or types of the taxonomy. Hence, surface changes are presented as formal and meaning-preserving changes, and text-base changes are presented as microstructure and macrostructure changes.

Surface Changes and Text-Base Changes in Arabic and English

In both the Arabic and English writing assignments the overwhelming majority of revisions involved surface changes, as shown in Table 2 which compares the percentages and frequency of revisions of Arabic and English surface and

text-base changes. As in Faigley and Witte (1981), in this chapter revisions are presented in frequencies per 1000 words to deal with differences in essay length. Surface changes account in Arabic for 83% and in English make up 89% of the total revisions in each language.

Table 2
Percentages and Frequencies of Surface and Text-base Changes
in Arabic and English

Revision Type	Language	Frequency of Revisions	Percentage
Surface	Arabic	2134	83%
	English	2629	89%
Text-base	Arabic	425	178
	English	335	11%

However, there are slight differences in the frequency of revisions between the total surface and text-base changes that occurred in Arabic and those which were made in English. Surface changes were more numerous in English (2629) than in Arabic (2134). Moreover, the participants made text-base changes more frequently in Arabic (425) than in English (335).

Table 3 presents the frequencies and percentages of surface and text-base changes for the individual subjects in Arabic and English. Inspection of Table 3 reveals that surface changes were the predominant type of revision for each writer in both Arabic and English. This finding is

similar to the findings of other first language or ESL studies that used the taxonomy to classify revisions of advanced L1 and L2 students. For example, Gaskill (1986) noted that the majority of his advanced ESL students' revisions were surface changes in L1 and English. Similarly, Faigley and Witte's (1981) study indicates that advanced first language writers made only one text-base change for every three surface changes.

Formal, Meaning-Preserving, Microstructure and Macrostructure Changes in Arabic and English

Faigley and Witte's (1981) revision taxonomy also divides the two major categories of revisions into smaller types. Hence, surface changes include formal and meaning-preserving revisions while text-base changes consist of microstructure and macrostructure revisions. Table 4 gives the frequencies and percentages of all of the types of revisions—i.e, including formal, meaning—preserving, microstructure and macrostructure changes—made by all of the subjects in the Arabic and English assignments regardless of where they occurred in the composing process.

Formal Changes

Inspection of Table 4 reveals that it is quite clear that formal changes—which occurred in Arabic and English mostly to correct grammar and mechanics—were in general considerably more frequent in English than in Arabic.

Indeed, while they represent about one third (33%) of the total Arabic revisions for all of the subjects, they account

Table 3
Frequencies and Percentages of Surface and Text-base Changes
in Arabic and English for Individual Subjects

Subject*	Language	surface	Text-base
Mubarak	Arabic	299 (78%)	85 (22%)
	English	332 (87%)	48 (13%)
Mohammed	Arabic	267 (84%)	51 (16%)
	English	344 (89%)	41 (11%)
Ali	Arabic	326 (86%)	55 (14%)
	English	340 (87%)	51 (13%)
Waleed	Arabic	230 (82%)	50 (18%)
Waleeu		336 (89%)	
Abdullah	English Arabic		43 (11%)
ADGULLAN		250 (82%)	53 (18%)
	English	324 (87%)	47 (13%)
Omar	Arabic	210 (83%)	42 (17%)
	English	258 (91%)	24 (9%)
Ahmmed	Arabic	264 (88%)	37 (12%)
	English	322 (91%)	33 (9%)
Khalid	Arabic	288 (85%)	52 (15%)
	English	373 (89%)	47 (11%)

*Fictitious names are used to refer to the subjects in this study to protect their real identities.

for a larger percentage (46%) of the English revision total, and were the most frequent type of revision in English, whereas in Arabic meaning-preserving changes were the most frequent type of changes. The justification for difference between the frequency of formal changes in Arabic and those in English is that generally the subjects needed to make substantially

more corrections (i.e., formal changes) in grammar and mechanics in English to make up for their incomplete mastery of the English language grammar and mechanical system.

But there is a relatively high frequency of formal changes in both Arabic and English. Gaskill's (1986) and Hall's (1990) studies showed a similar high frequency for formal changes in both the L1s and English of their advanced ESL students; and Raimes (1987), who examines ESL writers at different levels of proficiency to describe their writing behaviors, notices that skilled ESL writers made more editing changes than the unskilled ESL writers.

Meaning-Preserving Changes

Meaning-preserving changes occurred, as shown in Table 4, at roughly the same rate in Arabic (1280) and English (1274).

Microstructure Changes

Concerning the frequency of the smallest types of Faigley and Witte's taxonomy, Table 4 demonstrates that in Arabic for all of the subjects under the text-base revision category, microstructure changes were the predominant type (409) of text-base changes, accounting for 96% of all of the subjects' total text-base changes in Arabic. Likewise, in English the great majority of

Table 4
Total Frequencies and Percentages of All of the Subjects' Formal, Meaning-preserving, Micro-Structure and Macrostructure Changes in Arabic and English

Revision Type	Language	Total Freq. of Revisions	Percentage
Formal	Arabic	854	33%
	English	1355	46%
Meaning- preserving	Arabic	1280	50%
	English	1274	43%
Microstructure	Arabic	409	16%
	English	319	11%
macrostructure	Arabic	16	1%
	English	16	0%

text-base changes were microstructure changes (319), and they represent 96% of the total English text-base changes for all of the subjects.

Macrostructure Changes

Macrostructure changes were very infrequent in both assignments, since they represent only 4% of the total text-base changes in either language. Thus, the two languages were similar in that in both assignments microstructure changes were the overwhelming majority of text-base changes. But it is interesting to note that although Table 4 shows that on the whole microstructure changes were slightly more frequent in Arabic (409) than in English (319), macrostructure changes-i.e., revisions which change the meaning of a text at the level of main ideas--were as frequent in

Arabic (16) as in English (16). Similarly, the percentages of the total macrostructure changes in Arabic (1%) and in English (0%) are almost identical. This is clearly a marked point of similarity between revision processes in the two languages.

Similarities between Arabic and English in the Frequency of Types of Revisions

Tables 5 and 6 give the frequencies and percentages of each type of revision that each of the subjects made in Arabic and in English respectively and show to what extent their revising strategies in both assignments were similar with respect to the frequency of the four types of revisions that occurred in the study. Like Tables 3 and 4, Tables 5 and 6 show a number of points of similarity between each subject's revising behaviors in Arabic and English in the frequency of revision types:

- 1. There is a high frequency of formal changes and meaning-preserving changes in both Arabic and English, even though the frequencies and percentages of these two types were different in each language and varied from one subject to another.
- 2. For each subject, there is a relatively low frequency of microstructure changes in both languages. Microstructure changes for each of the subjects were consistently the third most frequent type of revision

in both Arabic and English. Even for Mubarak, who made the highest number of microstructure changes in Arabic (83), they account for only 22% of his total Arabic revisions. And in both writing assignments and for each subject, macrostructure revisions were very infrequent. Also, they were the least frequent type of revisions for each student in both Arabic and English.

Differences between Arabic and English in the Frequency of Types of Revisions

However, Tables 5 and 6 show some differences in frequency between the Arabic and English writing assignments in the frequency of certain revision types.

Table 5
Total Frequencies and Percentages of Individual Subjects' Formal, Meaning-preserving, Microstructure and Macrostructure
Changes in Arabic

subject	Revision Type			
For	Formal	Meaning- preserving	Micro- structure	Macro- structure
Mubarak	113 (29%)	186 (48%)	83 (22%)	2 (1%)
Mohammed	83 (26%)	184 (58%)	48 (15%)	3 (1%)
Ali	118 (31%)	208 (54%)	53 (14%)	2 (1%)
Waleed	107 (38%)	123 (44%)	48 (17%)	2 (1%)
Abdullah	107 (35%)	143 (47%)	50 (17%)	3 (1%)
Omar	93 (37%)	117 (46%)	42 (17%)	0 (0%)
Ahmed	122 (40%)	142 (47%)	35 (12%)	2 (1%)
Khalid	111 (32%)	177 (52%)	50 (15%)	2 (1%)

While the most frequent revisions in Arabic for each of the eight writers were meaning-preserving revisions, formal changes were the most frequent type of revision for five writers (Mubarak, Ahmed, Waleed, Abdullah and Omar). Tables 5 and 6 also show, as Table 3 indicated for all of the subjects, that each writer made many more formal changes in English than in Arabic. When we compare the frequencies of meaning-preserving changes in Arabic with those in English, we notice that five subjects' meaning-preserving changes were slightly more frequent in Arabic than in English. Although three subjects made slightly more meaning-preserving changes in English than in Arabic, the percentage that such revisions represent of their total revisions in English tended to be consistently lower than the percentage that the same revisions represent of their total revisions in Arabic.

Although Tables 5 and 6 demonstrate that for each of the subjects, microstructure changes tended to occur more frequently in Arabic than in English, only two students (Mubarak and Omar) made considerably more microstrucure changes in Arabic than in English. When it comes to macrostructure changes, Tables 5 and 6 indicate that all of the subjects except Omar made some macrostructure changes in Arabic and English. Table 4 indicated above that macrostructure changes were as frequent in Arabic (16) as in English (16). In addition to being the least frequent type of changes for each of the subjects in each language, macrostructure changes,

Table 6
Total Frequencies and Percentages of the Individual Subjects' Formal, Meaning-preserving, Microstructure and Macrostructure Changes in English

The	Revision Type			
subject	Formal	Meaning- preserving	Micro- structure	Macro- structure
Mubarak	168 (44%)	164 (43%)	46 (12%)	2 (1%)
Mohammed	141 (37%)	203 (53%)	40 (10%)	1 (0%)
Ali	161 (41%)	179 (46%)	48 (12%)	3 (1%)
Waleed	180 (47%)	156 (41%)	41 (11%)	2 (1%)
Abdullah	185 (50%)	139 (38%)	43 (11%)	4 (1%)
Omar	143 (50%)	115 (41%)	24 (9%)	0 (0%)
Ahmed	203 (57%)	119 (33%)	31 (9%)	2 (1%)
Khalid	174 (42%)	199 (47%)	45 (11%)	2 (0%)

as shown in Tables 5 and 6, were more frequent for some subjects in Arabic; for others they occurred more frequently in English. A closer examination of the data indicated that the topic rather than the language of the assignment was the determining factor for how frequently macrostructure changes were made in the study. Indeed, in general topic one tended consistently to be associated with fewer macrostructure changes than topic two (See Appendix 2) in both English and Arabic, the native language of the students. The participants made identical totals of macrostructure changes when writing on topic two in Arabic (9) or in English (9). Similarly, 7 Arabic macrostructure changes and 7 English macrostructure changes were associated with topic one. This finding is very reasonable and

convincing since topic one requires more specialized knowledge than topic two. In relation to this finding, Faigley and Witte (1981) state that participants' level of familiarity with the subject of an essay is a major situational variable for composing which can affect the frequency of some types of revisions.

Where Revisions Occur in the Writing Process

In addition to categorizing them according to Faigley and Witte's (1981) taxonomy, revisions were analyzed with respect to where they occurred in the writing process, a procedure that was used by revision researchers such as Bridwell (1980) and Faigley and Witte (1981). In this study, on the basis of where they occurred, revisions were divided into three groups: first-draft revisions, between-draft revisions and final-draft revisions. First-draft revisions refer to revisions that occurred when the first drafts were composed in the first writing sessions and also include changes made to notes or outlines before the first draft was written. Between-draft revisions consist of revisions that were made while the subjects were reading their first drafts in the second writing sessions. Final-draft revisions include those changes that were made during the actual writing of the final drafts in the second writing sessions. To easily distinguish changes made on first or final drafts from

changes made between drafts, I used a technique similar to those used by Faigley and Witte (1981), Bridwell (1980) and Hall (1987), namely the use of pens with different color inks in the first and second writing sessions. While first and final drafts were produced by black pens, the participants used red pens to make between-draft changes.

Arabic and English essays are similar regarding where revisions occurred in the writing process. Table 7 gives the frequencies and percentages of the points of occurrence--FD (First Draft), BD (Between Draft) and FND (Final Draft) -- of all revision types in Arabic and English. In both the Arabic and English writing assignments, revisions, as demonstrated in Table 7, occurred most frequently while students were writing their final drafts and least frequently while they were working between drafts. Also, it is clear that the subjects revised substantially more frequently in both Arabic (80% or 2058) and English (73% or 2173) when they were in the drafting phases (i.e., first and final draft revisions combined) than when they were working between drafts in either language. Similar findings are reported by Hall (1990) and Gaskill (1986) who investigated the revising behaviors of advanced ESL writers in English and their native languages. This finding supports Murray's (1978) claim that revising and writing are co-occurring activities. It also

indicates that in both assignments, revising was not restricted to one phase of writing; it is a recursive process that takes place throughout the subjects' Arabic and English writing process. Although Arabic and English were strikingly similar in the recursiveness of the revision process and in the phases in which revisions were considerably more frequent, they were different in how frequently revisions in each phase occurred. Inspection of Table 7 shows that many more first and between draft revisions occurred in English than in Arabic and slightly more final draft changes were made in Arabic than in English.

Table 7
Total Frequencies and Percentages of Where Revisions of
All Types Occurred in the Writing
Process in Arabic and English

Point of Occurrence	Arabic	English
FD	731 (28%)	1031 (35%)
BD	502 (20%)	793 (27%)
FND	1326 (52%)	1140 (38%)

Formal Changes

Table 8 presents the frequencies and percentages of types of revisions in Arabic and English. Inspection of Table 8 reveals that in both languages formal

changes occurred most frequently in final drafts, even though in each phase many more formal changes were made in English, as anticipated. This might suggest that in both languages editing changes are most frequently made in final drafts when the students were largely satisfied with the content and organization of their essays. In this regard it is relevant to note that ESL researchers investigating different aspects of the composing behaviors of advanced ESL writers found that formal changes tended to be more frequent in L2 than L1 and that they were most frequently made during the production of final drafts (Gaskill, 1986; Hall, 1987, 1990; Zamel, 1982, 1983). This suggests that the eight advanced subjects in both Arabic and English were aware that, as Zamel (1982 notes, "editing, though to some extent inevitable throughout, is really the province of the last stage of composing" (p. 205).

Meaning-Preserving Changes

In meaning-preserving changes, we notice some differences between the two languages. While Arabic meaning-preserving changes occurred most frequently in the final draft phase and least frequently in the between-draft phase, English meaning-preserving changes occurred most frequently in the first draft phase and least frequently in the first draft phase and least frequently in the final draft phase. This difference between the two languages is linked to the

extent--sentence structure changes in English. As will be shown below in the section on purposes of revision, most English vocabulary changes occurred in the first draft phase, and they were least frequent in the final draft phase. English sentence structure changes, on the other hand, were most frequent in the between draft phase and least frequent in the final draft phase.

Microstructure Changes

The students' revising behaviors in Arabic and English show similar patterns regarding the frequency of occurrence of microstructure changes. In both languages microstructure changes occurred most frequently in final drafts and least frequently in first drafts.

Macrostructure Changes

Table 8 indicates that Arabic and English texts are very similar in how frequently macrostructure changes appear in the writing process. In Arabic and English, most macrostructure changes were made as students were working between drafts. Also, in both writing assignments, no macrostructure changes were made in the first draft phase. The finding that microstructure—and many macrostructure changes—were most frequent in the final draft phase implies that

students should be allowed to write more than one draft, since no macrostructure changes, for example, were made in either Arabic or English in the first draft phase and only about one fourth of their total microstructure changes in either language occurred in the first draft phase.

Purposes of Revisions in Arabic and English

Boiarsky's (1984) major seven purposes, that were reviewed and illustrated in Chapter Two, were used to explain why revisions were made in this study.

They are the following:

- 1. Improvement of coherence.
- 2. Expansion of information.

Table 8
Frequencies and Percentages of Total Types of revisions and Where They Occurred in Arabic and English

Revision Type	Language	Point of Occurrence			
		FD	BD	FND	
Formal	Arabic	252 (29%)	133 (16%)	469 (55%)	
	English	415 (31%)	293 (21%)	647 (48%)	
Meaning- preserving	Arabic	377 (29%)	229 (18%)	674 (53%)	
	English	524 (41%)	385 (30%)	365 (29%)	
Micro- structure	Arabic	102 (25%)	131 (32%)	176 (43%)	
	English	92 (29%)	106 (33%)	121 (38%)	
macro- structure	Arabic	0 (0%)	9 (60%)	7 (40%)	
	English	0 (0%)	9 (55%)	7 (45%)	

- 3. Reorganization of information.
- 4. Deletion of information.

- 5. Emphasis of information.
- 6. Improvement in vocabulary
- 7. Correction of grammar and mechanics and improvement in sentence structures.

The researcher and his assistant, as was pointed out in Chapter Two, independently relied on the subjects' think-aloud comments to determine why revisions were made.

Why Are the Revisions Made by the Students?

Revisions in this study occurred for a variety of purposes, ranging from reorganization changes to mechanical, grammatical and sentence structure changes.

Table 9
Total Frequencies and Percentages of Revision
Purposes in the Study

Purpose	Frequency and Percentage
REOG	124 (2%)
СОН	465 (8%)
EM	124 (2%)
voc	1191 (22%)
EXP	868 (16%)
GMS	2477 (45%)
DEL	274 (5%)

Table 9 presents the frequencies and percentages of each purpose--REOR (Reorganization), COH (Coherence), VOC (Vocabulary), EM (Emphasis), EXP (Expansion), GMS (Correction of Grammar and Mechanics and

Improvement in Sentence Structures) and DEL (Deletion).

From Table 9, it is quite clear that revisions seeking to correct grammar and mechanics or improve sentence structures were the most frequent (2477 or 45%) in the study. Vocabulary changes were next, representing 22% (1191) of the total revision purposes in the study. The next most frequent purposes were the combined purposes of expansion and deletion which accounted for 21% (1142) of the total. All other purposes made up 12% (713) of the total.

<u>Similarities and Differences between Arabic and English Revision Purposes</u>

While in both Arabic and English the same seven purposes were used, there were differences between the two languages in the frequency of some purposes. Table 10 gives frequencies and percentages of total Arabic and English revision purposes. Table 11 divides the seventh purpose into its three subpuporses—grammatical, mechanical and sentence structure changes—and presents their frequencies and percentages of the total Arabic and English changes. Table 10 indicates that in the Arabic assignment students made many more reorganization and deletion changes than in the English one. Indeed, while emphasis changes were the least frequent purpose in Arabic, reorganization

was the least frequent purpose in English. But in English substantially more grammatical and mechanical changes and slightly more sentence structure changes occurred than in Arabic (as shown in Table 11, which divides the seventh purpose into its three subpurposes --i.e., grammatical (Gram) and mechanical (Mech) and sentence structure (SS) changes). In the English assignment, grammatical (500) and mechanical (823) changes were substantially more frequent than Arabic grammatical (270) and mechanical (561) revisions. But sentence structure changes were slightly more numerous in English (170) than in Arabic (153). From Table 10, it is clear that in Arabic there are slightly more emphasis, expansion and coherence

Table 10
Total Frequencies and Percentages of Arabic and
English Revision Purposes

Purpose	Language						
	Arabic	English					
REOR	76 (3%)	48 (1%)					
СОН	243 (9%)	222 (8%)					
EM	72 (3%)	52 (2%)					
voc	537 (21%)	654 (22%)					
EXP	476 (18%)	392 (13%)					
GMS	984 (39%)	1493 (51%)					
DEL	171 (7%)	103 (3%)					

changes than in English. But vocabulary changes appeared slightly more frequently in English than in

Arabic. Although Tables 10 and 11 show that there are some major (i.e., the differences in the distribution of frequencies of reorganization, deletion,

Table 11
Frequencies and Percentages of
the Arabic and English
Sub-purposes

Subpurpose	Language				
	Arabic	English			
Mech	561 (22%)	823 (28%)			
Gram	270 (11%)	500 (17%)			
SS	153 (6%)	170 (6%)			

grammatical and mechanical revisions between Arabic and English) and minor (that is, in the difference between the rate of revisions per 1000 words between Arabic and English emphasis, expansion, vocabulary, coherence, and sentence structure changes) differences in frequencies of revision purposes between Arabic and English, they also reveal a number of similarities between the two language samples. For example, in both languages there is, as frequencies per 1000 words and percentages show, a low frequency of reorganization and emphasis changes and a relatively low frequency of sentence structure, deletion, coherence or expansion changes. However, there is a relatively high frequency of vocabulary

changes and changes seeking to correct the grammar and mechanics in both Arabic and English, even though such changes occurred, in general, considerably more frequently in English than in Arabic. Furthermore, even though changes aimed at improving sentence structures were slightly more frequent in English than in Arabic, they accounted for the same low percentage points in both languages.

Table 12 gives the frequencies of revision purposes for each participant in Arabic and Table 13 presents the frequencies of revision purposes for each student in English. Since both Tables 12 and 13 divide the seventh purpose into its sub-purposes, they allow us to compare the two languages in terms of frequency of not only purposes but also sub-purposes per 1000 words for each subject. Tables 12 and 13 show that there is a wide variation between the subjects in the frequencies of revision purposes in Arabic and English that was not revealed in Tables 10 and 11. For example, while Table 10 indicates that in Arabic substantially more reorganization changes were made than in English, Tables 12 and 13 demonstrate that this pattern was not followed by all of the subjects in Arabic or in English. It is true that five subjects made substantially more reorganization changes in Arabic, but Omar made slightly more reorganization changes in English and Abdullah's reorganization changes were as

frequent in English as in Arabic.

Similarly, inspection of Table 10 reveals that coherence changes occurred slightly more frequently in Arabic than in English but Tables 12 and 13 indicate that when individual subjects' revision purposes are analyzed, four subjects actually made slightly more coherence changes in English than in Arabic, one subject (Ahmed) made nearly twice as many coherence changes in Arabic as in English and only three subjects made slightly more coherence changes in Arabic than in English. In Tables 12 and 13 a wide variation among the subjects is shown regarding the frequency of their revision purposes in the two languages. Some subjects made revisions for a certain purpose substantially or slightly more frequently in Arabic than in English. For others, the same purpose was substantially or slightly more frequent in English.

In spite of the presence of such wide variation at the quantitative level in the revising behaviors of the eight subjects in Arabic and English, there are several points of similarities. For instance, the most frequent purpose for all of the subjects in both Arabic and English was the GMS--correction or grammar and mechanics and improvement in sentence structures.

Moreover, for the great majority of the subjects in Arabic and all of the participants in English the second most frequent purpose was improvement in

vocabulary. There were similarities and differences between the subjects' revising behaviors in Arabic and English not only in frequencies of purposes, but also in types and quality of revision purposes. In the following sections, types and quality of reorganization, coherence, emphasis, vocabulary, expansion, grammar, and mechanics changes in both Arabic and English will be discussed and illustrated with examples.

Arabic and English Coherence Changes

As Table 10 showed above, in terms of frequency per 1000 words coherence changes, on the whole, were slightly more frequent in Arabic (243) than in English (222). Similarly, when the frequency of types of coherence changes are considered, microstructure changes were slightly more frequent in Arabic (11% or 27) than in English (9% or 22). Likewise, the subjects made slightly more meaning-preserving coherence changes in Arabic (216) than in English (200).

But in both languages microstructure changes were infrequent and the majority of coherence changes were meaning-preserving ones, accounting in Arabic for 89% and in English for 91% of total coherence changes in each language. Furthermore, microstructure coherence changes involving short changes in topic sentences to make them better cohere with their thesis statements

and in thesis statements to make them better reflect
the main ideas of their essays were predominant in both
Arabic (21) and English (20) languages. Consider the
following change made by Abdullah in his thesis
statement as he was working between the drafts of his
English essay:

In fact there are many advantages for sending
[Saudi] students to study abroad in the developed
countries around the world.

In the following example, a very similar change in length occurred in Arabic in the thesis statement as one subject was producing the final draft of his Arabic essay:

Since learning the English language [in the Kingdom of Saudi Arabia] may be limited to the intermediate and high school stages, therefore, the learning period for this language by making it a required subject at the elementary stage.

Meaning-preserving coherence changes included, as Chapter Two pointed out, cohesive ties which make the grammatical aspects of the essay mutually connected, namely reference, conjunctions and lexical cohesion. In Arabic referential (52 or 24%) and conjunctional (102 or 48% of total Arabic meaning-preserving coherence changes) revisions were slightly more frequent than English referential (49 or 24%) or conjunctional (75 or 37% of total English meaning-preserving coherence changes) revisions.

Table 12
Frequencies of Revision Purposes and Sub-purposes
for Each Writer in Arabic

Purj	pose			- <u>-</u>	Wr	iter			
		Mub'k	Moh'd	Ali	Wal'd	Abd'h	Omar	Ahm'd	Kha'd
RE	OR	14	9	18	11	4	5	6	9
C	ЭН	32	32	39	25	36	26	24	29
E	м	7	11	10	9	6	9	10	10
v	С	75	72	79	60	65	50	59	77
E	(P	86	68	62	53	49	43	52	63
	MEC	74	55	87	71	70	59	73	72
GMS	GRM	38	26	32	30	35	32	43	34
	SS	16	19	29	13	20	13	16	27
DI	EL.	42	26	25	8	18	15	18	19

Table 13
Frequencies of Revision Purposes and Sub-purposes
for Each Writer in English

Purj	pose				Wri	ter			
		Mub'k	Moh'd	Ali	Wal'd	Abd'h	Omar	Ahm'd	Kha'd
RE	OR	5	4	15	6	4	7	3	4
C	ЭН	24	35	32	26	24	33	13	35
E	M	0	15	3	11	2	0	9	12
V	oc	90	101	90	78	74	61	73	87
E	KP .	59	39	48	65	57	18	38	68
	MEC	97	78	113	101	110	91	121	112
GMS	GRM	72	56	45	70	75	52	75	55
	88	18	23	31	17	17	16	17	31
DI	RL	16	34	14	5	8	4	6	16

However, the distribution of the frequency of types of referential cohesion changes shows some major differences between the two languages. Whereas demonstrative cohesion changes were more or less as frequent in Arabic (19) as in English (20), twice as many pronominal cohesion revisions were made in Arabic (29) as in English (14). Indeed, there are several occasions in the students' English essays, in which pronominal revisions could have been used to improve the cohesiveness of their essays. For example, in the following passage—from Waleed's English final draft—the word English in the second sentence could have been replaced by the pronoun it to make the passage more cohesive:

Currently, English is a very important tool of communication in various domains. For example, information networks, all over the world, use English as a communication medium.

Another difference between the subjects' coherence revising behaviors in the two languages was in the area of comparative cohesion revisions; whereas they were the least frequent referential cohesion revisions in Arabic (3 or 6%), they were the second most frequent referential cohesion change in English (15 or 31%). Hence there are noticeable differences between the two languages regarding the distribution of the frequency of two types of referential cohesion changes, namely pronominal and comparative cohesion changes; while the

former was substantially more frequent in Arabic the latter was substantially more frequent in English.

While in English lexical cohesion revisions (38% of their total meaning-preserving coherence changes in English or 77) were, on the whole, slightly more frequent than in Arabic (28% or 62), there is also a major difference between Arabic and English in the frequency of types of lexical cohesion changes in each language. In Arabic 70% (or 43) of total lexical cohesion revisions involved substituting key words or phases of the main ideas of the topic sentences with synonymous forms to achieve lexical cohesion. For instance, in the following passage Mubarak replaced alternative, which appeared in the topic sentence, with solution in the second sentence as he was writing his first draft in Arabic:

There is the argument that we can reduce the number of students who are studying abroad because there is another alternative like translation. This is not a positive alternative [solution] for this issue

But in English 72% (or 55) of the total English lexical cohesion revisions involved the repetition of exact key words or phrases of such ideas. Consider the following passage from Ali's English first draft:

Secondly, I think that sending students in their youth might affect them negatively, since they will go and live in a different society which is completely different from their home society. In such an open country [society] the students might be influenced by the western secular thought

In the above example, Ali repeated the word society, which appeared in the topic sentence, in the second sentence. This finding implies that students may benefit from additional instruction in vocabulary in English, since it will allow them to vary words in their paragraphs rather than repeat exact words.

To sum up coherence changes, generally coherence changes occurred slightly more frequently in Arabic than English. Microstructure coherence changes were slightly more frequent in Arabic than in English. Arabic and English essays also differed in how frequently meaning-preserving coherence changes (i.e., cohesion changes) occurred. The subjects made slightly more meaning-preserving coherence changes in Arabic than in English. But while in Arabic conjunctional and referential cohesion changes were slightly more frequent than in English, lexical cohesion changes occurred slightly more frequently in English than in Arabic. Furthermore, some types of referential (e.g., pronominal cohesion revisions) or lexical (i.e., revising by substituting words) cohesion changes were substantially more frequent in Arabic than in English. Other lexical (revising by repeating exact words) and referential (comparative cohesion revisions) types were considerably more frequent in English than in Arabic. Nonetheless, the subjects' coherence revising behaviors were strikingly similar in both writing assignments in

that meaning-preserving changes were the majority in Arabic (89%) and English (91% of total coherence changes in each assignment). Also, most of the microstructure changes involved similar changes in both assignments. Moreover, one type of referential cohesion change (demonstrative cohesion) was more or less as frequent in Arabic as in English.

Arabic and English Expansion Changes

In both Arabic (57%) and English (58%) the majority of expansion changes were microstructure changes. Meaning-preserving expansion changes were the second most frequent expansion revisions in Arabic (40%) and English (38%). In both languages macrostructure expansion changes were the least frequent expansion revisions in Arabic (3%) and English (4%). But there were slight differences in the frequencies of these types of expansion changes between Arabic and English. Arabic microstructure (274) and meaning-preserving (188) expansion changes occurred slightly more frequently than English microstructure (226) and meaning-preserving (150) expansion changes. But in English macrostructure expansion changes were more frequent (15) than in Arabic (14). Furthermore, whereas there were no noticeable differences in the complexity or length of Arabic and English microstructure or meaning-preserving expansion changes,

Arabic macrostructure expansion changes tended to be more detailed and complex than those in English.

Consider the following Arabic and English macrostructure expansion changes made by Ahmed while he was working on his Arabic and English essays between drafts:

Arabic:

[Anyone who is familiar with the history of nations and peoples will realize that science, education and civilization are not owned by one group of people. The Romans, Greeks and Indians were peoples of advanced civilizations at that time [in their own times], but, before fifteen centuries the Muslims were at a low level of civilization, therefore they needed to translate those sciences and cultures into the Arabic language. And, indeed, they were able to do that without the need for all Muslims to master the Greek, Roman, or Indian languages. Also, before six or seven centuries Europe was living in the medieval ages or the dark ages as they call them, at a time when the Muslims were living in an age of prosperous civilization. For this reason, a group of European orientalists started learning the Arabic language and transferring the Islamic civilization to Europe and they succeeded to do so, but, without the need for all Europeans to learn the Arabic language.

English:

[Finally, there are also some social problems such as culture shock and homesickness, but these problems can be solved by passage of time and by, as I said above, building more Islamic centers in the western countries. So, these problems shouldn't stop the government from sending the necessary number of students to study in other countries.]

In the Arabic macrostructure expansion change two detailed examples are given to show how historically it is not necessary for all people to learn a language of a certain great "civilization" to transfer that

civilization and all of its scientific contributions to their native language. However, Ahmed's English macrostructure expansion change is less persuasive because he did not show how, for instance, the passage of time or building more Islamic centers in the Western countries can "solve" the culture shock and homesickness problems.

Arabic and English Reorganization Changes

Although Arabic reorganization changes (76) were, on the whole, substantially more frequent than English ones (48), there are several points of similarities between the reorganization changes in Arabic and those in English that should not be overlooked. Regarding types of reorganization changes, in both assignments microstructure changes were the majority, accounting in Arabic for 83% (or 63) and in English for 78% (or 37) of the total reorganization changes in each language. Moreover, meaning-preserving reorganization changes were somewhat infrequent in Arabic (17% or 13) and English (21% or 10). Thus, although microstructure reorganization changes were relatively low in frequency in both languages and although they were substantially more frequent in Arabic than in English, the fact that the majority of the subjects' reorganization changes were microstructure ones in both Arabic and English indicates that in both languages the subjects were

considerably more concerned with making reorganization changes that affect their essay meaning than with making meaning-preserving reorganization revisions.

Additional points of similarities between the two languages in reorganization changes include that in both languages the most frequent microstructure reorganization changes involved breaking existing paragraphs to produce new ones, representing 67% (or 43) in Arabic and 68% (or 25) in English of the total microstructure reorganization changes in each language. Changes involving joining related but separate paragraphs with the preceding ones came next in Arabic (27% or 17) and English (25% or 9). The least frequent microstructure reorganization changes in both Arabic (6% or 4) and English (7% or 3) were those that moved a paragraph from one location to another.

In this study, meaning-preserving reorganization changes included moving sentences or phrases from one location in a paragraph to another in the same paragraph and reordering of items in a sentence. The first type of meaning-preserving reorganization changes was the most frequent type in Arabic (64% or 8) and English (58% or 6). A further major point of similarity is that no major differences in quality were found between microstructure or meaning-preserving reorganization changes in Arabic and English.

Arabic and English Deletion Changes

As was mentioned above, deletion changes were far more frequent in Arabic (171) than in English (103). Microstructure deletion changes were made slightly more frequently in Arabic (45 or 27%) than in English (34 or 33%). Furthermore, meaning-preserving deletion changes occurred substantially more frequently in Arabic (124 or 72%) than in English (69 or 67%). Also, while 2 macrostructure deletion changes were made in Arabic, no macrostructure deletions were made in English. In this regard, Faigley and Witte (1981) found that advanced student writers made very infrequent macrostructure deletion changes in their essays. In spite of the number of slight or major differences between the two assignments in how frequent types of deletion changes were in each language, it appears that the subjects used similar revising strategies. For example, in both assignments, most deletion changes were meaningpreserving ones. Furthermore, in both Arabic and English microstructure and meaning-preserving deletion changes were more or less similar in length and complexity.

Having reviewed the similarities and differences between Arabic and English deletion and expansion changes, it is interesting to note that in both Arabic and English expansion changes occurred significantly more frequently than deletion changes. Unlike Sommers's

student writers who were more interested in making deletion changes than expansion changes, in this study the eight advanced ESL students, on the whole, made far more expansion changes than deletion changes in either language. This finding does not support Hall (1987) who found that his four advanced ESL students made more deletion changes than expansion revisions in English.

Arabic and English Emphasis Changes

The distribution of the frequency of meaning-preserving and formal emphasis changes points to major differences between Arabic and English. Meaning-preserving changes occurred substantially more frequently in Arabic (51 or 72%) than in English (19 or 35%). On the other hand, formal emphasis changes were made considerably more frequently in English (34 or 64%) than in Arabic (20 or 28%). Furthermore, the frequency and variety of types of meaning-preserving and formal emphasis changes show some differences between the subjects' revising behaviors in Arabic and English. For example, while the subjects added a variety of meaningpreserving devices to emphasize certain pieces of information in Arabic like Inna, emphatic adverbs, fronting and delaying, in English only two emphasis devices were used--i.e., emphatic adverbs and the do construction. Inna was the most frequent meaning-preserving emphasis device in Arabic (35 or 68%). Adverbs came next in Arabic (10 or 19%). Fronting and delaying were the least frequent meaningpreserving emphasis devices (6 or 13%) in Arabic. In English, in contrast, adverbs were the most frequent meaning-preserving emphasis device (17 or 89%). Thus, in both languages emphatic adverbs were not used frequently, even though they were substantially more frequent in English than in Arabic. The do construction was the least frequent meaning-preserving emphasis device in English (2 or 11%).

There are also some major differences in the frequency and variety of the formal emphasis devices used in each language. Whereas Arabic formal emphasis devices include adding underlines, double underlines or dashes, the students added only underlines for emphasis in English. Furthermore, emphasis underlines were substantially more frequent in English (34 or 100%) than in Arabic (14 or 69%). However, there is a point of similarity between the two languages here in that emphasis underlines (14 or 69%) were the most frequent formal Arabic emphasis devices. Emphasis dashes were the second most frequent Arabic device (5 or 26%). Emphasis double underlines came last (1 or 5%).

In summary of emphasis changes, there were major differences between Arabic and English writing tasks regarding the frequency of meaning-preserving and formal emphasis changes as well as the variety of types of such changes. The subjects used more types of meaning-preserving and formal emphasis changes in their Arabic essays than in their English ones. Furthermore, while meaning-preserving emphasis changes were substantially more frequent in Arabic

than in English, formal emphasis changes were nearly twice as frequent in English as in Arabic. This suggests that although emphasis changes were, on the whole, the least frequent changes in Arabic, the students were considerably more likely to use a meaning-preserving emphasis change than a formal one. But in English the students were far more likely to make a formal emphasis change than a meaning-preserving one.

Arabic and English Vocabulary Changes

As pointed out above, slightly more vocabulary changes were made in English (654) than in Arabic (537). But Arabic and English were similar in that in each assignment vocabulary changes were relatively highly frequent, even though they occurred slightly more frequently in English than in Arabic. Indeed, while they made up 51% of total meaning-preserving changes in English, they accounted for 42% of total meaning-preserving changes in Arabic. This finding is similar to the findings--on advanced students' revising behaviors--of first language and ESL writing researchers (Faigley and Witte, 1981; Heuring, 1984; Zamel, 1983; Hall, 1990) that vocabulary changes were very frequent when revising in L1 or L2. The slight increase in vocabulary changes in English suggests that the subjects, as Hall notes (1987), take advantage of revision to overcome "problems in language proficiency" (p. 112).

Arabic and English Correction of Grammar and Mechanics and Improvement in Sentence Structures

Mechanical changes were substantially more frequent in English (823) than in Arabic 561). Likewise, grammar correction changes were far more frequent in English (500) than in Arabic (270). These findings suggest that these advanced ESL students relied on revision to deal with grammatical and mechanical difficulties in English.

Nonetheless, an inspection of the final drafts of the subjects shows that although grammatical and spelling problems were almost completely eliminated from the students' Arabic essays, the students' finished final drafts in English still contain a few grammatical and mechanical mistakes, as illustrated in the following example which is taken from Abdullah's finished English final draft:

Such diversity is needed in our country because it will greatly contribute in building a good and diverse experience.

In this sentence, contribute is followed by the preposition in rather than to. On the other hand, sentence structure changes were slightly more frequent in English (170) than in Arabic (153), a finding that indicates that the participants had to make not only more vocabulary, grammatical and mechanical changes, but also sentence structure changes to compensate for their incomplete mastery of the English language system. However, sentence structure changes were more or less similar in the two assignments in that most

involved removing unnecessary or redundant words, phrases or sentences, as is shown in the following passage from Waleed's English between-draft:

Therefore, most of the periodicals [in science] and books in science are published in English.

Here Waleed noticed that he repeated in science twice in the same sentence. As a result, he deleted the first phrase because it was redundant.

Ratings of Quality in Arabic and English

Since one of the interests of the study was to find out if the students' revising behaviors improve the quality of the subjects' Arabic and English essays, copies of both the first and final drafts of the participants' English and Arabic essays were graded by Saudi doctoral students in the Department of English at Michigan State University, using the ESL Composition Profile (Jacobs et al., 1981) to determine: 1) whether or not they would notice improvements between the first and final drafts, and 2) whether or not there would be major differences in quality between the Arabic and English essays. Furthermore, the researcher asked experienced ESL teachers who are native speakers of English to rate copies of the first and final drafts of four English compositions--chosen at random--to see if the native speakers of English would rate the final drafts of the four subjects' English essays more

highly. The native speakers of English were told that the intended audience was Saudi doctoral students majoring in English at Michigan State University.

According to Jacobs et al. (1981), each composition should be read by two raters. They also suggest that when raters' scores of an essay differ by more than ten points, that essay should be submitted to a third grader, and the average of the closest scores within a ten-point range should be considered the final score. A copy of the profile was attached to the back of the first and final drafts of each essay. The subjects' first and final drafts were then submitted to the raters in envelopes. The order of the participants' first and final drafts was mixed in these envelopes. In other words, the raters were not told or given any indication concerning whether the drafts that they were asked to grade were actually first or final drafts.

Tables 14 and 15 present the Saudi doctoral students' holistic ratings for the subjects' Arabic and English first and final drafts, respectively. Table 16 gives the native speakers' holistic ratings of the first and final drafts for four essays. Both the Arabic and English final drafts show improvements in quality. However, whereas Arabic essays improved in the final drafts by an average of 7.625 points, English essays improved in their final versions by an average of 5.125 points. English essays rated by the native speaker

graders show some improvement, too. The final drafts of these essays improved by an average of 4.875 points. Arabic final draft improvement scores were significantly higher than English final draft improvement scores (t=-7.34, p=.000079). This suggests that the participants were better revisers in Arabic.

Table 14
The Saudi Doctoral Students' Ratings for the Arabic
First and Final Drafts

Participant	Draft		Average		
	-	Rater 1	Rater 2	Rater 3	
Omar	First	86	82		84
	Second	92	89		90.5
Abdullah	First	83	87		85
	Second	90	94		92
Mubarak	First	87	85		86
	Second	95	91		93
Ahmed	First	83	85		84
	Second	89	95		92
Khalid	First	88	91		89.5
	Second	99	98		98.5
Ali	First	92	88		90
	Second	99	95		97
Mohammed	First	86	84		85
	Second	97	93		95
Waleed	First	87	92		89.5
	Second	93	99		96

The slightly more frequent microstructure changes in Arabic and the longer and more complex macrostructure

changes in Arabic are possibly an explanation for the difference in improvement between the final drafts in Arabic and those in English.

In Arabic, Khalid's essay received the highest final draft score (98.5). The lowest score in Arabic (90.5) was obtained by Omar's final draft, which did not show any macrostructure changes in either language.

Table 15
The Saudi Doctoral Students' Ratings for the English
First and Final Drafts

Participant	Draft	Ra	ters' Scores		Average
		Rater 1	Rater 2	Rater 3	
Omar	First	79	80		79.5
	Second	82	84		83
Abdullah	First	78	82		80
	Second	83	87		85
Mubarak	First	75	79		77
	Second	81	83		82
Ahmed	First	76	74		75
	Second	84	80		82
Khalid	First	85	82		85.5
	Second	93	89		91
Ali	First	76	87	85	86
	Second	89	93		91
Mohammed	First	84	82		83
	Second	88	90		89
Waleed	First	84	80		82
ľ	Second	89	83		86

In the English essays, the highest score was given to Ali's and Khalid's final draft (91) essays, whereas Mubarak's and

Ahmed's essays received the lowest final draft score (82).

A t-test was performed to determine if the subjects' second drafts improved significantly in either language. The test shows that ratings of quality were significantly higher for second drafts in both languages. Arabic essays improved significantly in their final drafts (t=16.92, p=.0000003). Similarly, English compositions received significant improvement scores in their second drafts (t=13.25, p=.000002). This indicates that the advanced ESL participants used successful revising strategies in Arabic and English.

Table 16
The Native Speakers' Ratings for Four English Essays

Subject	Draft	Ra	Average		
		Rater 1	Rater 2	Rater 3	
Abdullah	First	76	78		77
	Second	84	82		83
Mubarak	First	77	79		78
	Second	80	84		82
Mohammed	First	84	86		85
	Second	89	93		90
Waleed	First	81	80		80.5
	Second	87	83		85

The correlation between the subjects' average scores-given by the Saudi raters--for their Arabic and English
final drafts is quite high (r=.87), suggesting that there is
a strong relationship between writing in Arabic and English

by advanced Saudi ESL students. In other words, it indicates that if a student writes competently in his native language, he will tend to do so in the second language. This finding corroborates the finding of Canale et al. (1988) on the significant relationship between the L1 and L2 writing of French-English bilingual high school students

The Subjects' Revision Knowledge in Arabic and English

In this section aspects of what the participants know about revising, based on the written data and accompanying think-aloud protocols, in both languages will be presented. The students seemed to have a highly developed sense of what revision involves. For example, they used a variety of revision types (formal, meaning-preserving, microstructure changes, and macrostructure changes) to modify all aspects-surface, meaning or organization—of their essays. They also made revisions for a variety of purposes; in both languages, they made changes involving expansion, reorganization, deletion, coherence, emphasis, vocabulary, sentence structure, grammar and mechanics.

Also, the fact that the majority of changes in both Arabic and English occurred as the writers were producing their first and final drafts rather than while they were working between drafts clearly indicates that the students were aware of, and took advantage of, the recursive nature of revision that first language (e.g., Sommers, 1980; Bridwell, 1980) and second language revision studies (e.g.,

Heuring, 1984; Hall, 1987) demonstrated.

In addition, like the advanced L1 and L2 writers, the students seemed to have goals and intentions; and very frequently in both Arabic and English, revisions were used to resolve discrepancies between their intentions and actual texts. Such cases often led to microstructure changes in both assignments. For example:

Undoubtedly, English is an important language in the field of technological sciences. Indeed, most technological devices are closely associated with English. [The reason behind this is that modern sciences developed in English countries and scientists continued to accept this language as a common language.] This is what made it necessary for those in charge of education in Saudi Arabia to be interested in teaching this language.

In the above example Omar noted, as he was reading the introductory paragraph of his Arabic first draft in the between-draft phase, that he did not give the reason why "most technological devices are closely associated with English". Therefore, he made a microstructure expansion change to make the paragraph congruent with his intended meaning.

Also, in both Arabic and English the subjects' final drafts were substantially different in organization and content from their first drafts, a finding that shows that these writers' revising behaviors were productive in the major matters of composing. Like the essays of the ESL advanced students of Gaskill (1986) and Zamel (1982, 1983), their texts in each language included frequent global changes through addition, deletion or reorganization.

Moreover, in both languages the subjects, in general, made substantially more expansion changes than deletion changes, a finding that indicates that they were, like other advanced writers, more inclined to add than to delete. In this sense, they are similar to Sommers's (1980) skilled writers who were more interested in making addition revisions in their texts than deletion ones. In contrast, her student writers failed to make addition changes.

Moreover, the eight writers in this study substantially more frequently reread what they had written in order to know how to proceed and evaluate it (i.e, to see if what they had written was consistent with their intentions) rather than to look for errors. This feature is associated with good L1 and L2 revisers (Stallard, 1974; Pianko, 1979; Zamel, 1982). In the following think-aloud passage, Omar read and re-read portions of what he had written in his Arabic first draft to evaluate them:

(It should be noted that italicized material indicates that the subject was speaking while he was writing. But italicized and underlined lines denote that he was (re)reading or reviewing what he had written. Un-italicized as well as un-underlined lines indicate that the subject was speaking or thinking only).

Also if he learns the English language at this stage, it will be easy for him to learn or continue to learn this language at the later educational stages. Indeed the student at the later stages faces difficulties in learning the language because it is a new and sometimes strange thing for him and his environment. Mmmm. Here. Mmm. I should read it again. I don't like this. Something is missing. Indeed the student at the later stages faces difficulties in learning the language because it is a new and sometimes strange thing for him and his

environment. Mmmm. Indeed the student at the later stages faces difficulties in learning the language Until here the sentence is good. because it is a new and sometimes strange thing for him and his environment. I need to add a sentence to clarify this sentence. I'll say: As a result, the student feels that there is a barrier between him and this language because it is a new and strange thing for him. which discourages him from learning the language. But if he learns the language at the elementary level, it will be easy for him to accept this language in the later stages. Why? I must clarify this sentence...

But in the following think-aloud passage from Mubarak's in-between Arabic draft, Mubarak used the reading and re-reading strategies to generate additional details:

Furthermore, translation will not be continuous to update his knowledge because the translation process may be time-consuming. Let me see what I wrote here. Furthermore, translation will not be continuous to update his knowledge because the translation process may be time-consuming. I don't think that this is enough on translation. Mmm. Furthermore, translation will ot be continuous to update his knowledge because the translation process may be timeconsuming. I have to mention another reason. But I can't think of any ...mmmm... But let me read it to think of another reason. Furthermore, translation will not be continuous to update his knowledge because the translation process may be time-consuming. .. Mmmm... Yes. I just remembered one reason that I could use here: Also, translation may be a hurdle because the person who translates a book may not be mmm good. No, it is better to say competent competent and therefore translation may be useless. Mmmm.. I can't think of other reasons but these are sufficient.

Additionally, the students used efficient strategies for prioritizing in revising. For example, in both Arabic and English formal changes were most frequent in the final draft phase. Consider the following efficient strategy and comment made by one subject as he was composing his first English draft and was not sure about the spelling of enthusiastic:

Also, children or elementry school strudents <u>elementary school</u> students are..mm <u>also elementary school students are</u> mm. <u>also elementary school students</u> mm... I read the first part of this sentence a number of times to remember what I had written and to help me come up with how to develop it or mm complete

it.. <u>are</u> usually more enthocestic <u>enthocestic are more enthocestic</u> I underlined **enthocestic** because I don't know how to spell it correctly so that I can come back to it later and check it..

This behavior is consistent with behaviors of other advanced ESL and L1 students (Hall, 1990; Zamel, 1983; Faigley and Witte, 1981). In doing so, they allow themselves to give more attention to more important issues such as organization and content and avoid Perl's (1980) unskilled writers' problem of being so preoccupied with error detection and correction that they are frequently distracted from their main points.

A number of writing researchers noted that revisions can be triggered by a writer's concern for the audience's needs (Flower, 1979; Monahan, 1984). In this study revisions motivated by the students' awareness of their audience's needs are numerous and included macrostructure, microstructure as well as meaning-preserving changes in both Arabic and English. For example, several macrostructure changes in Arabic and English were made by the students to respond to and refute possible counter arguments that might be advanced by their audience. Consider the following comment made by Khalid before he made the second macrostructure expansion change in the between-draft phase of his Arabic essay:

I will now respond to people ..mmm.. I mean or some readers who think that giving scholarships mmmm is useful but mmm causes problems ..mm ..because it separates students from their families and country. So I will discuss this problem mm.. and mm.. show that this is not true.

Then he made the following macrostrucure expansion change:

Some may think that giving scholarships, in spite of their recognition of its importance and benefits, must be reduced because it causes a great psychological separation for the student. But I think that their claim is false because we know that US cities, for instance, have many Saudi student clubs and Islamic centers. And this means that the separation factor has been minimized to its minimum level. In addition, the separation factor is a very weak factor and should not be compared with the vital benefits of scholarships.

In this regard, Hays, Durham, Brandt, and Raitz (1990) state that writers' response to readers' probable questions about or objections to their positions is an audience move. Microstructure changes triggered by audience awareness included coherence changes such as giving a thesis. Johns (1986) stresses that such a revision is motivated by reader considerations. In the think-aloud passage that follows, Mohammed illustrates, in his Arabic final draft, how a microstructure reorganization change of breaking of existing paragraphs can be triggered by awareness of reader concerns:

Of course, I'll start a new paragraph because the topic is separate mmmm. So if I put it together with the preceding paragraph, it will confuse the reader. So mmm I start a new paragraph because the reader mmm so that the reader is mm knows that the idea is separate from the one preceding it.

Awareness of an audience's needs can also lead to meaning-preserving changes like vocabulary revisions, as demonstrated by the following example taken from Ahmed's Arabic final draft essay:

In my opinion, this idea (i.e., making English a required subject in the Saudi public schools in Saudi Arabia) is a complete failure [not convincing] and instead of this attention should be paid to more important matters like concentrating on sciences in

general, since the Saudi student is weak in those sciences such as math, chemistry and physics.....

In the above example, Ahmed substituted not convincing for a complete failure for the following reason:

A complete failure is very strong, mmmm..So I will changes it so that it becomes flexible. Not convincing conveys the same meaning but not convincing will be more appropriate because readers of this essay may be supporters or opponents of this topic. So a complete failure may be very strong.

Attending to audience concerns is considered to be a feature of skilled writers (Flower and Hayes, 1980, Flower, 1979; Sommers, 1980; Zamel, 1982)

Thus, in both Arabic and English the subjects' revising strategies are consistent with those of advanced writers and show that they possess extensive knowledge of what effective revising involves. But there were a few problems that were found in both the Arabic and the English essays which revision could have been used to remove. Those problems that occurred in both Arabic and English included a few cases in English (and still fewer cases in Arabic) of organization, coherence or inadequate elaboration, as illustrated in the following examples, respectively:

Inappropriate Organization from Arabic:

On the Other hand, there are those who encourage teaching the English language at the elementary level in order to take advantage of the children's early age in acquiring a foreign language faster and better.

To refute their claim, it can be said that children have not been shown to acquire the foreign (second) language faster and better, since there are some scholars who argue that the foreign language can be acquired fast and well even at an older age.

Inappropriate Coherence from Arabic

[Anyone who is familiar with the history of nations and peoples will realize that science, education and civilization are not owned by one group of people. The Romans, Greeks and Indians were peoples of advanced civilizations at that time [in their own times], but, before fifteen centuries the Muslims were at a low level of civilization, therefore they needed to translate those sciences and cultures into the Arabic language. And, indeed, they were able to do that without the need for all Muslims to master the Greek, Roman, or Indian languages. Also, before six or seven centuries Europe was living in the medieval ages or the dark ages as they call them, at a time when the Muslims were living in an age of prosperous civilization. For this reason, a group of European orientalists started learning the Arabic language and transferring the Islamic civilization to Europe and they succeeded to do so, without the need for all Europeans to learn the Arabic language.]

Inadequate Elaboration from English

One of the reasons, which makes me support this view, is believing that we should depend on our national educational institutions in training and educating our students.

By looking at the above three examples, it is noticed that the first presents an organization problem in Arabic in which revision was not used to join two separate paragraphs, even though they discuss the same idea and are one-sentence paragraphs. The second gives an idea in English that was not developed appropriately. While this argument is reasonable, readers are not given a substantiated reason regarding why the "national educational institutions" are dependable and in what areas. The third presents a detailed paragraph in Arabic that appears to lack an explicit topic sentence. In all of these examples, microstructure revisions could and should have been used to remove such problems.

But in English there were some additional revision

problems. While in Arabic vocabulary changes were most frequent in the final draft phase for all of the subjects, in English vocabulary changes were most frequent in the first draft phase for seven writers and in the between-draft phase for one writer, Mubarak. In Arabic, sentence structure changes occurred most frequently in the final draft phase for all writers. In contrast, in English sentence structure changes were most frequent in the between-draft phase for five students and in the first draft phase for one student, Ahmed. Since the subjects in Arabic demonstrated that they can delay making frequent vocabulary and sentence structure changes until the final draft phase, they appear to need to practice delaying making most of their sentence structure and vocabulary changes to the last phase in English as well.

Another problem in the students' revising behaviors in English is that their macrostructure expansion changes, in general, tended to be shorter and less complex than their Arabic counterparts, a finding that might account for the lower improvement scores in their English final drafts. Thus, as they revise they should pay attention to the quality and amount of information in their macrostructure expansion changes. Other possible needs of these students in English are given in the concluding chapter.

The Relationship between the Subjects' Revising Behaviors in Arabic and English

This section will present a summary of the major similarities and differences between Arabic and English revising behaviors. Based on the findings of this study regarding the similarities and differences between the subjects' revising behaviors in Arabic and English, it is quite clear that the subjects used strikingly similar revising strategies in the Arabic and English assignments.

The findings based on written products indicate that Arabic and English revising behaviors were substantially more similar than different. There are several major points of similarities between the two languages. First, the subjects made the same types of revisions and revised for the same variety of purposes in each language. Second, in both Arabic and English, the overwhelming majority of revisions involved surface changes. Third, in both languages, formal and meaning-preserving changes were relatively highly frequent, but there is a relatively low frequency of microstructure and macrostructure changes. Fourth, macrostructure changes were as frequent in Arabic as in English. Fifth, in Arabic and English the subjects revised substantially more frequently when they were producing drafts than when they were reading their first drafts in the between-draft phase. Sixth, formal, microstructure, and macrostructure changes appeared most frequently or least frequently in the same writing phases in both Arabic and English; and microstructure changes tended to gradually increase from the first draft phase through the final draft phase. Seventh, in both languages the subjects made substantially more expansion than deletion changes. Eighth, the majority of expansion and reorganization changes were microstructure revisions in both languages. Ninth, most deletion and coherence changes were meaning-preserving ones in each language. Tenth, revising was a recursive process in Arabic and English. Finally, holistic ratings of quality show that both Arabic and English essays improved significantly in their second drafts.

Additional major similarities between the Arabic and English revising behaviors were obtained from the thinkaloud data, which indicate that, for example, the subjects followed the same method of planning in Arabic and English; those who used predraft outlines (two students) in Arabic used the same method in English. On the other hand, those who composed without outlines in Arabic (most subjects), did not use outlines in English, preferring to plan as they wrote, as shown in the following planning episode given by Mohammed as he was writing his first English draft:

These are my two arguments. Mmm.. Then I would like to add another paragraph to support my argument from .. from.. why don't I speak about my experience. MM.. I remember <u>I remeber when</u> I think it's going to make it more attractive.. more appealing to the reader if I give, it will make the argument very strong if I give an example, a real life example, so I'm going to give an example of myself. <u>I remeber when I was in high school</u> and even at elementary school... <u>I remeber when I was in high school</u> and even at elementry school that I did not like English.

Moreover, they revised before as well as after pen met paper in both Arabic and English. Furthermore, attending to audience concerns frequently triggered revisions in the English and Arabic assignments.

Despite these numerous similarities, there were a few noticeable differences between the revising behaviors in Arabic and English in revision types and purposes. For example, reorganization and deletion changes were substantially more frequent in Arabic than in English. In addition, substantially more formal (mostly grammatical and mechanical) changes were made in English than in Arabic. Additionally, meaning-preserving emphasis changes were made substantially more frequently in Arabic than in English, whereas formal emphasis changes were substantially more frequent in English. Furthermore, while Arabic vocabulary and sentence structure changes were most frequent in the final-draft phase, English vocabulary changes were most frequent in the first-draft phase and sentence structure changes occurred most frequently in the between-draft phase.

From the above similarities and differences, it is quite clear that although the Saudi advanced ESL students did not use the same revising strategies in the two assignments, they used strikingly similar revising strategies in both Arabic and English, thus indicating that advanced ESL students use more or less one pattern of revising strategies in L1 and L2. Differences between English and Arabic revising behaviors are greatly

outnumbered by the striking similarities between the revising behaviors in the two languages. Differences in revising behaviors between the two assignments (namely the finding that substantially more grammatical, mechanical, and formal emphasis changes appeared in Arabic than in English) support Hall's (1987) claim that L2 students modify their revising behaviors to deal with L2 proficiency problems.

Although contrastive rhetoric research is clearly not the focus of this study, some of its findings do not corroborate contrastive rhetoric researchers. For example, Kaplan (1980) claims that in Arabic paragraph development is achieved by a complex series of parallel constructions and excessive use of coordination. Similarly, Kock-Johnstone (1981, 1987) argues that in addition to displaying a great deal of coordination and very little subordination, Arabic persuasive discourse attempts to convince its readers by stating an idea, restating it, and paraphrasing it.

But this study found that the advanced Saudi ESL students used the same linear method of paragraph development in Arabic and English, even though in some cases the Arabic paragraphs were more detailed. Also, contrary to Kaplan's and Koch-Jonstone's claims, coordination was not overused in Arabic or English. Regarding Kock-Johnstone's (1981, 1987) second claim, this study indicates that the subjects used in both their Arabic and English argumentative essays facts, examples, and personal experience to support their arguments or thesis statements, not paraphrasing or

restating. Few paraphrasing and restating cases were noticed in the students' essays. Hence, academic argumentative essays in this study do not support her claims. The students used not only similar revising strategies but also similar rhetorical structures in the English and Arabic texts.

CHAPTER 4 CONCLUSIONS

The purpose of this revision study was to answer the following questions:

- 1) What kinds of revisions do the subjects make in English and Arabic writing tasks? Are there differences between the students' Arabic and English revising behaviors with respect to revision type, frequency of revisions and where they occur in the composing process?
- 2) Why are the revisions made by the students? What are the similarities and differences between the reasons behind the students' Arabic and English revisions?
- 3) To what extent do the revisions made by the subjects as they write affect the "holistic" quality of the entire essays? Do the Arabic essays receive significantly better quality ratings than the English essays or the reverse?
- 4) What do the subjects know about revision in Arabic and English on the basis of an analysis of the changes they made in their texts?
- 5) What does the study tell us about the relationship between the subjects' L1 revising behaviors and their L2 revising behaviors?

Eight Saudi graduate students, who were studying at

Michigan State University during the Spring Semester of 1993, participated in the study. The subjects thought aloud as they composed and revised two argumentative essays: one in Arabic and one in English. They were given two sixtyminute sessions to write and revise each essay. Throughout the writing sessions, a video-camera was used to record all the writing and verbal comments that took place in each session.

This chapter reviews the conclusions regarding the students' revising strategies. Then, it reviews conclusions related to the subjects' think-aloud protocols. Next, it lists the implications of this study. Finally, the chapter presents suggestions for further research.

Conclusions Based on the Findings of the Study Regarding Revising Strategies

From the findings of the study relating to the eight writers' Arabic and English revising behaviors, the researcher concludes that:

- 1. The students used strikingly similar revising strategies in Arabic and English.
- 2. The subjects appeared to be able to transfer their Arabic revising habits to English.
- 3. The revision processes of the Saudi advanced students were recursive in both writing tasks.
- 4. For advanced ESL students, in general, and the eight advanced Saudi students, in particular, revisions were

substantially more frequent during drafting phases than when they were reading their first drafts, thus suggesting that writing and revising are co-occurring processes.

- 5. Revisions of a number of types can be triggered by writers' concerns for audience.
- 6. Since both the students' Arabic and English essays improved significantly in their final drafts, revision appears to improve text quality.
- 7. Due to the higher number of vocabulary and sentence structure changes and the substantially greater grammatical and mechanical changes in English than in Arabic, L1 revising behaviors are not identical to L2 revising behaviors.
- 8. Successful and effective revising strategies are accompanied by prioritizing strategies.
- 9. Since most microstructure changes appeared in Arabic and English in final drafts, revision seems a more useful process when students are given more time to explore their ideas.
- 10. Revision can occur before pen meets paper as well as when one is writing or reading (reviewing) what has been written.
- 11. Advanced Saudi students in both languages are considerably more likely to make expansion changes than deletion revisions.
- 12. Degree of familiarity with topic appears to affect how frequent major content changes are.

- 13. Advanced students appear, especially in Arabic, to intentionally postpone making many vocabulary, sentence structure, grammatical and mechanical changes until the last phase of the writing process.
- 14. Advanced students' revisions in Arabic and English include the same types and occur for the same purposes.
- 15. Advanced Saudi student writers are much more likely to make text-base expansion changes than surface expansion revisions.
- 16. There is a strong relationship between writing in Arabic and English.
- 17. Advanced ESL students can use more or less one pattern of revising strategies in L1 and L2.

Think-Aloud Protocols

The think aloud method in this study was very useful in determining why a change was made and in showing the writers' concerns as they wrote or revised. Indeed, it would have been very hard to accurately know why a change was made otherwise. For example, underlines in this study were used by different writers for a variety of purposes. In addition to using them to emphasize certain pieces of information in Arabic and English, Mohammed used them in English to mark words when he was not sure about their spelling. But he also used underlines in Arabic to denote deleted material. Omar, on the other hand, used underlines for emphasis and also to mark a microstructure reorganization change by breaking

paragraphs. Without the think-aloud method, one would have been tempted to classify all of these changes as emphasis changes. Although this was true for some of these changes, it is by no means true of all underline changes in this study. Hence, studies attempting to classify revision purposes without the help of the think-aloud method are likely to encounter problems interpreting some data.

Furthermore, think-aloud protocols were useful in detecting major or minor changes triggered by concerns for audience. In addition, they detected in this study several changes that took place as writers were thinking, not actually writing, thus confirming revision researchers' (e.g., Fitzgerald, 1988) claim that revisions do occur as people think, write or read what they have written. Most of such changes were formal or meaning-preserving; few changes were microstructure changes.

However, there were several gaps in the think-aloud protocols collected in this study. For example, the Arabic and English think-aloud protocols included many changes whose purposes were not verbalized. In such cases, the researcher and his assistant independently considered the context and the effect of such revisions to determine why they were made. Hence, one of the conclusions of this study is that more effective techniques should be used to train revision subjects in future research projects to produce more think aloud data.

Despite the many positive features of the think-aloud

method, some potential issues beyond those addressed in the think-aloud literature will be raised here. For example, the think-aloud technique might have had a positive effect on the eight subjects' revising strategies in the sense that it might have stimulated them to make more or better revisions. In other words, it is possible that thinking about writing and revising might actually have improved these writers' revision. However, it is also possible that the think-aloud method had a negative effect. This study required the participants to write Arabic and English essays, report on the processes they followed in revising such essays, and mention the reasons behind the revisions that they would make in their texts. Therefore, verbal reporting might have interfered with their composing or revising processes. Also, the procedures that were used in this study to prepare the participants to think aloud about their revising processes might have stimulated them to use better revising strategies or produce better essays. These are interesting points that future revision research should attempt to answer.

Faigley and Witte's Revision Taxonomy

Faigley and Witte's (1981) revision taxonomy provided, on the whole, a good technique for classifying students' revisions according to the effects such revisions had on the meaning of the text. The taxonomy was used by other ESL researchers like Gaskill (1986) and Heuring (1984).

Therefore, it was important to use it in order to be able to

compare the findings of this study with those of their studies. But it appears to have several weaknesses. First, although it classifies revisions into four types, it is not detailed or comprehensive enough to make "fine" distinctions according to, for example, how complex or lengthy a macrostructure change is. Second, despite the fact that it categorizes revisions into types, it overlooks revision purposes. And, based on the data collected by examining the similarities and differences between Arabic and English regarding revision purposes, I think that overlooking such purposes in the taxonomy is unjustified and a major point of weakness. Third, although there were relatively few cases of disagreements in the classification of revisions, they nonetheless suggest that the taxonomy was not always easy to use or accurate. For example, the assistant thought that the following change should be regarded as a macrostructure change because he felt that a completely new idea was added in the following passage from Mohammed's English first draft:

[I remember when I was in high school and even at intermediate school that I did not like English and I avoided English class. However, when I was in elementry school, [I was so cerious that] I used to grap my older brothers' English books and look at the pictures. Thus, if I had been taught English at elementry school I would have [learned] studied English perfectly. Instead I finished high school with only little knowledge about English.]

However, it is also reasonable to consider it a microstructure change because it is somewhat related to the preceding idea (i.e., "younger people learn a second

language faster and better than older people").

The following example, taken from Waleed's English inbetween draft, illustrates another controversial change:

In conclusion, English, no doubt about it, is an important tool for communication and knowldge of science and modren technology. Therefore, teaching English to [Saudi] students in the early age help them to learn it and use it better than the students who learn it at the intermediate and high school levels.

The researcher considered the addition of the word **Saudi** in the above passage a meaning-preserving change because he felt that the meaning was not affected. But the assistant considered it a microstructure change since it occurred in the concluding sentence and the meaning was slightly affected by this change.

Fourth, the taxonomy does not require or encourage its users to video tape their subjects or have them think aloud as they revise. As a result, it displays a limited view of the revision process and is likely to miss several revisions and be inaccurate in classifying revision operations.

Regarding revision operations, Gaskill (1986, p. 144) notes:

I have watched writers add several words above a line, and then go on to work elsewhere. Then, much later, they returned and deleted words below those which had been added. Analyzing such revisions after the fact would suggest that a "substitution" had occurred, and, realistically, that would be true; however, in operational terms, the revisions actually occurred in two separate steps as an "addition" and a "deletion".

Fifth, it does not account for whether revision is single or episodic. But revision studies dealing with skilled and skilled writers (e.g., Monahan, 1984) found that competent writers make frequent episodic revisions, while

unskilled writers rarely revise in episodes.

Sixth, since in this study there were few cases in which the researcher and his assistant disagreed on what exactly the gist or main ideas of some essays should be, the taxonomy should be accompanied by some guidelines or rules for accurately identifying and summarizing essays' main ideas. Seventh, there were a number of disagreements between the researcher and the assistant concerning whether a change was a meaning-preserving or microstructure change. Hence, to be a more reliable revision classification scheme, it should present detailed, more specific and accurate definitions of meaning-preserving and microstructure changes. Finally, the taxonomy does not have its own revision phases; consequently, Faigley and Witte (1981) used Bridwell's (1980) revision stages to determine where revisions occurred in the writing process.

Implications of the Study

- 1. A major finding of this study is that revising is a productive and major component of writing, which improves writing quality, helps writers refine texts that are not congruent with their goals or intentions, and allows them to make their essays more sensitive to their audience's needs. Thus, ESL teachers should encourage their students to revise their essays throughout the writing process, especially at the content and organization levels.
- 2. On the whole, slightly more vocabulary changes were made

in English and most of the subjects' English lexical cohesion changes involved repeating exact words rather then synonyms. Therefore, further vocabulary development will most likely reduce the Saudi advanced ESL students' need for making more frequent vocabulary changes and help them achieve variety. It is also reasonable to argue that by improving their lexical skills in English the Saudi advanced students will be able to postpone making most of their vocabulary changes until the last phase of the writing process, since this is exactly what all of them did in Arabic, their native language.

- 3. In English, sentence structure changes occurred, in general, slightly more frequently than in Arabic.

 Furthermore, they, unlike Arabic sentence structure changes, were most frequent in the between-draft phase. Hence, one implication might be that English language centers should stress the development of sentence structure in their programs. Again, it is believed that when ESL students' proficiency in these aspects improves, more attention will be focused on more important issues of composing, as was the case in Arabic.
- 4. Because the students' English finished drafts include a few grammatical and mechanical mistakes and because substantially more grammatical and mechanical changes were made in English than in Arabic, additional development in these aspects could be helpful to these advanced students.
- 5. Topic seems to be the determining factor in how

frequently macrostructure changes were made in both Arabic and English. Thus, the level of familiarity with the subject of an essay is, as Faigley and Witte (1981) note, a major situational variable for composing which can affect the frequency of some types of revisions. The implication for ESL writing teachers is that they should consider before assigning a topic whether or not their students are familiar with it. And if not, then it is important that they help insure the students are familiar with the topic by allowing them to familiarize themselves with it through, for example, reading about it.

- 6. In both languages, most microstructure changes—and many macrostructure changes—were made in the final draft phases. In either language no macrostructure changes occurred in the first draft phase. Therefore, advanced students should always be allowed and encouraged to write several drafts in Arabic and English.
- 7. The eight writers' Arabic macrostructure changes tended to be more detailed and complex than the English ones.

 Hence, advanced ESL students should be encouraged to frequently evaluate the essay content to determine if it is substantiated with enough examples, reasons, etc.
- 8. Although the subjects displayed several features of advanced L1 and L2 revisers, the finding that in both languages there were still a few organization, expansion and coherence problems suggests that Arabic and ESL composition teachers should continue to emphasize the importance of

revising these aspects of writing, even when dealing with advanced writers.

- 9. The findings of this study appear to show that transfer of revising behaviors appears to take place. This implies that English language centers when attempting to determine the needs of ESL students should use methods to examine their writing behaviors -- not only knowledge of English writing conventions (e.g., grammar, mechanics, vocabulary etc.) -- and the writing processes implied by such behaviors. The reason behind this is that although some ESL students are not proficient in English, they may be advanced or experienced writers in their native languages (Brooks, 1985). Therefore, to avoid problems associated with giving students courses that they do not really need, English language centers should use methods which are capable of assessing the degree to which ESL students mastered the writing process components in their native language. This may require that they be asked to do a writing task in their native language or that segments of their think-aloud protocols be analyzed to determine if they are skilled or unskilled writers. Then on the basis of writing skills, appropriate courses of writing, grammar, vocabulary, etc. can be assigned. As a result, courses will be based on students' needs and perhaps be more interesting and more helpful.
- 10. The study found that the students used linear paragraph structures in both Arabic and English and claims of

contrastive rhetoric researchers appeared to be inaccurate regarding the structure of written academic Arabic discourse. Therefore, English language centers should be cautious in applying presumed rhetorical differences between Arabic and English paragraphs and concentrate on the areas in which students demonstrate actual needs such as vocabulary, sentence structure, and so on.

11. There was a relative low frequency of text-base changes and a relative high frequency of surface changes in both the Arabic and English writing tasks. Consequently, Arabic and ESL composition teachers should encourage their students to make more extensive text-base changes in their essays.

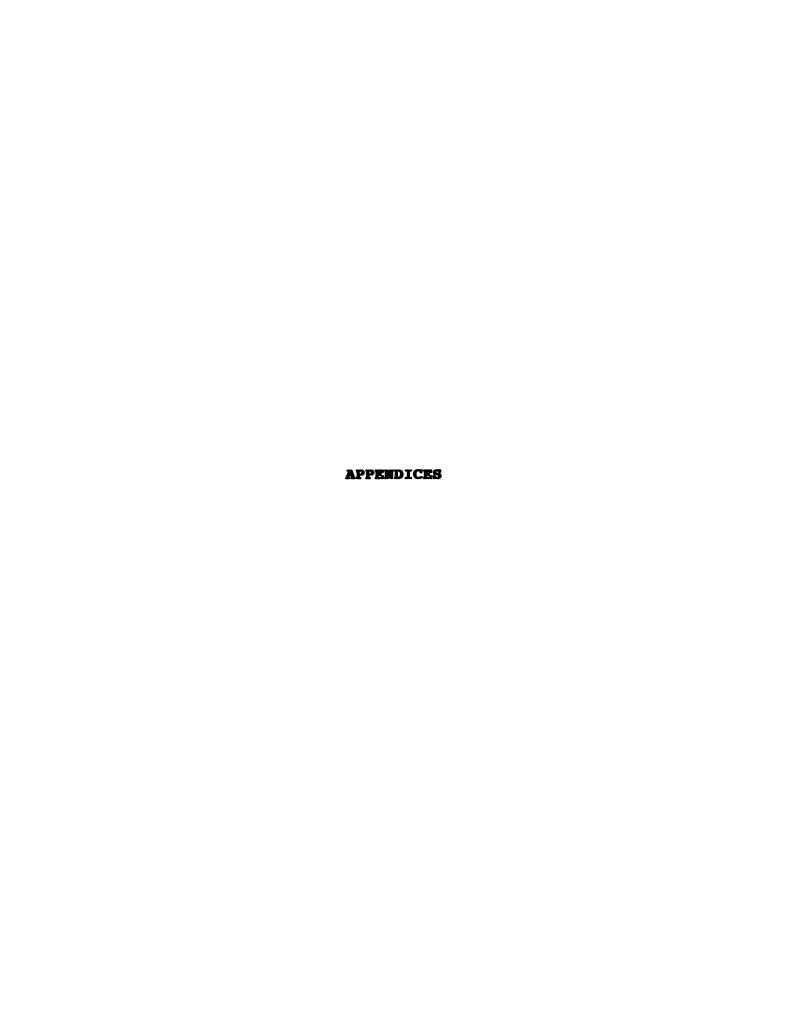
Suggestions for Further Research

This study investigated the similarities and differences between the advanced Saudi students' revising behaviors in Arabic and English.

- 1. Other studies should investigate the Arabic and English revising behaviors of Saudi students at different levels (i.e., intermediate, or beginning) of proficiency in English to determine to what extent Saudi students' revising behaviors are controlled by the level of fluency in English.
- 2. Other research should also examine Arabic and English revising behaviors of Saudi students at different ages and educational levels, both female and male.
- 3. This study used only argumentative writing tasks. It would be interesting to see if advanced Arab students would

use the same Arabic and English revising behaviors in other types of writing tasks.

- 4. The subjects were given two-sixty minute sessions in this study. It would be useful to find out whether or not advanced L1 and L2 writers use different revising strategies in L1 or L2 when they are given more time or more writing sessions.
- 5. In this study the students were not given the topic in advance. But other research may want to give (Arab) ESL writers the topic of the writing task two or three days in advance of their participation to investigate the effect on the quantity as well as quality of revisions.
- 6. The subjects in this study used conventional methods of composing (i.e., pen and paper). However, it would be interesting to see if Arab advanced ESL subjects would use the same or different revising strategies in either language if using a word processor.
- 7. The think-aloud technique may have positively or negatively affected revision and composing. Further research might have students write both with and without think aloud procedures to determine any effects.
- 8. Faigley and Witte's (1981) revision taxonomy was modified and used with largely positive results. Further research might make some of the modifications discussed in this study.



FAIGLEY AND WITTE'S REVISION TAXONOMY

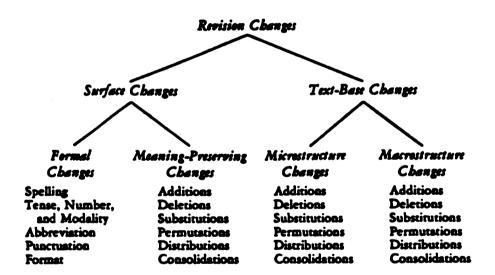


Figure 1
Faigley and Witte's Revision Taxonomy

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TOPICS OF THE WRITING ASSIGNMENTS

Topic One

English should be a required subject in the Saudi public schools in Saudi Arabia not only at the intermediate and high school levels but also at the elementary level.

Topic Two

The number of scholarships given by the Saudi government to the Saudi students to study in the U.S. or other developed countries should be greatly reduced.

INSTRUCTIONS GIVEN TO STUDENTS

Thank you for participating in this study. Please read the following instructions carefully.

- You will be asked to write and revise two argumentative essays: one in Arabic and one in English. The writing and revising of the Arabic essays will precede the writing or revising of the English ones. The topics of the Arabic and English essays consist of statements [pertaining to academic issues] that you should argue for or against. You should support your position properly and present it in a clear manner.
- As you write and revise, think aloud about the process(es) you go through in writing and revising your Arabic and English essays. Also, if you want to make changes in your essay, you need to mention the reason(s) behind such changes. A technique that may help you think aloud is to pretend that you are explaining how to revise to someone who does not know anything about the revision process.
- A list of some of the things you should verbalize about revising is as follows:
- a. Why do you reorganize information?
- b. Why do you elaborate on a point?
- c. Why do you delete some information?
- d. Why do you make lexical changes?
- e. Why do you make changes in the introductions or conclusions of their essays?
- f. What are you thinking about when you stop writing?
- g. What do you think about as you reread what you have written? etc.

However, you should note that the above list is by no means exhaustive. It is just intended to remind you of the things that you should verbalize as you compose and revise.

- As you write and revise, a video camera will be focused on your paper. When I turn on the camera begin writing.
- You will be given two sixty-minute sessions to write and

revise each essay. The writing and revising sessions for each essay will take place on two separate days. On the first writing session, you are expected to produce the best draft that can be composed in sixty minutes. At the end of the first writing session for each essay, I will take your paper. Then on the second session, I will give you back your paper. Then you will be given another sixty-minute session to make revisions in your first draft and start writing and making the necessary revisions in your final draft.

- You will be provided with paper, pens and an English-English dictionary. But you can bring with you any other dictionaries you want to consult as you compose and revise your Arabic and English essays.
- You should keep in mind that the readers, raters and audience of your Arabic and English essays are Saudi doctoral students in the English Department at MSU.
- You are graduate students; therefore, the audience will have high expectations for your Arabic and English compositions. In other words, they will expect your essays to be well-developed and well-organized. Also, they will expect your arguments to be well-supported and very convincing.
- You should not talk to other Saudi students about the topics you were asked to write about during the period of the study.
- Skip lines and write as legibly as possible.
- You should write at least four pages on each topic.
- Do not write your name anywhere on your responses.
- Your identities will be protected.

EMGLISH TRANSLATION OF THE MATH PROBLEM'S THINK-ALOUD PROTOCOL.

The problem:

9853

X

7436

I want to do, hmmm.. I'm asked to do a multiplication operation to the first group of numbers which is: nine thousand eight hundred fifty three by seven thousand four hundred and thirty six to find out the result of this multiplication procedure. Hmmm.. the multiplication process is a repetition process of a certain number a number of times. But first the sets of numbers I want to multiply by one another consist of a number of digits: ones, tens, hundreds and thousands. Therefore, the first thing I should do is to multiply this six by the first digit in the above group, which is hmmm... the ones' digit. Six times three is eighteen. We put eight here in the first digit and carry one which is in fact ten to the hmmm.. tens' digit. Then we need to go to the second number which is five. Six multiplied by five equals thirty. Now we add the one we carried earlier to thirty. This gives us thirty one. We put

one here and carry the number three to the hundreds' place. Now six times eight is forty eight. Forty eight plus three equals fifty one. Since we have two digits, here we should put a one in the first partial product space and move the five to the thousands' digit. Six times nine is sixty three. Sixty three plus hmm. the five, which we carried, equals sixty eight. We will write sixty eight here because hmmm. at this stage we have come up with the product of multiplying six by the above group of numbers; there is no more digits to move this six to.

We now move to the second number in this group, and repeat the same process with the third number and with the fourth number. Here because we are multiplying a number in the tens' place, we put here a zero in the ones' place under hmm. the eight. We will completely repeat the same process as we did with six. OK. Three times three equals nine. Three multiplied by five is fifteen. We write a five and carry the one. Three times eight is twenty four. Twenty four added to the one we carried to it equals twenty five. Ok. We put a five here and move the two with us. Three times nine is twenty seven. With the two we moved, twenty seven becomes hmmm. twenty nine. And we write twenty nine without moving or carrying any thing because this is the product of multiplying three by the last digit in the above group of numbers.

Now we will multiply.. hmmm.. we are done with this digit, the second digit; and the third digit, the hundreds'

digit, hmmm.. because we are now dealing with hundreds' digit, we will put here two zeroes. Four multiplied by three equals twelve. The same process. We write a two here under the five and move the one to the tens' place. Hmm... now four times five equals twenty. Twenty plus one is twenty one. We put the one here and carry the two with us to the following digit, the hundreds' place. Four multiplied by eight equals .. hmmm .. thirty two. Yes, that's right, thirty two. And when we add thirty two to the two we moved up there, we have thirty four. Ok. So we put the four under the nine and move the three to the ..hmmm...thousands' digit. Then we multiply four by nine. Hmmm.. four times nine is ..hmmm.. thirty six. Thirty six plus three equals thirty nine.

Next we will move to multiply the thousands' digit by the above number. And because we are dealing with a thousands' digit, we'll put three zeroes: one zero in the ones' digit, one zero in the tens' digit and then one zero in the hundreds' digit. I put three zeroes because although the seven is a one digit here, it is, in fact, seven thousands. Therefore, I wrote three zeroes to indicate that I'm multiplying seven thousands by the above group of numbers. OK. Now, like the procedures I used with the previous numbers, seven times three is twenty one. I will move the number two to the tens' digit. Seven multiplied by five is thirty five which becomes hmmm... thirty seven when we add it to the two I moved there. Now we put a seven and

move the number three to the following digit. Seven times eight equals ..hmmm. fifty six. Fifty six plus the previously carried three equals fifty nine. We move the number five with us to last digit, the hmm. thousands' digit. Seven times nine is sixty three. But here I'm not finished hmm. I have to add sixty three to the number five that I carried with me there. Sixty three added to five equals sixty eight.

Now we conduct the addition operation. This group of numbers is called the first product of this multiplication operation. And this is called the second product. And this is called the third product. And this is called the fourth product of the multiplication operation. But it is better to refer to them as: the first partial product, the second partial product, the third partial product, and the fourth partial product. The first is, of course, the product for the multiplication procedures or steps that occurred in the ones' digit. And this is the product for the tens' digit. This is the product for the hundreds' digit. And this is the product for the hmm. thousands' digit. Now for this problem to be completely solved, we need now to add these partial products in order to come up with the final product which will be the last step, hmmm. the solution.

Ok. Now let's start adding these numbers. Eight plus zero is eight, plus the zero here and this zero is also eight. One added to nine gives us ten, plus a zero is ten, plus another zero is also ten. We put a zero here and carry

the number one with us to the following digit, the ..hmmm.. hundreds' digit in this case. Now one, oh this number one here is the one we moved from the last digit. Ok. One plus one is two. Two added to five is seven. Seven plus two equals nine.

In the thousands' digit, eight plus five is thirteen. Thirteen plus one is fourteen. Fourteen added to one is fifteen. We put a five here and move the one to the following digit. One plus six is seven, plus nine equals hmmm... sixteen. Sixteen added to four is twenty, plus seven equals twenty seven. The two is carried with us to the following digit. Two and two is four, plus nine is hmm.. thirteen. Thirteen and nine equals twenty two. We put a two here and the other two is moved with us to the following digit, the hmmm... millions' digit in this case. Two plus three is five, plus eight, hmm... plus eight equals hmmm... thirteen. The number one is carried with us to the next digit, which is, I think, the place of the tens of millions. But let me make sure. Three is in the millions' digit; therefore, the next digit should be the place of hmm... the tens of millions. OK. Now one plus six is seven. The addition steps have been done. And the problem is completely dealt with, it is hmm.. completely solved. We conducted the multiplication procedures and then we did the required addition steps. So, the final product of this multiplication problem is hmmm.. seventy three million, two hundred seventy five, and nine hundred and eight.

THE FIRST AND FINAL DRAFTS OF SAMPLE ARABIC AND ENGLISH ESSAYS

Ali's Arabic First Draft (Including Between-Draft Revisions)

هناك من يرى تدريت اللغه الإنجليزية في المارى المدرسا لئيت وهذه الفكره لها مؤيدوها وهناك من يعارضها لأسباب مختلف وهول هذا الموضوع فأنا اعتقد ه

العَنْ الله المراكب المارك المارك المعالم المعالم المحارم في محرك مستوى الإستائي مديرن الإطفال عرية في هذه المجال علم يتمكنوا من لغتهم المع اللغ العربة لهذا الله المعور ان تدرس اللغ الانكيرية فيها الرحلم قدية ترساساً على اللغم العرب مبدلتاليا معمل الطلاب رهذا قد يحمل لفتهم العرب ضعيد. اضامه رالى دلك فإن تعلم اللغم الإنكائر مدامي لموها المرشراكية قد يوترعا أفكر وعادات الأطفال حيث أن اللغرهي سعام- الاممالاً في المراد في المراد في المراد في المروسية المروسية هناه من يرى اويشجع تدريسه اللغ بركيلزي، معد المسائير من اعلى استغلال

المن المبك للألمفال الذي قد يعينها على تعلى اللغ مطريق اؤخل واسع أسيموسل سع وللريان على المؤكر عالم يعكن الفول بأن الإعان بطرق افضل والع حبث التي هناله من البرهشي من مرى أن اللغه الأهنيم (ثانيد) عكن أن تكتب عة في سن مناوزة وبإنة بريو. رهرة. من مرا العوادل بروس الي قد تولي على - Rich Min Maine مسقى المسين والمناع ومقدر التوفي We Main whim the at Met can they in ملا من المرسة تربية

ومن المعرفط أن مستوى الطلب لعودي في الم جائة المرتبائية أنه مترى ضعيف هيدان المواد نسات كشيرة على الطالب م) هذه إرجالةً كالتبائع كا ان محتوى المناهر يعتبر كثير. فأذا اضفا إليها لغة جريده ومه بهيد فالمن هذاري نظريء سول بطبعن مسؤل لتلامية ويشتك أذها بهم وفعلا تر ليرهم على الموار المروس. ومن الرب الأفرى الي متلطلط بمسها لا ارى تدري اللغة الإنحلنري في هذه الرهد- المبك هر علة وضعف وندرة

هذه المراب المبكرة هو علم ونعرة المرسين المتكنين من ندريه العرب المركسية معنوه على دري

عرم وجر المام الصلى المام التي عِك ان تشريح علات و تقاليم Mcikyon And (O) Wings) مناعم اللغند الإنحانسة أساسة معرة لطسرمى سلك الرك ال تشكر الإيسار ipa is of the to الكتب او المناهج الدي سية ذكر للخد م ذكر للعشيقة او الصديم سير ومثل هذا كريشي مع عددات وتفاليز التسكير الما المل ، سبب آو - معانی لا أؤيه هذه العكر هو أن المجمع كله ان الجميم العدين الريتكلم اللخة المؤلام كلعنه اساسية، فاللفة الانكينرسية تستخدم على

نظای طبیق ال می این می المراح ندار کا مُع هذا الوقت الما من عر العالب. Die was Mind It is willy X أري تسريس اللغة الانحلير سرفها المرهدة برشددير. واعتد الالرسباء كان ال جد كسر منطقية ومعقولة ، والموقع ان يتقبل ولالنك المؤسين لترب اللغة المرتحان عي المراج المرتجان رض رطیب نف

Ali's Arabic Final Draft

: Darés

هناك من يرى تدري اللغة الإنجليزي على مستوء كالمار المرحلة الإبسائيت عوه الفكر لها هؤيرله وهناك ديضة حن يعد منها كرمباب مختلف ميكون لمه عليه بيروها

معول هذا المضري فأنا أعمة أنه من المكر هما أن نبدأ بتعليم اللغة الإنبيزي نمي المرهام الإسبائي ، الأن الألمنال إلى الده المرهامة المتقدمة في العمد ملم يتمكنوا من لغتي الرم (اللغة العربية) فيتسرم للغة أجنبية قد يو ثرعل تعلى اللغم العرب سبسة حيث أن تعلمها من تبس الترميز لم ينظبر بعد. إضاف الى ذلارم فإن تعلى الوتررمس اللغة الإنجليزية في برجل الإبتراكيد قد يترك أثارة

مسلمه على كفكار وطلات وتقاليم المغوين على اللغويين على اللغويين اللخريين متكل و مُصيخ المرفكر و مَوْرَر عليها م كا أن اللغري مثيك و مُصيخ المرفكر و مَوْرَر عليها م كا أن اللغب هي المسلاح المقاف و مصاحف المرفرين التي قد متحارض و مَعادم مع مبادى الإربرم و مَعاليم في محكم المرفيان.

كفار في الجائب الآخر ، هذا له هذا من عرى أو يتبع مرسه اللغه الإنجابزية أي لمرهدة الإنتبائية مرسه اللغه المرتبائية المستخلال المن المبكر للألفال في اكتباء لعنه أهنبية بطريقية أسع وأفعن ، لعنه المرد على فكرة هؤ برراعكن العقول بأن الألفال ليست بنكل قطع وأكيد يكتبعا اللغة المجنبية (المألية) بطريقية أفهل وأكيد يكتبعا اللغة المجنبية (المألية) بطريقية أفهل وأسم ، هيث أن هنا لك من المنا فين

من يرى إلى اللفة الأجنيية عكن أن تكت بطريقة سريعة وعبدة عن في سن منافرة من لعيد وللرجوع إلى الوامع ، فإنه من الملافظ أن مسول الطلب بعورين في لمولم الإبتالية أنه منوى صنعین و مشی اوقد یعزا ذلامے ای کثرة و تعدد المواد الراسية وكتافة معتواها العليء فإذا أُضَفْنًا باليما لغة أُجنيه للنعم فإن هذا سوف يزيد ا لعبي الدرسي على كواهل التكلمني وبالمالي سوف یضعف مستواهم ویشت ادهانهم دیملرین مُركيرهم على المواد المُعْ م التي فَدْ تكون أكثر للعبية. ومن الرئب ب المرزى الى من أَعِلْها الرارى تسريس اللغه الرنجلير سامي الرحل الإبنرائية هر قلم المدرسين المتمكنين من تدري اللغم الإنكريم

كلفت تكنو الجنب الى عكى الفرت من المكير من مناهم الملائد كراسلافية ميث الن الكير من مناهم الملائد كانت الكير من مناهم اللغت المركليزية الى تستناج في عدارسا كانت معدة أساسة الملائد على المول الى تسكم م فالمرت المعالمة المكتب ونكر للحرز وفركر للعيقة المول الى تسكم م فالمرت المول الى تسكم م فالمرت المحت المول المرك المول اللي تسكم م فالمرت المحت وقت الما المرك المحت وقت الما المرك المحت وقت هذا المرية على الما وقتالية المراسل منه .

وهنال الجمع العوس كل لا يتعلم اللغة الماغلين المحمد العند الماغلين اللغة الماغلين المعند المولئ المالغة المرافيين المولئ المولئة الماسية (اولئ) المالغة المرافيين المولئة الماسية المولئة المرافية المرا

من برئيب ب برُفري البي طراق على رهني هو
الن شريب اللغه المرني شرعه ميرة بريدل خلافا لما يُقول المعرف الماري مرهد ميرة بريدل خلافا لما يقول المعرف على على يتعلور الحريق البيد برهبة - أن هذا به من البيد برهبة والعيث وروبية والمانيا وغيرها لا ته بتدريب اللغه برنيديد في إلى الله المنافق بتدريب اللغه برنيديد في إلى المنافق بتدريب اللغه برنيديد في إلى المنافق بتدريب اللغه برنيديد في إلى المنافقة بالمنافقة بالمنافقة المنافقة الم

هذه بعض الأسهاب التي من الكها الرائري هذه العبدائية.

تسريس العنه الإنجليزة في الرهام بالمبتائية.
وهذه الاسباب في نظري منطقية ومعقولة ومدعو من علمات المي المراب المي المراب المي المراب المي المراب المي المراب المواقع يوسي الما والمست المي من المرب أي ذهب المي و تطبيقيا من المرب أي والواقع يولي ما ذهب إليه من المرب والواقع يولي ما ذهب إليه من المرب والواقع يولي ما ذهب إليه من المرب

Ali's English First Draft (Including Between-Draft Revisions)

With regard to the discussed issue the reduction of schole the reduction of scholastife given ty A Sandi government to Sandi Stude As, It fait fair is fanged things It seems to me that the Sundigonerount in general and the Tordi universities in outcultishad reduce the number of granted scholarships to the U.S. and other conties. On of the reasons which make support this view is believing that we should depend on our own national institutions and extablishments in training and checating our people. Secondy, I think that I sending

Students in their youth might affect them negatively, since they will go and live in a different society which is completely different from their home society. In such an open wich the students might be influenced by the western secular thought and other ideas which are unacceptable or conflicting with our religion and our Arabic traditions. This Thirdly, I think that teducing the humber of scholarships the would save us a great amount of money,

since sending one scholar (i.e. student) to the U.S. costs alot of Menny Ant can be utilized opening. who department on many whole with the server that we softward it seems that we softward have a good number of universities and teachers staff me faculty members who can do the same tack of training and teaching Hanner, the need to send students addide can be limited to the majors or specializations which we lack, such as militerry sciences and predicine So, I think Furthermore, instead of sending our students outside we can recruit and bring faculty members and provide the a

proper envisonment for our students

to finish their graduate tulies in

their own country. In other words,

we can provide our universities with god

libraries, textboxs, classrooms, professional feathers,

and some and a father.

In conclusion, and I such that in agreement the hight of my I find myself in agreement above - mentioned reasons of the reduction of the reduction of the number of scholarships given by the Sandi Arabian government to the Sandi Students.

Ali's English Final Draft

With regard to the issue under discussion: freduction of scholarships given by the Soudi government to Sand: students, it seems to ma that the Sandi government, ingeneral, and the Sandi universities in particular should reduce the number of greated scholarships to the U.S. and other countries One of the reasons, which makes me support this view, is believing that we should depend on our sun national educational institutions in training a l'éducation out stradents. Second I think that sending

stadents in their youth might affect them regatively, since they will go and live in a new society which is completely different from their home society In such an open society the students might be influenced by the Western secular thought and other idalogies which are macceptable in Islam and our Arabic traditions. Third I think that reducing the most of scholarships would save us aft of money since conding one scholar (i.a., student) to the U.S. costs alot of many Mich can be utilized in

spening new departments or new buildings Fourth, it recove that we have a sufficient muber of universities and faculty members who came do the same task of training and kacking. Thus, the med to send students contride should be limited to very few specializations which we generally lack in Sandi Braba such as military science and metrone some specialization in delicina. Sandi feachers Fifth we should give our people the trust in chaping and making our own fintere without the foreign

in fluence finally it would be more useful to bring faculty musber from the U.S. or any other developed countries and provide in proper environment for our students to get their graduate studies in their own country In conclusion, because of these reasons I find my self in agreement with the idea of the reduction of the number of Scholarchips given by the Sand: garkrament to the Sandi students. Here theles I feel that this is sure is worth study The state of the s



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