THE REVISION STRATEGIES OF SKILLED AND UNSKILLED ESL WRITERS: FIVE CASE STUDIES

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ABSTRACT

Recently, the teaching of writing has shifted from an emphasis on the final product to that of the process of writing. Research, primarily first language studies (Emig, 1971; Flower and Hayes, 1978; Sommers, 1978; Perl, 1979; Pianko, 1979), has resulted in implications suggesting that revision plays a crucial and mediating role in the writing process. However, related research in ES/FL is still lacking. This thesis reports on a study designed to investigate the revision strategies of skilled and less skilled ESL writers for similarities and differences. This descriptive analysis required the implementation of process/product methodology, specifically tailored to reveal how each writer went about the task of using revisions to improve their essays. Relevant findings indicate that skilled writers were better able to evaluate the writing task by arranging their priorities to give revision a complementary and productive role in the writing process. Unskilled writers tended to employ revisions less efficiently.
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CHAPTER I

INTRODUCTION

ES/FL writing methods and materials have traditionally prescribed the learning of grammar, writing conventions, and other surface-related concerns, as well as extensive translation practice. The prevailing assumption is that since second language (L2) writers are already capable of writing in a first language, writing problems are due largely to a lack of linguistic and/or lexical sophistication. Past research has been based on this premise. Recently, though, a handful of L2 researchers have begun to study a new area of interest, one that presents writing from a much broader perspective. Not only are they focusing on the aspects of the final result of writing that a writer lacks or needs to master, but they are also examining how writers compose—the cognitive and physical activities that characterize the writing process. While this L2 composing research is relatively new, it is already raising many questions about current ES/FL writing pedagogy.

Composing Research and Revision

One area of writing research that composing studies are designed to investigate is that of the thinking or cognitive activities a writer engages in when writing. By utilizing audio-video equipment, composing researchers are able to
observe and document the act of writing—the problems that a writer confronts and resolves during the act of writing. Since most of these studies have been focussed rather generally on the writing process, what is beginning to emerge is a better understanding of how composing processes interact with one another to promote the formulation of ideas and the production of written script.

Composing studies are especially capable of examining the role of revision in the writing process. This is because they can facilitate an accurate analysis not only of what kinds of revisions are made, but also when these revisions occur in the writing process. In addition, a number of these studies have employed think-aloud protocols providing even more insight into the degree to which revising aids, or possibly inhibits, the writing process. Consequently, a synthesis of process and product data makes it possible to observe how the act of revising influences the progression of text as well as the extent to which revising improves the final product.

Unfortunately, there has been only one L2 composing study that looked primarily at the revising strategies of ESL/FL writers. Gaskill (1983) specifically designed his study to investigate both the process of making changes and the product that resulted. His primary objective was descriptive; that is, he video-taped his subject in order to
document and analyze revisions as they occurred. Gaskill used think-aloud protocols to aid in identifying and analyzing revisions. He based his product analysis on a classification of revisions developed by Faigley and Witte (1981). This classification, which is discussed in greater detail in Chapter 3, was originally designed for first language (L1) writers, but Gaskill's work has shown that it is also useful in L2 research. By combining both think-aloud procedures and Faigley and Witte's classification, Gaskill's case study of an ESL writer described how the act of revising proved to be a complex and integral part of the writing process. Since Gaskill looked only at a single writer, it is still necessary to determine whether his findings can be generalized to other ESL writers or, for that matter, to writers at different proficiency levels. In fact, other composing studies suggest that there are crucial differences between the revising capabilities of unskilled and skilled writers.

Zamel, by far one of the most eloquent and persuasive proponents of L2 composing research (1976, 1982), conducted a study designed to address this issue of similarities and differences between less skilled and more skilled advanced writers (1983). While all of her participants were most concerned with making changes to improve their texts, Zamel concluded that only the more skilled writers were capable of "pursuing the development of their ideas without being sidetracked by lexical and syntactic difficulties."
Conversely, her less skilled writers tended to let low-level writing concerns dominate their revisions.

These findings are similar to conclusions of process studies of revision in L1 and reinforce Zamel's contention that writing in a second language is essentially the same as writing in a first language. Moreover, Zamel, like many L1 researchers, strongly argues that previous instruction affects revising capabilities. She directs her criticism primarily at the teaching of grammar, contending that writers who are taught to be aware of primarily low-level concerns can be expected to focus on these at the expense of high-level priorities, e.g., generating and organizing ideas. Zamel believes that additional research is needed to corroborate her claim that writers at different developmental levels display different revising characteristics.

Another leading investigator of L2 composing research, Jones (1982), designed a study that investigated this issue of how previous instruction manifests itself in the revising strategies of ESL writers. His methodology typically involves the use of video-taping (Jones op. cit., 1983a, 1983b). In this study, he video-taped subjects while they wrote and matched this observational analysis with the corresponding think-aloud protocol. These procedures were used to facilitate an analysis of monitor over/underusers by measuring and correlating grammatical and rhetorical units.
with writing performance. He observed how one of his subjects, a L2 writer who had been taught by a method that emphasized grammar usage, was preoccupied with form, whereas the other subject, a monitor underuser, focused to a much greater extent on the message. In his conclusions, Jones supports Zamel's claim that previous instruction affects one's degree of monitor use. In another similarly designed study, Jones investigated the role of transfer and concluded that, for his subject, high-level composing processes, i.e. goal setting, transferred from LI to L2 writing. Jones's work has clearly established the utility as well as the advantages of L2 process/product based studies.

Both Chelala (1981) and Lay (1982) have looked specifically at the degree to which revising skills transfer from LI to L2. Chelala observed her subjects doing less reviewing and revising in L2 than in LI, suggesting that these processes were not as developed in the second language. Lay in her study of transfer found that better composition resulted from writers who used their first language to make more LI/L2 switches.

The extent to which LI writing skills transfer or are transferable is a major issue which composing research is capable of investigating. However, findings are still highly speculative. Further explorations in this area are necessary since relevant findings could have a major effect on the nature of L2 writing pedagogy. Relevant findings
could establish, for instance, if writing skills automatically transfer or can be consciously transferred from one language to another, and if so, which skills do so. These findings could confirm or refute the popular premise that ES/FL writing is exclusively a communicative activity: one that relies on transferred L1 writing skills that incorporate learned L2 surface considerations of grammar, lexicon, orthography etc. (Widdowson, 1978, 1983).

Small-scale case studies, such as Zamel's and most L2 composing studies to date, are designed primarily to reveal what actually happens when writing. They are often broadly focussed on the entire writing process and therefore have rather general objectives. Although composing research is only a recent phenomenon, what is beginning to emerge is a picture of the writing process, one that gives revision a greater role in the composition of the final product. This is especially so when one looks at the work of native English composing research. Indeed, it is perhaps more accurate to say that L2 composing research has been spawned from the pioneering work already done in L1.

Two major contributors to the progress already made in L1, Flower and Hayes (1977, 1980), have done extensive research into the cognitive planning activities of L1 writers. Using think-aloud protocols to aid their analyses, their work has resulted in significant contributions to a theory...
of the writing process. Of interest to us are Flower and Hayes' views on the role of revision in the writing process. In general, their perceptive observations have revolutionized the way we view revising within the context of a writing situation. Rejecting traditional linear writing models that place revision at the end of a three-stage model, they have posited revision as an interrelated and motivating process, one that can play a central role in the final product.

However, there are questions pertaining to the validity of think-aloud protocols. The use of these protocols is somewhat controversial because of at least one major drawback: it may result in an artificial writing process. Critics of this procedure contend that when writers voice their thoughts during the production of text, their natural writing patterns may be affected, which might result in a different writing process than would have been the case if thinking aloud had not been required. The decision to employ think-aloud protocols depends largely on the goals of a study. For example, Flower and Hayes needed think-aloud protocols in order to investigate conscious cognitive processes—what writers contend with mentally when writing. Gaskill limited their function somewhat by using them only to clarify revisions. This made it possible to code revisions that would have been difficult to identify from a purely product-based examination. Studies employing think-
aloud procedures may risk affecting the naturalness of a writing situation, yet many researchers believe that the wealth of knowledge that results from their use is worth the risk of altering the writing process. As a result, think-aloud protocols have proved to be a valuable method for discovering more about what were previously unattainable cognitive writing operations.

Some researchers prefer to infer composing processes from observable writing behaviors that illuminate the writing concerns of their participants (Perl, 1979; Matsuhashi, 1982; Pianko, 1979). Such an analysis does not radically change the writing process, and therefore avoids the inherent problems of think-aloud protocols. Perl was one of the first researchers to use writing behaviors as the physical and overt representations of what happens mentally during the writing process. In conclusions related to revision, she found her unskilled adult writers making changes prematurely with the primary emphasis on local, typically, mechanical changes. Perl claims that it is this overconcern for low-level considerations that contributes to a breakdown of the writing and thinking rhythms—a possible explanation for writer's block. Perl found that writers at this proficiency level tended to let revision preempt the development of their texts. Her behavioral analysis has gone a long way toward discovering the restrictive nature of revising in the
writing process of unskilled writers.

Other L1 composing studies have reported how skilled writers are more capable than unskilled writers of using revision to improve their work. In his study, Stallard (1974) had originally planned to video-tape his participants but found this to be unwieldy opting instead to use on-the-spot observations and post-writing interviews. Although Perl found her unskilled writers limiting the scope of their revising efforts, Stallard noticed that his good student writers seemed to appreciate the value of using revision to improve their work. His good writers revised in order to judge the appropriateness of their sentences as well as the relationship between the content and the purpose of the writing assignment. In this respect, Stallard's good writers obviously perceived the role of revision to be a major determiner of the final product whereas Perl's unskilled writers still relegated revision to the limited role of polishing.

The L1 and L2 research so far gives evidence of the increasingly important role that revision plays in the writing processes of better writers. Sommers' study of the revision strategies of student writers and experienced writers (1979) illustrates further the ability of competent writers to juggle macro and micro writing constraints. She notes, for example, that her experienced writers revised in accordance with such macro-level concerns as audience and
purpose. Sommers corroborates Emig's earlier claim (1971) that such concerns as reader and task objectives affect revision at all levels, contending that it is primarily experienced writers who are capable of selectively making appropriate changes within the context of the writing process.

Sommers also observed how her competent writers seemed to appreciate the importance of organizing the revision task, making global changes first before attending to sentence and word level considerations. These writers understood that certain revisions work better at specific points of the writing process: they knew how to arrange writing priorities sequentially. It is clear then that skilled writers have a perceptually different and more sophisticated understanding of what revision consists of and how to incorporate it into their writing strategies. In other words, mature writers have a working knowledge not only of what changes are necessary but also when to make them.

There are, however, task environment considerations which can influence the way a writer uses revisions. The principle objective of another behavioral study (Pianko, 1979) was to determine how the effect of one of these restrictions, a classroom-imposed time limitation, affected the writing processes of different groups of college writers. In this study, writing time greatly affected
composing, and of interest to us is the finding that with timed writings, revisions were primarily mechanical: even second drafts were generally just recopied versions. Pianko concluded that, for her subjects, in-class writing assignments could not possibly have produced polished work; thus, revision took a subservient role to idea generation, development, and transcribing.

Similarly, in Mishel's case study of a twelfth grader, the subject seems to have been influenced by external considerations. The participant wrote in-class assignments completing each one within the allotted time. Yet he seldom revised. He had either not yet acquired sophisticated revision strategies or had simply adapted his composing processes to accommodate the constraints of the writing environment. Indeed, when deriving conclusions from laboratory studies, situational variables, such as time limitations, are a major factor affecting performance. They can adversely affect the writing process, thereby skewing the results.

Product Studies and Revision

There have been a number of L1 and L2 revision studies that looked at the result of making revisions but were not designed to investigate the process of making these revisions. They all relied exclusively on an examination of the final product and/or post study interviews to investigate various methodological issues of revision. Beach (1976,
1979) and Chaudron (1983) in separate studies looked at the effects of various kinds of feedback on revision by comparing qualitative improvement that resulted from two different kinds of feedback. Chaudron compared improvements resulting from teacher feedback with those resulting from peer feedback while Beach, in one study, compared teacher feedback with the self-evaluation improvements of his writers and, in the second study, the revision strategies of extensive revisers vs nonrevisers. Other studies examining correction procedures include Cohen (1982, 1983), Partridge (1981), and Witbeck (1976). These studies have direct pedagogical implications. But, even though they were not concerned with the process of making revisions, they provide additional evidence of the effect previous instruction can have on the way one revises.

The belief that level of revision strategy sophistication directly relates to the developmental proficiency of the writer is one repeatedly voiced in the findings of other revision-related studies that examined only the product of a writing task (NAEP, 1977; Faigley and Witte, 1981; Bridwell, 1980). The main drawback to these studies, of course, is that they were designed to examine only post-performance results, and, because of this do not shed light on how writers perceived the role of revising.

The National Assessment of Educational Progress (NAEP),
A large-scale comparative study of the number of revisions made by nine- thirteen- and seventeen-year old students, reported that thirteen-year olds made significantly more revisions than their nine-year old counterparts. One would expect then that seventeen-year olds would be the most extensive revisers of the study. However, the seventeen-year olds were given a substantially simpler task to write on and understandably revised considerably less than the thirteen-year olds. As a result, this finding should not be compared with the findings of other studies without qualification. The fact that seventeen-year olds revised less than thirteen-year olds is more a reflection of the easier writing task than of the level of revision proficiency. It is certainly just as plausible to conclude that if given a challenging assignment, seventeen-year olds would be capable of making quantitatively more revisions than younger writers. Evidence from other studies corroborates this claim.

A major shortcoming of the NAEP study was that it did not examine qualitative differences. In other words, the number of revisions were counted, but no attempt was made to examine to what degree these revisions improved the texts. Rather than just simple numerical comparisons, a better analysis should include an analysis that is capable of showing the degree of qualitative improvement.

To do this, Faigley and Witte (op. cit.) have devised a classification of revision changes that distinguishes be-
tween surface and text-based changes. Using this quantitative/qualitative schema, these researchers examined how the revisions of six inexperienced student writers, six advanced student writers, and six expert adult writers differed. As they expected, the advanced writers improved the content of their texts considerably more than the inexperienced writers did. More interesting, though, were the diverse ways in which expert writers improved their texts, ranging from practically no revising to a number of rather idiosyncratic revising practices, e.g. starting from an almost stream-of-conscious text that was converted to an organized essay in the second draft; limiting major revisions to a single long insert; revising mostly by pruning. Clearly, these writers have devised personal preferences for making revisions; yet, such revising diversity also seems to indicate that they have the ability to improvise and manipulate the way they employ revision in the writing process.

The Faigley and Witte classification is capable of providing an analysis of both quantitative and qualitative revisions. However, it is not widely used in L2 research; only Gaskill has employed it to date. Since there is so much variability in the rating criteria of both L1 and L2 revision studies, it would obviously be advantageous if future studies adopted the Faigley and Witte classification as a standard method for evaluating revisions.
In a fairly large scale study, Bridwell (1980) used a different method of analysis where syntactic complexity determined the measure of revising proficiency. But rather than examining the revisions of writers at different age or proficiency levels, she investigated the revisions of twelfth graders for variations in syntactic environments at three stages of the writing process: in-process first draft, between draft, and in-process final draft. Her analysis did not directly examine composing processes. Instead, she analyzed the actual revisions and reported patterns as well as associations between revision and essay quality with quality determined by the syntactic complexity of the revisions. She found that there were developmental differences in both tendency and ability to revise successfully. Her poorer LI subjects revised very little or typically at surface and word levels. On the other hand, the writers of higher rated essays either revised extensively or had initially produced first drafts that needed little change.

A shortcoming of her study, which is similar to that of the NAEP study, is that of the rating criteria. Simply looking at syntactic environments may not necessarily be an accurate measure of qualitative improvement. It does not, for example, distinguish between surface and deep structure changes. Nor does it accurately portray the role of revision in the production of the text.

As mentioned, composing studies are only a recentphe-
A great deal of research is still needed in order to substantiate related findings in L1. In particular, previous L1 work suggests that revision strategies correspond to developmental skills and that the acquisition of revising capabilities appears to depend, at least to some extent, on the type of previous instruction. What is not clear, however, is whether these findings apply to ESL writers and, if so, to what degree.

Furthermore, the previous work in both L1 and L2 suggests that there are still questions about the effectiveness of different research methodologies. Traditional product-based analyses are capable of determining what happened but not how it happened. Think-aloud and writing behavior protocols reveal how writers go about the writing task, but in the case of think-aloud protocols, a less-than-natural writing process can result. Consequently, it is clear that a combination of process and product procedures, tailored to address both how and what happens, would best accomplish the objectives of a revision study.
CHAPTER II

DEFINITION OF TERMS

In addition to defining terms related to revision that are frequently referred to in this paper, Chapter 2 also provides a conceptualization of the writing process of L2 writers. It is hoped that this conceptualization of the writing process will provide a theoretical orientation from which my findings as well as those of future studies can be operationalized.

The writing process refers to the entire situation encompassing the production of text beginning from the initial impulse to write something and ending when the writer has finished the work and no longer desires, needs, or is able to make further changes. In other words, it is everything from the origination to the completion of any form of written expression.

Composing processes are the cognitive activities a writer engages in to facilitate the generation of ideas from the brain, the transfer of these ideas onto paper, and the subsequent improvement of these ideas. A writer can only be engaged in one composing process at a time, yet any process can interrupt another. Though composing processes are mental activities and hence unseen, these cognitive operations can be inferred through the analysis of writing behaviors. A composing process, which I found necessary to
isolate and identify, was that of crystallizing. This process involves the activity of reviewing what has been previously written in order to develop the content further. Writing models in L1 do not account for this process in this manner and since it is useful in illustrating how writers improve their work through further idea development, I have included this process as a crucial activity of the writing process model.

Writing behaviors do not necessarily conform or correspond to particular composing processes. Rather, they are simply overt and observable representations that indicate what a writer is dealing with mentally during the writing process, and as such, they provide interpretable clues as to how these unseen composing processes are facilitating the progression of written text.

There are a number of major and minor processes which are discussed in detail later in this chapter. However, revision is not considered to be one of these composing processes since it consists of not only cognitive activities but also a physical activity. It typically results when three things occur. A writer first makes a determination that something is inappropriate then, decides how to change it and, finally, physically makes the change. In order to revise successfully, though, a writer relies on the revision strategies that he/she has developed or, in the case of
ES/FL writers, are perhaps transferred from Ll. For the purpose of my study, revision strategies reflected the following: writing behaviors associated with revising, the quantity and quality of revisions, and the syntactic complexity of the changes.

Revision and the Writing Process

Proposing a working definition of revision calls for more than the pat answers provided by traditional writing models espoused by many rhetoricians, e.g., Helmholtz (1903) Wallas (1926) Young, Becker, and Pike (1970) Winterowd (1980). Although revision may in fact be the primary activity during the third phase of a prewrite/write/rewrite model, it can also play a mediating role during the production of text (writing stage) and, in a sense, also occurs in the writer's head before s/he even picks up a pencil (prewriting stage). A model that is divided into stages does little to reveal the various forms revision can take, nor does it accurately describe the influence revision can have on the final product. Sommers, a prominent first language composing researcher, strongly objects to the stage model, stating rather emphatically that "by staging revision after enunciation, the linear model reduces revision to no more than an afterthought" (1980).

In addition to the problem of placing revision within a linear model, we must also be clear as to what we mean by
the term 'revision'. Revision can and does mean different things to different people. One can speak of such terms as copyediting, proofreading, recopying, reformulating, restructuring, reviewing just to name a few of the "buzz words" used to characterize revision. What these have in common is that they all involve some aspect of reviewing text in order to make improvements: a rather broad definition. This diversity of terms represents a whole spectrum of meanings ranging from the proofreader's meticulous search for incorrect spelling and punctuation, etc. to the complete restructuring of text that a professional writer might find necessary. Rather than deal with all these terms, and for the sake of simplicity, I will use revision as a cover term to refer to the writing objective of searching for and making changes.

Understanding the fundamental properties of revision requires an appreciation of the crucial role it can play in the writing process: a role that appears to correspond with the sophistication of the writer's revision strategies. In order to visualize how revisions can influence the production of text, it is useful to conceptualize revision within the context of the writing process. Simple models of this process have been proposed independently by Hayes and Flower (1980), Nold (1982), and Humes (1980). But before discussing the constituents of a writing process model, one should
realize that a conceptual understanding of the writing process is still in its infancy. Composing research is still largely pretheoretical. This is evidenced by the abundance of descriptive case studies and the lack of hypothesis testing studies. The reason for including a synopsis of the writing process model is to provide an abstract representation from which the findings of this study as well as other studies can be conceptualized and thereby contribute to the evolving theory of the writing process.

The Writing Process Model presented below is an adaptation of the three models mentioned above. Since this study reports an investigation of the composing processes of second language writers, it was necessary to modify the L1 writing model to account for a composing process that monolingual speakers do not have. The model also simplifies the review process so that it consists of only two subprocesses. This refinement includes the additional process which only L2 writers are capable of using. Figure 1 provides an illustration of the model. There are three major constituents of a writing situation: the Long-Term Memory (LTM), the Composing Processes, the Task Environment.

The first of these, the Long-term Memory, is the stored content, personal and academic, a writer brings to the writing task or assignment. LTM, for example, can consist of such learned strategies as brainstorming for ideas, outlining for organization, and rereading for mistakes. It
also includes knowledge that has become internalized, e.g. personal writing style, writing schemas, etc. In the case of ES/FL writers, much of this knowledge was probably acquired in a language other than English. Much of the L2 composing research designed to investigate transfer (Chelada, 1981; Lay, 1982; Jones, 1982, 1983a, 1983b) attempts to determine whether skills acquired in the first language are also present in the second language.

The second constituent of the Writing Process Model is the Composing Processes Component which includes both major processes and related subprocesses. The three major composing processes are planning, transcribing, and reviewing (see Figure 2). According to Hayes and Flower (1980), the first of these processes, planning, involves the subprocesses of generating ideas, organizing ideas, and setting
Planning

- Generating Ideas
- Organizing Ideas
- Setting Goals

Transcribing

- Assign. Ling. Reps
- Translating

Reviewing

- Crystallizing
- Evaluating

Figure 2
Composing Processes Component
goals. These subprocesses can occur at any time during the writing process but typically predominate during the initial production of text. The planning process is also a method for controlling the many constraints imposed on the writer. Flower and Hayes (1981) suggest that this process consists of the interaction of plans for generating ideas and plans for producing text. A writer can use the planning process to control the writing process so as not to become overburdened with too many concerns.

During what has been referred to as the transcribing process (Nold, 1982), a writer takes inchoate ideas and transforms them into written English sentences. This cognitive activity involves the subprocess of assigning linguistic representations to the mental concepts formulated as a result of the planning process. The writer uses content from his/her LTM—semantics, syntax, orthographics—to accomplish this. It is not uncommon to have the planning and transcribing processes alternating back and forth, the former inducing and developing ideas, insights, and memories with the latter providing the necessary script in accordance with the linear text format of conventional English syntax.

A second subprocess of transcribing is that of translating ideas, either inchoate ones or those that have already been assigned linguistic representations. The subprocess of translating is, of course, an option that only second or multilanguage speakers can utilize since only they are
capable of **recoding** ideas from one language to another. Although translating is an option available to L2 writers, its use requires additional processing time which may slow down or even inhibit the writing process. Consequently, better writers may find themselves relying on it to a lesser and lesser extent as their writing ability improves.

For the competent writer, transcription is fairly straightforward since such a writer has developed a rather flexible syntactic network, acquired a wide lexical repertoire, and mastered the orthographic system. This is not the case for less skilled ES/FL writers or unskilled native writers. For both of them, the transcribing process can slow down their efforts to express themselves by forcing them to devote additional processing time to language considerations. ES/FL writers must also contend with an additional process, that of translating, which can affect the transcribing process.

The third major composing process is that of reviewing. It consists of two related but distinct subprocesses: crystallizing and evaluating. Both of these subprocesses involve rereading previously written script but for somewhat different purposes. The crystallizing process (Wiskin, personal communication) is a process in which writers reexamine the text produced so far in order to stimulate further idea generating, organizing, and goal setting. By
using this process, a writer is able to motivate the discovery of additional ideas resulting in further development of the content. It often accompanies or complements the planning and transcribing processes by helping the writer to discover what to write next.

The second subprocess, evaluating (Nold, 1980), is also that of reexamination, but this time the writer examines what has previously been written in order to determine if improvements are necessary: in other words, a writer checks to see whether the transcribing process has accurately approximated the intentions resulting from the planning process. As a result of evaluating, a writer can improve the content of the text by attending to surface-related shortcomings such as correcting usage errors or by clarifying ideas through further elaboration.

The evaluating subprocess pertains specifically to revision in that it triggers what Bridwell (1980) calls dissonance—the feeling a writer has that something is not accurately transcribed, does not represent original intentions, or is not the appropriate choice. When a writer reviews his/her work for dissonance, s/he is attempting to detect problem areas. Once detection occurs, a writer must be able to identify what the problem is and decide on the appropriate change. The final step of this activity is to make the change on paper. Thus, in order to successfully revise, a writer uses the evaluating subprocess to detect,
identify, and correct discrepancies (Bartlett, 1982).

Perl (1982) has identified a concept dealing with this need to evaluate whether assigned language representations accurately approximate one's ideational intentions. She calls it retrospective structuring but feels that it is not necessarily a reflection of writing skill. Instead, she claims that it is more likely related to the way one has internalized the writing process. It may result from one's previous instruction: the kinds of revising skills that were emphasized at school. If, for example, grammar was the main focus of instruction, then it would not be unexpected to find students overconcerned with grammatical perfection. If, on the other hand, one was taught how to evaluate ideas and, when necessary, refine these ideas further, then the result will be a writer who interacts more so with the content.

In presenting a model of revision, Nold (1979) defines revision as the process of retranscription of previously produced text as well as in-process text production resulting from a writer's conscious evaluation that modifications will improve the product. It can occur at any given point in the writing process, interrupting, and sometimes preempting, other processes. Again though, a writer must utilize discretion when setting revision priorities for a writing task. The success of a writing task can depend on
one's ability to make improvements, so a writer should be able to determine the optimal amount of revising necessary to accomplish the task. Writers such as those in Perl's study have not yet learned how best to incorporate revisions into their work.

I should point out that this interpretation of the Writing Process Model does not consider revision to be a process of the Composing Processes Component. Rather, revision is what occurs upon the completion of a subprocess of the review process and the subsequent change in the text. It begins when the evaluating subprocess is used to detect and identify points of dissonance in the text, and it typically ends when the writer has made the change on paper (editing behavior). Since composing processes are by definition cognitive ones, and since the term revision includes a physical activity, I prefer not to refer to revision as a composing process. If the writer is unable to identify and correct a detected problem, the review process is aborted. My analysis did not include these incomplete revisions, examining instead only those revisions that were successfully performed.

The Composing Processes Component is the operational apparatus of the Writing Process Model. It depicts the cognitive activities—the major processes and related subprocesses—that interact with LIM and the Task Environment. But, more importantly, it also illustrates the
dynamic nature of the writing process: its recursiveness. This recursiveness, however, is not necessarily one of lock-step, process by process cycles or loops. On the contrary, planning, transcribing, and reviewing can be irregular, depending on constraints imposed upon the writer by the third component of the writing process model—the Task Environment (see Figure 1 again).

Flower and Hayes (1981) consider the Task Environment to be anything that influences the performance of the task, including such intangibles as topic, intended audience and purpose, in addition to the text that a writer has already produced. The more difficult the Task Environment, the more likely it is that the writing process will be characterized by irregular, cyclical patterns as the writer attempts to overcome any problems imposed by the Task Environment. It is also the case that if the Task Environment is routine—say writing a letter—the writing process can be fairly linear and uni-directional.

Hold has contended that the degree of processing irregularity is a result of psychological constraints inherent in the cognitive capabilities of the brain. Because each process requires focal attention and because of the limitation of short-term memory, only one process occurs at a time, so a skilled writer will alternate from one process to another in an attempt to deal with the hurdles imposed by
internal and external considerations—the cognitive limitations of the brain and the Task Environment. Although the mental processing limitations of an adult probably remain relatively constant, the Task Environment can obviously change. Thus, and as the dotted lines in Figure 2 illustrate, a writer alternates from one composing process to another in order to motivate the production of text. Flower and Hayes contend further that a writer monitors the writing process by making decisions as to the best use of composing processes to accommodate the Task Environment. Any process can interrupt another, but it appears to be only the proficient writers who are able to effectively strike a balance among competing composing processes as well as between these processes and the constraints of the Task Environment.

In that the writing process accommodates the writing task and since there are restrictions to the processing capabilities of the human brain, it is not surprising that skilled writers find ways to compensate for these constraints. Such writers have developed strategies to aid them in their efforts to overcome these considerations. Discovering the many ways in which skilled writers have developed similar and different revision strategies and how these compare with those of less skilled writers is a major goal of this study.

Finally, instead of treating revision as the end stage of a linear stage model, I have tried to present it as an
interrelated part of the writing process, an activity that contributes to the dynamic nature of this process by interacting with other processes to improve the final product. Nor is revision simply a matter of making changes. Rather, it is much more complex, involving the activities of detection, identification, and correction. Yet, the key to understanding the role of revision includes not only what it consists of but also how writers go about accomplishing this task. In other words, what are the similarities/differences of revision strategies of good and poor L1/L2 writers? What types of revision predominate during the writing process? When do they occur? These questions are but a few of the areas in need of further research. Although first language research has been fruitful during the last decade, precious little work has been done in the field of TES/FL. So within the context of the Writing Process Model, the study on which this thesis is based reports on the role of revision for L2 writers.
CHAPTER III

STUDY DESIGN

Although this study is not a replication of Bridwell's, it looks at some of the same phenomena. In particular, Bridwell's study was designed to investigate three areas of interest: what twelfth graders do when they revise, the differences between the patterns of more successful and less successful writers, and how these patterns relate to the evolving theory of the writing process (1980).

Purpose

The primary purpose of this descriptive analysis of L2 writers was to observe the revision strategies of five subjects and report on how they were similar and different. Of specific interest were the following: at what points in the writing process revisions occurred, the quantity and quality of these revisions, and how reading was related to making revisions. Of more general interest to us was the relationship of L2 revision strategies to the emerging writing process paradigm. The research questions of the study are provided below:

1. What are the general characteristics of the revision strategies of L2 writers.

2. What are the associations between the whats and whens
of revision and the rated quality of the essays?

3. What role does reading play in the review process and how does this role relate to the rated quality of the essays?

Participants

The five participants studied were all L2 writers. They were initially selected and grouped as less skilled and more skilled. Levels were predetermined so that it would be possible to examine revision strategies from a developmental perspective. The writers' ESL backgrounds were diverse; two of them (the least skilled) had been in the US for only a short time while the two competent writers had been in the US for over a year--one for nearly twenty years. The fifth writer, whose essay was rated qualitatively better than the least skilled writers' but not as good as the competent writers', was in the second year of her undergraduate degree program at an American university. Table 1, which is provided below, shows each writer's nationality, age, time in US, and amount of ES/FL educational experience. It is apparent from the table that the three least skilled writers were considerably younger than the two best writers. It is also the case that four of the five participants were Asian with the fifth from Europe. Additional information about the writers is provided in Chapter Four at the beginning of each case study sections.
Table 1

Background Information of the Five Subjects

<table>
<thead>
<tr>
<th>Name</th>
<th>Nationality</th>
<th>Age</th>
<th>Time/U.S.</th>
<th>L2 Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeong Ki</td>
<td>Korean</td>
<td>22</td>
<td>2 weeks</td>
<td>8 years</td>
</tr>
<tr>
<td>Winako</td>
<td>Marshallese</td>
<td>18</td>
<td>2 weeks</td>
<td>12 years</td>
</tr>
<tr>
<td>Shao</td>
<td>Chinese (HK)</td>
<td>20</td>
<td>2 years</td>
<td>14 years</td>
</tr>
<tr>
<td>MeiLi</td>
<td>Chinese (PRC)</td>
<td>32</td>
<td>2 years</td>
<td>10 years</td>
</tr>
<tr>
<td>Andrea</td>
<td>Hungarian</td>
<td>44</td>
<td>20 years</td>
<td>14 years</td>
</tr>
</tbody>
</table>

I had originally expected to have separate groups of unskilled and skilled writers. But after having the essays rated, it was apparent that one of the writers wrote an essay that was between the rated quality of the two groups. This unexpected occurrence was fortunate for it provided a developmental perspective of revision strategies allowing my analysis to focus on how revision strategies of unskilled writers differed from those of the semi-skilled and skilled writers. The ESL Composition Profile developed by Jacobs, et al. (1981) was used to rate the essays. Three ESL writing instructors rated each essay using this profile. The raters' scores were averaged together and clearly depict developmental differences. Based on the evaluations of their essays, writers #1 and #2 were considered to be unskilled, #3 semiskilled and #4 and #5 skilled.

Writer #1--66
Writer #2--67
Writer #3--82
Writer #4--90
Writer #5--93
Writing Assignment

The writing assignment consisted of a single topic in paragraph form. The topic (provided below) was chosen because 1) it could have been a "typical" academic assignment for an undergraduate sociology course; 2) the topic content lent itself to an experience each writer had had or was in the process of experiencing. Consequently, even the least skilled writers would be able to draw on the personal experience of adapting to a new environment.

After arriving in the US, foreign students usually experience problems adapting to the new environment. This is understandable since the language and culture are often quite different. Write an essay directed at newly arrived foreign students. Tell them what to expect and offer suggestions as to the cultural and language problems they will most likely encounter in the US.

There are a number of writing assignment variables that can influence writing performance. These variables include the writing context, format, directions, cognitive demands, affective demands, and linguistic demands (Greenberg, 1982). It is certainly preferable to control these as much as possible, which is what I tried to do. Although the writers knew this was an experiment, indicators of both audience and purpose were built into the directions. Rhetorical skills and syntactic/semantic proficiency, of course, could not be controlled and depended on the developmental level of each writer. Finally, the participants were told that their essays would be graded in terms of clarity, cohesiveness,
and coherence. Final drafts of all five writers can be found in Appendix A.

Procedures

In order to accurately uncover revision strategies that occurred during the writing of the drafts, video-taping the participants from just after a prewriting activity to the end of the second draft was considered to be the most feasible way to gather the writing behaviors that aided the progression of text. Taping procedures involved a two-camera arrangement—one camera aimed at the participant's paper and the other positioned in such a way as to give a frontal view of the writer's face and hand movements. The resulting video-tape consisted of a split-screen picture with the written script on the left side of the screen and the participant on the right.

There was a two-hour time limit imposed upon the writers. This was unfortunate but necessary because of resource limitations. In that there was a time restriction, the writing situation could be considered to be an in-class assignment. Yet, two hours was also believed to be lengthy enough for the writers to make the kinds of changes that would reveal their revision strategies. It was suggested to the participants that they use the two hours in such a way as to allow sufficient time to write a first and second
draft. Although two drafts were required, there was no requirement on the number of revisions nor was there a minimum or maximum limit set on the number of words or paragraphs. Thus the writers were expected to manage their time in any way necessary to accomplish the writing task.

Prior to beginning to write and after reading the assignment, each writer watched a twenty-five minute taped lecture on the psychological and sociological aspects of adaptation/assimilation to a new culture. The lecture tape was used as a prewriting heuristic to introduce the writers to the topic area. This was expected to aid idea generation thereby cutting down on the time required for prewriting considerations.

An explanation of three procedural restrictions preceded the filming. These restrictions may have affected the naturalness of the writing process, but probably not in a major way. The three were:

1. Writers could not move the paper on which they were writing.
2. When rereading any segments of the text, writers were asked to use their pens to follow the script.
3. When making changes, writers were asked to indicate verbally but briefly why they made them.

The first two restrictions were mechanical actions which were not expected to interfere greatly with the
natural flow of the writing. The first restriction was necessary because of the placement of one of the cameras. In order to keep the written script within the view of this camera, it was necessary that the paper not be moved about. The second restriction was needed to help ascertain whether the writer was reading or pausing. In a pilot study by the researcher (Heuring, 1983), there was difficulty determining whether the writer was actually reading or just staring at the paper. To alleviate this problem, writers were simply asked to follow the script with their pens when reading.

The third restriction, which was not really a restriction because it was optional, dealt with a somewhat controversial issue in composing research experiments; that is, whether think aloud protocols interfere with the natural process of composing. Some researchers use them (Flower and Hayes, 1977; Jones, 1982, 1983a, 1983b; Gaskill, 1983; Matsuhashi, 1982) and, the reasons they find them effective were discussed in a previous chapter. My temporal analysis of L2 writers involved the identification of writing behaviors as they related to revising, and most of the time these behaviors could be documented without much difficulty. I decided, however, to use a limited form of the think-aloud procedures to aid my analysis of revision types. For example, in the event of ambiguous revisions, think-aloud protocols might provide additional clues making it possible to determine the revision type. Thus, subjects were asked to
explain verbally, if possible, why they made changes in order to provide additional data to help confirm whether a change was surface or meaning related. As it turned out, only the two skilled writers were able to think aloud and then for less than 50% of their changes; nor were the explanations of much help since they were usually rather general. So the think aloud procedure was not a fruitful source of data and did not play a major role in the data analysis.

Method of Analysis

The design of this study produced two kinds of data: a process protocol of writing behaviors and product-derived tables of the quantity, quality, and syntactic complexity of the revisions. The process protocol came from the videotape and consisted of writing behaviors that had been noted, quantified, and analyzed for similarities and differences. The product tables were derived from an analysis of the revisions that the participants made and consisted of revisions that occurred on paper during the writing of the first and second drafts as well as those revisions made mentally when rewriting. The reason for having both process and product data was not only to provide insight into the types of revisions that occurred but also to determine how the participants differed in revision strategies. These strategies could best be uncovered by finding relationships
between 1) the number of revisions, 2) whether they were surface related or meaning changes, 3) the length of these changes, and 4) the writing behaviors that characterized these revisions.

Beeps at five second intervals were later recorded onto the video-tape in order to facilitate the extraction of writing behaviors. I adapted Perl's writing behavior system (1979) to code these behaviors. It was necessary to modify her coding system because it was designed for a study of L1 writers and needed to be refined somewhat to aid in the identification of writing behaviors related specifically to revision strategies. In particular, since reading is an activity used to detect dissonance—the points in the writing process where a writer senses the need for improvement—modifying Perl's code made it possible to account for additional, more revealing, reading behaviors that contributed to making changes. The adapted coding system consists of the major writing behaviors of Writing, Reading, Pausing, and Editing with these divided into subcategories. The code is provided below along with a brief explanation of each behavior.

**Writing**

W—instances of actual writing where script is being produced on paper in spurts of at least 3–4 seconds.

**Pausing**
Po—generally considered to be times when the writer is pausing for extraneous reasons such as shuffling papers, getting a new sheet of paper, etc.
Pc—moments of scribal inactivity reflecting times when the writer is engaged in cognitive planning, decision making, or reviewing activities.

**Reading**
Rd—reading the first draft in order to recopy or rewrite a second draft.
Ra—reading segments from the draft the writer is working on, with segments ranging from just a few words or sentences to paragraphs.
Rw—reading the entire draft following the completion of the essay.
Ro—reading other materials primarily notes or a *prewriting* outline.

**Editing**
E—physically making a change in the text.

The *identification*, quantification, and examination of writing behaviors within the context of the writing process was necessary to shed light on the *"whens"* of revision. Discovering when revisions occurred, revealed points at which writers felt dissonance between the generated texts and the intended meanings. The process protocol makes it convenient to pinpoint what revisions were prevalent during
the writing of the first and second drafts—performance revisions—and also those that occurred in the writer's head—between draft revisions. Besides these macro segments—a process protocol can also be used to look at micro segments, e.g. identifying writing behaviors that typically occur immediately prior to a revision. However, I decided not to examine micro segments because such an analysis would have required further elaboration of the coding system resulting in an analysis even more complicated than the one I used.

Writing behaviors are considered to be indicators of corresponding processing activities—composing processes. Certain reading behaviors, for example, appear to correspond to the reviewing process and more specifically to revision strategies. Pausing behaviors during the second draft of the writing process likewise tell us that the writer is engaging in activities related to improving the text. An analysis of such behaviors allows us to learn more about composing processes and how they interrelate and interact with one another to produce written text.

In particular, behaviors to which I specifically attributed revision-related properties to were certain pausing and reading behaviors. Pausing (Pc) occurring during the second draft production reflected moments of evaluation as did second draft reading behaviors (Ra, Rd, Rw). These specific behaviors formed the basis for my analysis of
revision-related strategies. Descriptions of individual behavior characteristics as well as comparisons with the behaviors of other writers, resulted in a behavioral account of the different and developmentally revealing ways in which these writers used the review process to help them improve on the written representation of their ideas.

The use of writing behaviors to infer composing processes has one obvious shortcoming. It is not always possible to be sure that a particular writing behavior represents the concurrent composing process. For example, the P behavior is considered to be an interval of pausing where pausing is related to contemplating an idea. However, without think-aloud protocols, it is difficult to determine whether this period is for idea generation or for such non-essay matters as daydreaming. Since this study had a two-hour time limitation, it is unlikely that there was enough time to daydream. Nevertheless, this inability to be able to distinguish between pausing types could greatly affect studies of longer duration.

The writing behavior protocol gives a rough indication of the amount of time a writer devotes to reviewing, but it does not show the extent to which revisions influenced the outcome of the final product. However, the product analysis of this study is designed to make this possible by showing the distribution of various revision types at different
stages of the writing process. It is divided into two analyses. The first analysis is similar to the classification of revision changes developed by Faigley and Witte (1981). Their schema (see Figure 3 below) distinguishes between revisions that change meaning and those that do not by breaking them into two general groups or types (surface vs text-based). Each of these revision types is again divided into two subgroups: 1) formal and meaning-preserving changes, and 2) micro and macro changes. Formal changes were those involving syntax or other writing conventions (punctuation, spelling, etc.). The three other revision types were semantic-related changes, but with a rather distinctive difference. Meaning-preserving revisions dealt with improvements that did not significantly alter the meaning; thus, they are grouped under Surface changes. Micro and macro text-based changes, on the other hand, affected the initial intent by changing the meaning. In order to be

![Figure 3](image-url)

Faigley and Witte's Classification of Revisions, 1981
a text-based change, the improvement could not have been inferred from the original choice. Examples of each revision type are provided in Appendix B. An analysis using this taxonomy makes it possible to determine to what degree a writer is using revision to qualitatively improve or change the text.

The taxonomy also looks at revisions in terms of operations, e.g. additions, deletions, permutations etc., and although these were initially part of my analysis, I decided not to include them in the findings primarily because they made my analysis unwieldy, and also because there did not appear to be significant results to report.

Instead, I analyzed revision units based on syntactic complexity. This analysis formed the second part of the product data and consisted of a breakdown of the revisions into syntactic units. This method was borrowed Bridwell's study in order to show how the syntactic complexity of revisions corresponded with writing level proficiency. The revisions were examined for linguistic length: lexical, phrasal, clausal, sentential and multi-sentential units. By identifying syntactic lengths, I hoped to see how the syntactic complexity of revisions differed at each stage of the writing process as well as how they differed between writers, thereby revealing the degree to which syntactic complexity of revisions correlated with developmental levels.

Of special note is the way in which revisions are
presented on the product tables. There are two computations for each revision type: a raw score and a percentage. The raw score represents the writer's total number of revisions for each revision type. This gives an approximation of each writer's emphasis on revision within the context of that individual's writing process. However, this raw score cannot accurately be compared to those of the other writers in the study because of essay length differences. So, it was necessary to standardize these scores in order to make them comparable. This was accomplished by determining how many revisions of each type occurred per 1000 words (tabulated from the final drafts only) and then computing percentages for each. Consequently, percentages are comparable between writers, but raw scores are not.

The product tables show revisions in stages of draft production: Stage A (in-process draft one), Stage B (between drafts), and Stage C (in-process draft two). By comparing revisions in stages, I expected to learn what revision strategies were used when my participants had different composing priorities; that is, whether Stage A revisions reflected changes made within the context of idea generation, whether changes made between drafts showed mental adjustments of these ideas, and finally whether Stage C revisions reflected changes in revising priorities to accommodate the reprocessing of Stage A ideas.
The inclusion of both process and product data for this study aided the clarification of two kinds of information. The process protocol looked at when revisions took place and the writing behaviors that reflected revision strategies whereas the product analysis showed quantitative and qualitative characteristics of the revisions. Writing behaviors, revision types and the complexity of these revisions are presented in the case study section of the next chapter. In the discussion that follows in Chapter Five, comparisons of similarities and differences of the five writers are presented.

Determining the reliability of the process protocol and the product data required the training of an outside verifier to determine a measure of agreement with my findings. This required separate verifications: one for the process protocol and the other for the product data. Each verification conformed with the guidelines suggested by Frick and Semmel (1978).

A total of fifty one minute segments, about nine percent of the total, were randomly selected from the process protocols of my five participants. A colleague of mine observed these segments and recoded the writing behaviors using the same criterion as the initial analysis. The two analyses were then compared for percent of agreement. Of a total of 600 observed behaviors, the second rater agreed with 567 of them for a 94.5 percent agreement. However,
when recomputing observed and expected codes that account for categorical differences (Cohen's Kappa), the rate of agreement was even higher—0.97. Such a high degree of agreement was expected since the behaviors involved are usually easily identified.

The product data was reanalyzed in a similar fashion but by a different person. Ninety-nine revisions or about twenty percent of the total number of revisions on all drafts were randomly selected from the three stages of all five essays. Another colleague of mine, who has had extensive experience working with the revision problems of L2 writers? was specially trained to detect and identify the revisions using the same criterion that I had used. Again, observed and expected ratings were computed according to Frick and Semmel. Interrater agreement was 0.88 (Cohen's Kappa). This is considered to be sufficient to validate my initial findings.

The design of this study was tailored to facilitate the identification and analysis of the revision strategies of less skilled and more skilled ESL writers. Through the examination of both the process of writing as well as the product of writing? it was possible to discover similarities and differences between the revision strategies of the writers. As a result of this examination? it is clear to see, at least in the case of my writers? how ESL writers
perceive the role of revision and how this perception aids in the production and improvement of their 'essays.
The subjects of the first two case studies in this chapter are the two unskilled writers. The subject of the third case study is the semi-skilled writer and of the fourth and fifth the two skilled writers. Each case study section begins with background information and general comments about the content and quality of the subject's essay. The Writing Behavior Protocol is presented next, with the product (revision) data summarized immediately after the protocol. The essays are presented in Appendix A.

Case Study # 1

Jeong Ki is a twenty-three year old Korean student. She is enrolled in a graduate level nursing program at the University of Hawaii. At the time of the study, she had been in the U.S. less than a month, so her English instruction had been conducted exclusively in an EFL setting. Besides having had virtually no exposure to native English input other than grammar translation textbooks, her previous writing practice had been used primarily to reinforce her oral skills. So it was expected that Jeong Ki would have difficulty writing an expository essay since it was a task she had never done before.

Part of her essay was written in a narrative genre and
consisted of a chronological account of past experiences. At various points in the narrative, she interspersed descriptive illustrations which gave support to her main theme. Yet, there were no instances of abstracting. The essay was written in a reportive manner, and even though the writer's message was expressed in a simple straightforward manner, her meanings were often obscured as a result of numerous grammar errors and poorly expressed ideas.

Table 2 is divided into two sections—the writing behavior protocol and the product analysis. A look at the first section (2A) shows the behaviors that characterized Jeong Ki's actions during the writing of her essay from the time she began thinking about the writing task until she had completed her essay. It partial evidence of her rather limited experience with academic English.

Table 2A
Jeong Ki's Writing Behavior Protocol

<table>
<thead>
<tr>
<th></th>
<th>1st Draft</th>
<th>2nd Draft</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>30.10</td>
<td>29.05</td>
<td>59.15</td>
</tr>
<tr>
<td>Po</td>
<td>1.50*</td>
<td>1.10*</td>
<td>3.00*</td>
</tr>
<tr>
<td>PC</td>
<td>26.25</td>
<td>12.55</td>
<td>39.20</td>
</tr>
<tr>
<td>Rd</td>
<td>-</td>
<td>15.00</td>
<td>15.00</td>
</tr>
<tr>
<td>RO</td>
<td>1.20*</td>
<td>-</td>
<td>1.20*</td>
</tr>
<tr>
<td>Ra</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rw</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E</td>
<td>.55*</td>
<td>0</td>
<td>.55*</td>
</tr>
<tr>
<td>Totals</td>
<td>60.40</td>
<td>57.20</td>
<td>118.00</td>
</tr>
</tbody>
</table>

* not used in the analysis

51
During the progress of the first draft, Jeong Ki spent 30.10 minutes actually writing (W) and about 26.25 minutes pausing (PC). Jeong Ki did not have many revisions on her first draft, so these writing/pausing times can be considered to be rough approximations of the amount of time needed to formulate and construct written discourse for her original ideational intentions. This corresponds with her second draft behaviors where she again spent 29.05 minutes writing and 27.55 minutes pausing/reading (PC and Rd are lumped together because they are both activities a writer can use alternatively to review a first draft for rewriting). These first and second draft pausing/reading times are almost equal indicating that Jeong Ki probably devoted about equal time to generating her original ideas and reviewing them for improvements. However, Jeong Ki demonstrated rather limited L2 revising capabilities since both drafts have essentially the same ideas. In other words, she needed nearly the same amount of processing time for planning and transcribing as she did for reviewing. This is significant since there was practically no difference in the content of the two drafts. This finding suggests that although she devoted substantial processing time to reviewing, she did not use this time to alter the content of her essay much beyond the scope of her original ideas. Even though she used her second draft for improvements, most of her time was apparently spent on changes within the context of what had been written the
first time.

Jeong Ki's limited L2 writing ability is also illustrated by the absence of any in-process reading behaviors. There were no instances of reading either while writing (Ra) or after completion of the drafts (Rw). A lack of such reading behaviors suggests that Jeong Ki did most of her reviewing at only one stage of the writing process—between drafts. It is not unusual then that there were so few second draft content changes. Jeong Ki's primary concern was with getting the meaning down the first time. She did not go back to evaluate her text while writing perhaps because she needed to reserve her processing time for another priority—planning and transcribing her original ideas. She limited her reviewing and revising to a point when other processes were no longer the main focus. Her improvements, in this respect, were relegated to the final stage of what was essentially a two stage writing process: write/recopy.

In addition to Jeong Ki's restricted writing behaviors, an analysis of her revisions (Table 2B) shows that her ability to revise extensively was also limited. Of a total of seventy-four revisions, only ten involved meaning changes and these were all at the micro level. This would seem to confirm that Jeong Ki had difficulty changing or developing her ideas. Eighty-six per cent of her total changes were surface revisions: 62% meaning-preserving and 24% grammar
Table 2B

Jeong Ki's Total Revisions

<table>
<thead>
<tr>
<th>Surface</th>
<th>Text-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>74 (73/1000)</td>
<td>10 (14%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Formal</th>
<th>Mng-Pre</th>
<th>Micro</th>
<th>Macro</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 (24%)</td>
<td>46 (62%)</td>
<td>10 (14%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Stage

<table>
<thead>
<tr>
<th>Stage</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>7</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>85%</td>
<td>1</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>0%</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

* L/P= Lexical/Phrasal
* C/S= Clausal/Sentential

related with 85% of these surface changes occurring at Stage B (between drafts). Since most of her changes occurred during this stage, my contention that she was unable to make substantial changes while writing because of processing limitations is further substantiated. Of additional interest is the fact that there were no changes at all during the writing of the second draft (Stage C). The writer was clearly overconcerned with the extent to which the first draft accurately expressed her original intentions and this overconcern most likely affected her ability to develop her ideas further. This is evidenced by her lack of second draft elaboration and her very limited reading behaviors—her main concern seemed to be on correcting or
refining but not changing her first draft content.

Of Jeong Ki's revisions, 24% were formal changes, primarily grammar concerns. This is probably a reflection of her previous training. Yet, even though nearly one fourth of her changes were grammar improvements, her final draft still had numerous grammar errors attesting to her inability to detect form-related inadequacies.

The process/product data presented above reveals an inexperienced L2 writer: one who used the review process primarily for surface-related considerations. Jeong Ki limited her revising to a stage in the writing process when other composing processes were no longer the main focus. For Jeong Ki the role of revision was not an integral part of the writing process; rather, it was typically a cleaning up or polishing activity, a technique for clarifying but not significantly elaborating or changing ideas. Nor was her review process able to help her substantially locate and correct grammar shortcomings. Thus, not only were revisions limited in qualitative scope, but since they occurred primarily during Stage B, they were accorded a secondary, subservient role to other writing priorities.

Case Study #2

The participant of the second case study, Winako, was in many respects similar to Jeong Ki. Since she had only
recently arrived in the US from the Marshall Islands, all of her English education had been in an EFL setting. She also was a nursing student, but at the undergraduate level. Her previous English instruction in the Marshalls was greater than Jeong Ki's (twelve years as compared to eight years) and had been more intensive. Winako had been taught by Americans and had received diversified forms of instruction in grammar, sentence combining and writing formats for essays, e.g., introductions and conclusions, paragraphing, etc.

Yet, Winako's and Jeong Ki's essays were rated similar in quality, and in only one area did Winako's essay reflect her greater exposure to English. This was in her grammar usage where she had considerably fewer syntactical errors in her final draft. Like Jeong Ki, she was unable to address the topic in an expository genre. Her essay was written as a narrative with just a few instances of sentence abstraction. These abstracted sections were rather simply written (topic sentence + illustration), but the fact that she used them is probably a result of her previous writing instruction. She later confirmed this in a post-writing interview. A major difference in Winako's work was that her final draft had 240 fewer words than Jeong Ki did, which might at least partially explain her similar rating. A look at Winako's Writing Behavior Protocol (Table 3A) reveals a writer who was apparently preoccupied with perfection. The pausing
behavior total in Table 3 shows that she spent a total of 69.15 minutes pausing compared to 32.50 minutes writing (W).

Table 3A

Winako's Writing Behavior Protocol

<table>
<thead>
<tr>
<th></th>
<th>1st Draft</th>
<th>2nd Draft</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>14.45</td>
<td>18.00</td>
<td>32.50</td>
</tr>
<tr>
<td>PO</td>
<td>1.15*</td>
<td>1.55*</td>
<td>3.10*</td>
</tr>
<tr>
<td>PC</td>
<td>42.39</td>
<td>26.36</td>
<td>69.15</td>
</tr>
<tr>
<td>Rd</td>
<td></td>
<td>5.10</td>
<td>5.10</td>
</tr>
<tr>
<td>Ro</td>
<td>1.45*</td>
<td></td>
<td>1.45*</td>
</tr>
<tr>
<td>Ra</td>
<td>1.10</td>
<td>1.45</td>
<td>2.55</td>
</tr>
<tr>
<td>Rw</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E</td>
<td>1.25*</td>
<td>1.25*</td>
<td>2.50*</td>
</tr>
<tr>
<td>Totals</td>
<td>62.55</td>
<td>55.00</td>
<td>117.55</td>
</tr>
</tbody>
</table>

*not used in the analysis

Clearly, such a high degree of pausing indicates that she needed a lot of time to transcribe her ideas and to review her text. Perhaps, this disparity between pausing and writing behaviors explains why her essay had few syntactic inconsistencies. She was obviously preoccupied with the accuracy of her written work and contemplated each choice she made.

Besides the significant disparity between Winako's writing and pausing behavior times, there are indications of other differences between her first and second draft pausing behaviors. She paused (PC) 42.39 minutes during draft one. This seems to be an excessive amount of time, especially when it is compared with Jeong Ki's pausing behaviors and
seems characteristic of a writer who is preoccupied with the planning process. Extensive pausing is again the case with the second draft where Winako devoted 31.46 minutes to this activity (Pc and Rd behaviors). This means that nearly half of her total pausing time was devoted to reviewing which is considerably more than Jeong Ki had and indicative of a writer intent on reviewing to correct and/or improve the first draft content. Since Winako spent so much time pausing, it is not surprising that she wrote only 780 words. Yet her final product does not match what one might expect from so much consideration and reflection.

One of Winako's reading behaviors also shows her concern for planning and reviewing. She spent 2.55 minutes reading (Ra) which is significant since this is a behavior that usually occurs in short spurts—often just the reading of a few words or a previous sentence or two. Of this behavior, 1.10 minutes, occurred during the first draft, which represents a good deal of reviewing to crystallize or evaluate ideas. In that Winako also had 1.45 minutes of second draft reading, it is apparent that short segment reading was used as a revision strategy to aid her reviewing process. Thus, she demonstrated a more advanced level of revision sophistication than Jeong Ki did.

Winako's actual revisions (Table 3B) provide evidence that the considerable amount of time she spent on reviewing does not seem to have substantially changed her essay. Only
nine of eighty-three revisions (11%) were text-based, and these were at the micro level. Since Winako only wrote 780 words, her average number of revisions per 1000 words is

Table 3B

<table>
<thead>
<tr>
<th>Winako's Total Revisions</th>
<th>83 (106/1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surface</strong></td>
<td><strong>Text-based</strong></td>
</tr>
<tr>
<td>74 (89%)</td>
<td>9 (11%)</td>
</tr>
<tr>
<td><strong>Formal</strong></td>
<td><strong>Mng-Pre</strong></td>
</tr>
<tr>
<td>26 (31%)</td>
<td>48 (58%)</td>
</tr>
<tr>
<td>Stage A</td>
<td>Stage B</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>0 L/P*</td>
<td>0 L/P</td>
</tr>
<tr>
<td>0 C/S*</td>
<td>0 C/S</td>
</tr>
</tbody>
</table>

* L/P= Lexical/Phrasal  
* C/S= Clausal/Sentential

106—a substantial revising effort. Yet, the majority of her changes (89%) were meaning-preserving or grammar related. Winako was even more grammar conscious than Jeong Ki since over 30% of her revisions were for grammar inconsistencies compared with Jeong Ki’s 24%. Winako’s use of the review process to make revisions is more evenly distributed than Jeong Ki’s. She was able to make changes both in-process as well as between drafts. Forty-seven per cent of her changes occurred between drafts, but she also made
20% and 33% of her changes while writing draft one and two, respectively.

For Jeong Ki, most of her Stage A revisions were used primarily to aid her planning and transcribing processes. During this stage she made ten changes (20%), and all but one of these were lexical or phrasal. Not surprisingly, revisions occurring when the review process is the major objective (80% during Stages B and C) greatly outnumber those of Stage A. Yet Winako did not actually broaden the qualitative scope of her revisions. The nine text-based revisions consisted of changes in a rewritten version of her conclusion and did not change the gist of the text. Thus, Winako had a large number of revisions when she focussed on revising, but she still restricted most of her changes to surface related concerns with a high percentage of these considerations related to form.

For Winako, revising was a major activity, one that she used throughout the writing process. It may be the case that she placed too much emphasis on revising, and that this slowed down her ability to manage other processes. Such an overconcern for perfection probably explains why she wrote so few words. Yet, since she devoted so much time to revising, one might expect that there would be major differences between her first and second drafts. This was not the case, however, as her changes were numerous but not qualitatively significant. Thus, the amount of time spent on
revising had no correlation with qualitative improvement.

Winako's revising strategies probably are a result of her previous English instruction. Her concern for grammar and surface-preserving improvements at the expense of text-based changes are perhaps indications of syntactic and format preoccupations instilled in her from earlier instruction. Although Winako made a lot of revisions and seems to understand that revising is a useful writing skill, she has not yet broadened her scope of revision strategies to include reviewing to promote further idea development or discovering new ideas.

In addition, her overemphasis on revising may have adversely affected her ability to plan and transcribe her original intentions by slowing down her processing capabilities. Her reviewing process inhibited other composing processes and did not significantly result in much qualitative improvement of her second draft.

Case Study # 3

The participant of the third case study, Shao, was from Hong Kong. The rated quality of her essay was considerably higher than that of the previous two writers. Shao had had more experience with English than either Jeong Ki or Winako. In addition to having been in the US for over a year, she had also taken remedial writing courses at the University of
Hawaii, with her most recent courses focusing on writing as a process of developing and improving ideas.

It is not surprising then that her paper was judged qualitatively better than the first two writers'. Her final draft was clearly a thoughtful and well-organized expression of her ideas. It had a clearly written introduction and conclusion and a coherently developed theme. Shao wrote rather informally, referring to her own experiences to illustrate her points. She also wrote more words in less time than the less skilled writers, but her essay still contained a few grammar errors.

Shao's Writing Behavior Protocol from Table 4A shows that her behavioral patterns were fairly consistent. Her balanced behaviors suggest that she was able to adjust her writing priorities to accommodate the writing task. Shao's writing behavior (W) for drafts one and two were nearly

<table>
<thead>
<tr>
<th></th>
<th>1st Draft</th>
<th>2nd Draft</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>24.20</td>
<td>23.20</td>
<td>47.40</td>
</tr>
<tr>
<td>Po</td>
<td>.30*</td>
<td>1.25*</td>
<td>1.55*</td>
</tr>
<tr>
<td>PC</td>
<td>27.39</td>
<td>2.45</td>
<td>30.20</td>
</tr>
<tr>
<td>Rd</td>
<td>-</td>
<td>14.15</td>
<td>14.15</td>
</tr>
<tr>
<td>Ro</td>
<td>11.30</td>
<td>0</td>
<td>11.30</td>
</tr>
<tr>
<td>Ra</td>
<td>3.20</td>
<td>.35</td>
<td>3.55</td>
</tr>
<tr>
<td>Rw</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E</td>
<td>1.35*</td>
<td>.40*</td>
<td>2.15*</td>
</tr>
<tr>
<td>Totals</td>
<td>68.50</td>
<td>43.00</td>
<td>111.50</td>
</tr>
</tbody>
</table>

* not used in the analysis
identical—24.20 and 23.20 respectively. Shao’s writing behavior totals (W) are only slightly greater than her pausing/reading totals (47.40 vs 44.35). This indicates that she spent about equal time writing as she did planning and reviewing her ideas.

Short-term reading (Ra) was used considerably more on the first draft than on the second draft, 3.20 vs .35 which might suggest that she needed to employ the subprocess of crystallizing rather than evaluating during draft one. She had a rather high incidence of the reading other materials behavior (Ro), but this simply means that she did some of her contemplating with her eyes on the notes. Shao did not bother to reread either her first or second draft (Rw), this in spite of the fact that she finished her second draft with over eight minutes remaining of her two-hour total. So it is perhaps the case that she used reading as a review strategy for sentence level concerns but not for larger chunks of discourse i.e. paragraphs, essay—relating on reading to aid her crystallizing process.

Of additional interest is the total amount of time spent on each draft. Draft one took 68.50 minutes but draft two only 43 minutes, apparently because Shao needed more time to formulate her ideas than she did to review them. This is further substantiated by the 39.09 minutes (Pc and Ro) devoted to first draft contemplating as opposed to 17
minutes (PC and Rd) for the second draft. Shao spent more
time producing text than reviewing it and was apparently
satisfied with the content of her final draft since she
finished her work with additional time remaining.

Section B of Table 4 provides further indications of
Shao's somewhat advanced but not yet extensively developed
ability to improve her text. Shao had a wide range of
revision types, evidence that she was able to make qualita-
tive improvements as well as mechanical ones. Over 30% of
Shao's revisions dealt with meaning changes including one

Table 4b
Shao's Total Revisions
92 (81/1000)

<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th>Text-based</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63 (68%)</td>
<td>29 (32%)</td>
</tr>
<tr>
<td>Formal</td>
<td>12 (12%)</td>
<td>12 (56%)</td>
</tr>
<tr>
<td>Mng-Pre</td>
<td>51 (56%)</td>
<td>28 (31%)</td>
</tr>
<tr>
<td>Micro</td>
<td>28 (31%)</td>
<td>28 (31%)</td>
</tr>
<tr>
<td>Macro</td>
<td>1 (1%)</td>
<td>1 (1%)</td>
</tr>
</tbody>
</table>

Stage

A 21% 5 12 1 0 L/P*
21% 0 2 0 0 C/S*

B 71% 5 26 20 1 L/P
71% 0 5 8 0 C/S

C 8% 2 5 0 0 L/P
8% 0 1 0 0 C/S

* L/P= Lexical/ Phrasal
* C/S= Clausal/ Sentential

at the macro level, but many of these changes were limited
in syntactic environments. That is, of Shao's ninety-two
changes, only sixteen were at the clause or sentence level.
This along with her selective use of reading suggests further that she focussed on local concerns instead of global ones. Nevertheless, these concerns were both surface and text-based and certainly place Shao at a higher proficiency level than the first two writers.

Grammar does not appear to have been an inhibiting factor for Shao. She made only twelve formal revisions. The fact that her remedial writing classes deemphasized syntax in favor of idea generation and development may have contributed to her tolerance for syntactic inadequacies.

All but one of Shao's text-based changes occurred during the same stage—between drafts. She was not able to make these meaning changes during in-draft performance—when the transcribing process was the main focus. Instead, she apparently reserved her meaning changes for a time when other processes were less likely to interfere with her reviewing process. Since only one of these twenty-nine changes occurred when transcribing was the focus, such a disparity clearly shows a selective strategy for making meaning changes. Yet, she has also demonstrated that she was aware that such changes could qualitatively improve her first draft.

In addition to twenty-nine text-based changes (32%), Shao also had fifty-one (56%) semantic changes that involved meaning-preserving clarification or refinement. Again most
of these were at the lexical or phrasal level (43 of 51) with half of these occurring at Stage B.

Thus, it seems to be the case that Shao had developed strategies involving the use of reading to aid the improvements of her text. These improvements consisted of a wide range of revision types, including those that improved the quality of her essay. This wide range of changes allowed her to refine, elaborate, and change her meanings. However, the review process was not utilized equally during each stage of the writing process. Shao restricted almost all meaning changes and over half of her meaning-preserving changes to Stage B: a point when she could give revision her greatest attention. At other times, though, when other processes—planning, generating, goal setting, and transcribing—were of greater importance, she restricted her revisions to surface concerns.

In summary, Shao demonstrated revision strategies that were sophisticated but not yet extensive. She had a substantial number of revisions of all types that qualitatively improved her essay. In addition, composing processes which were inferred from her writing behaviors appeared to be well-balanced, reflecting a writer capable of adapting her processes to overcome the constraints of the writing task. Shao's revision strategies were lacking only in that she did not make many syntactically complex changes. It is possible that she either had not reached this level of revising
sophistication or had simply decided she did not need such complex improvements given the time limitation.

Case Study § 4

The participant of the fourth case study, Meili, was an experienced and competent writer. She had a fairly extensive ES/FL background including ten years as an English teacher, and two years as a graduate student in the University of Hawaii TESL program. In China, she had occasionally received instruction from native English instructors. In short, her English background, consisting of extensive reading and writing, characterized that of a skilled writer, one who would be expected to display revision strategies that were sophisticated and wide-ranging.

The essay Meili wrote was qualitatively superior to that of any of the three previous participants. Her 1283 word essay addressed the issues in a knowledgeable and substantive manner. The ideas were clearly stated, well developed and succinct. Meili's choice of vocabulary probably reflected her extensive English teaching background and certainly contributed to the academic nature of the essay. Her constructions were complex with just a few very minor inconsistencies of syntax. Meili's essay was well-written, representative of an advanced and experienced writer and one that provided further insight into the role
Meili behaviors during the writing of her essay illustrate her control over the writing situation (see Table 5A). Her writing behaviors (W) for drafts one and two were practically identical (30.45 vs 29.00). In addition she spent roughly the same amount of time pausing on both of her drafts (29.20 vs 22.10). These fairly balanced behaviors probably resulted from Meili's realization that given the imposition of a time limitation, she needed to strike a balance between her planning/transcribing and her reviewing processes, a balance that would allow for idea production as well as idea reformulation. Thus, she accorded sufficient time to both with enough time devoted to the review process to allow it to be a major contributor to the final product.

For Meile, reading was used more so with first draft production than for second draft reviewing. She gave a
total of 1.25 minutes to in-draft reading, (Ra). These were short segments with most of them occurring during Stage A (1.05). Meile also devoted 8.05 minutes to first draft pausing/reading (Ro). These were times when she was contemplating her choices. Even though reading was used for reviewing, she did not reread large passages or the entire draft. Since she barely finished her essay in time, it is possible that the time limitation prevented such large-scale rereading.

In the findings of one of the inexperienced writers, Winako, it was noted that she devoted a great deal of time to reviewing. Yet her revisions were not wide-ranging nor were they influential in improving her original ideas. In the case of Meili, however, not only did she commit close to half of her pausing time to reviewing, but she also utilized the review process to make substantial improvements. In particular, she made quantitatively more and qualitatively better changes than any of the other writers. A look at Table 5B shows that Meile, like Winako, was a massive reviser, making a total of 141 changes (109 per 1000 words). Of this total, a whopping 39% of them were meaning changes compared with 56% meaning-preserving changes. So Meili concentrated her improvements both on attaining correct transcriptions of her original ideas as well as manipulating these ideas to make them correspond to modifications that
changed the meanings of her original ideas. Furthermore, she did not have many formal changes (8). The bulk of her revisions dealt with semantic concerns as she was clearly focussing on getting her meanings down right.

Table 5B
Meili's Total Revisions
141 (109/1000)

<table>
<thead>
<tr>
<th>Surface</th>
<th>86 (61%)</th>
<th>Text-based</th>
<th>55 (39%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>8 (5%)</td>
<td>Mng-Pre</td>
<td>78 (56%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Micro</td>
<td>47 (43%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macro</td>
<td>8 (5%)</td>
</tr>
</tbody>
</table>

Stage

<table>
<thead>
<tr>
<th></th>
<th>23%</th>
<th>61%</th>
<th>16%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

* L/P= Lexical/Phrasal
* C/S= Clausal/Sentential

Of these semantic revisions, 56% were meaning-preserving with over half of these occurring during Stage B. Of additional note is the fact that at Stage B, Meili revised about equally at the lexical/phrasal level as she did at the clausal/sentential level. Yet, during Stages A and C she had no revisions of this syntactic complexity. This was also the case with Meile's text-based changes where she again reserved clausal/sentential revisions for the between draft changes. It may be that since clause and
sentence structures are syntactically and semantically complex and since performance changes must pre-empt other activities, i.e. the transcribing process, Meile apparently used a strategy where she reserved more complex changes to a stage in the writing process when she could give them her greatest attention.

Meili's advanced revision strategies are especially evident in her fifty-five text-based revisions. She used Stage B to review and make substantial meaning changes at the micro and macro level with her eight macro level changes greatly affecting her final product. In fact, seven of these eight changes were complex structural changes, which is clearly evidence of major restructuring. In addition to meaning changes made at Stage B, Meili also had twelve **lexical/phrasal** changes during Stages A and C. This suggests that her review process included not only attaining accurate approximations of her original intentions, but also changing these intentions as she discovered alternative ideas. This corresponds with the belief that good writers discover new meanings as a result of reviewing intended meanings. Meili, to her credit, was capable of incorporating these improvements into the context of previously written text.

In many ways, Meili displayed revision strategies that were sophisticated and extensive. She devoted her changes
to semantic considerations covering all facets of the writing task. The largest proportion of changes were meaning-preserving as she tried to approximate her original ideas. Yet, she also made both micro and macro changes that showed her ability to make changes beyond the scope of her first intentions. She made changes at all three stages, but seems to have restricted her complex changes to Stage B where she could focus exclusively on such changes. Finally, her reading and pausing behaviors correspond to her concern for making qualitative changes in that these behaviors reflected the utility of using the review process to greatly improve the content.

For Meili, revision was a crucial part of her writing process. She displayed revision strategies that were very sophisticated. Revisions occurred throughout the writing process and dealt with numerous concerns at different levels. Clearly, Meili was capable of employing the review process without letting it interfere with other processes.

Case Study #5

The fifth and final writer was a Linguistics professor with over twenty years of university-level teaching experience. Andrea, who immigrated from Hungary at twenty-five, has succeeded in achieving a high degree of English writing proficiency. In fact, her essay was virtually native-like. In Hungary, Andrea studied English as a child.
primarily reading English books. She has continued to read a lot and credits this for helping her improve her English. The one thing she remembers most about her writing instruction is being told always to reread what she writes. She also said that previous Latin/Greek instruction has helped her tremendously with vocabulary especially that within her academic field. Testament of Andrea's professional writing ability is the fact that she has published books and numerous articles in linguistics journals.

Andrea wrote substantially more than any other writer, over 1800 words in her final draft alone. Before beginning to write her essay, she spent time outlining her main points. Her essay followed this prewriting outline fairly closely. Her ideas were clearly expressed and organized in a logical manner. The vocabulary represented a wide repertoire of general and academic terms. There were no usage errors and Andrea effectively used a number of writing conventions including quotation marks, underlining and dashes.

Like Meili, Andrea's Writing Behaviors Protocol portrays a writer capable of managing the writing task. A look at Table 6A reveals that she had a total of 69.50 actual writing minutes (W) about equally divided between drafts one and two. Yet, her pausing behaviors for both drafts totalled only 16.15 minutes. Of this total, 13.45
occurred during the first draft—such a limited amount of pausing suggests that Andrea did not need to spend a great deal of time planning nor did she do much in-process reviewing. Since she had previously spent time outlining her essay, she had already schematized her content so that before even beginning the essay, she had apparently done a major part of her idea generating. She later confirmed that she preferred to know where her writing would lead prior to beginning to write.

Further evidence of Andrea's preconceived planning can be seen in her very limited pausing/reading (Pc & Rd) behaviors during the second draft. She spent only 2.30 minutes on these behaviors. Clearly, she had internalized her content to the point where she hardly needed to look at the first draft to rewrite and improve on the second draft. Furthermore, such a limited amount of time devoted to

<table>
<thead>
<tr>
<th></th>
<th>1st Draft</th>
<th>2nd Draft</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>34.25</td>
<td>35.25</td>
<td>69.50</td>
</tr>
<tr>
<td>Po</td>
<td>0.35*</td>
<td>1.25*</td>
<td>2.00*</td>
</tr>
<tr>
<td>Pc</td>
<td>10.30</td>
<td>1.30</td>
<td>12.00</td>
</tr>
<tr>
<td>Rd</td>
<td>13.45</td>
<td>1.00 2.30</td>
<td>16.15</td>
</tr>
<tr>
<td>Ro</td>
<td>3.15</td>
<td>-</td>
<td>3.15</td>
</tr>
<tr>
<td>Ra</td>
<td>2.20</td>
<td>0.15</td>
<td>2.35</td>
</tr>
<tr>
<td>Rw</td>
<td>5.30</td>
<td>8.15</td>
<td>13.45</td>
</tr>
<tr>
<td>E</td>
<td>1.40*</td>
<td>1.15*</td>
<td>2.55*</td>
</tr>
</tbody>
</table>

* not used in the analysis
reviewing suggests that she was able to formulate and construct her original intentions correctly during the transcription process. She did not need to use much pausing or reviewing time to check her ideas. And since she wrote a total of 1800 words and completed the writing task with thirteen minutes remaining, this is certainly evidence that she easily and successfully adapted her composing processes to conform with the requirements of the writing task.

Another indication of Andrea's advanced writing proficiency is in her reading behaviors. She gave a total of 2.35 minutes to short segment reading, which is not much different from any of the other writers. However, Andrea used another reading behavior in a manner that allowed her to focus on large segments as well. She was the only participant in the study to spend time, indeed a lot of time (13.45), rereading large passages of the essay (Rw). She reread large chunks of her first draft for 5.30 minutes and her second draft for 8.15 minutes. It is conceivable that she used this reading behavior to check her content appropriateness at word, sentence, paragraph, and essay levels as well as her transitions within and between these levels. Finally, this reading behavior seems to have been used to polish her essay, allowing her to double check her linguistic representations for accuracy.

Section B of Table 6 shows that Andrea had a total of eighty-eight revisions (48/1000). When one considers the
length of her essay and the total number of revisions, it is obvious that Andrea needed to revise less often than any of the other writers. Indeed, she revised substantially less than the other competent writer (48 words per 1000 as compared to 141 words per 1000).

Most of her revisions were semantic-related (70 of 88) and the majority sought to clarify rather than change the meanings (54). Yet, only nine of her meaning-preserving changes dealt with clause or sentence environments. So it is apparent that Andrea concerned herself mostly with using revisions to correct through clarification or refinement but at a lexical or phrasal level. Although nineteen per cent

Table 6B
Andrea's Total Revisions
88 (48/1000)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Surface</th>
<th>Text-based</th>
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<tr>
<td></td>
<td>70 (19%)</td>
<td>18 (21%)</td>
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<tr>
<td></td>
<td>16 (19%)</td>
<td>54 (60%)</td>
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</table>

* L/P= Lexical/Phrasal
* C/S= Clausal/Sentential
of Andrea's revisions were formal changes, these were seldom related to grammar. Rather, they dealt with the use of writing conventions, primarily punctuation changes such as quotation marks, dashes, underlining, etc.

She had eighteen revisions (21%) that changed her meanings with eleven of these occurring at Stage B, most of which were either lexical or phrasal. Yet, she had no macro-level changes at all. This is perhaps because she did not feel the need to go beyond her outline ideas. Like the other writers, Andrea made a large share of her semantic changes at Stage B. This again does not seem surprising in that this is the point where the review process takes precedence.

Thus, Andrea's revision strategies were more holistic than those of any of the other writers. The organization of her reading activities from the essay level down to the word level was an especially effective way to review and improve her essay. She apparently did not need to make many qualitative changes as her planning and transcribing processes had successfully transformed her ideational intentions into accurate representations. In fact, the writing assignment probably did not greatly challenge her writing capabilities. She was able to accomplish the writing task in an efficient and proficient manner.
CHAPTER V

CONCLUSIONS

The findings from the previous chapter suggest at least three general conclusions characterizing the revision strategies of my five writers.

1) Skilled writers were able to evaluate the writing task arranging their priorities to give revision a complementary and productive role in the writing process. Unskilled writers were less capable of striking a balance between the review process and planning/transcribing processes, and this resulted in an inefficient use of revising.

2) Unskilled writers were preoccupied with low-level, local concerns which did not significantly improve the quality of their text. More skilled writers incorporated a wider range of revision types into their essays affecting both surface content as well as the inherent deep structure meanings of the text.

3) Reading was used as a revision strategy by all of the writers, with rather diverse and strategic differences between one of the unskilled writers and one of the skilled.
Discussion

**A major objective of this study is to compare the revision strategies of my participants with those from related findings of previous L1 research. In this way, parallels between the process of writing in first and second languages can be drawn, perhaps even showing the degree of uniformity of writing development across languages. One recurring parallel between L1 and L2 writers might be the typical or similar ways in which writing abilities of both L1 and L2 characteristically progress through developmental stages. A major issue in writing research is whether or not learning to write in a second language entails a maturing process that is similar to that of acquiring comparable proficiency in a first language or whether writing skills already developed in the first language can simply be transferred from one language to another.**

**My findings provide evidence that the revising capabilities of ES/FL writers correspond roughly to developmental stages. Proficiency in revising appears to reflect a writer's progress in the second language. Furthermore, findings corresponding to developmental stages compare favorably with similar findings from L1 work.**

The five participants in my study used revision strategies that seemed to correspond with the rated quality of their essays and reflected their ability to use revision to
improve their work. The different degrees of importance each writer attached to the role of revising, and the effect revisions had on improving their work were particularly characteristic of different capabilities. There were some general similarities, which characterized all of the writers and which were most likely affected by processing limitations. When it was necessary to focus on the processes of planning and transcribing, for example, all of the writers tended to demote the review process to a secondary role. This was particularly the case at Stage A when idea generation is most prevalent. This is perhaps because it is at Stage A that writing priorities typically require more initial idea generation than idea evaluation or review. All of my writers had substantially fewer revisions during Stage A than Stage B with most of these changes restricted in syntactic complexity. Conversely, during Stage B when revising assumes a greater role, all five participants responded with the greatest number of revisions, including those changes with complex syntactic constructions. Such a similarity among the participants does not seem surprising in that it is at Stage B that writing priorities generally shift from producing to improving the text.

There is, however, a major difference between my L2 writers and Bridwell's L1 writers. In her study, the greatest number of changes at all levels occurred during the two in-process stages with the greatest number at Stage C.
These are the stages when a writer must devote processing time to the transcribing process. In addition, Stage A also requires additional planning time. My writers differed in that they had the greatest number of changes at Stage B—between drafts. And, with the exception of Winako, they all revised the least at Stage C. This finding seems to suggest that when other processes are making major contributions to text production, the review process is relegated to a lower priority. A possible explanation for this may be related to interlanguage constraints. That is, depending on the degree to which a writer needs to translate from L1 to L2, it may be necessary to spend additional processing time on the transcribing process in order to realize the correct L2 language representations. To keep from being overwhelmed during Stages A and C, my L2 writers may have stressed the transcribing process at the expense of the reviewing process.

It is also possible that situational variables affected the revision findings of both Bridwell's and my study. It is likely that since the studies did not have similar time limitations, revising performance differed resulting in less than accurate comparisons. The findings of another L1 study, more similar in design to mine, seem to corroborate my results. In this study by Faigley and Witte (1981), it was found that writers, regardless of their writing profi-
ciency, revised most often between drafts—just like my writers. So, at least in the case of Faigley and Witte's study, it is apparent that writers may indeed need to restrict the role of revising when the planning and transcribing processes are the focus. My product analysis and a number of other study aspects were similar to theirs, e.g. writers at different developmental levels, and as such, any comparisons between their study and mine would probably have greater validity than is the case with Bridwell's.

A second finding showed the extent to which my participants revised during the actual writing of the drafts. There are clearly differences between developmental levels as well as within each level. Findings indicate that it was the more skilled writers who were able to make changes without greatly affecting their processing priorities. The unskilled writers either ignored this option (Jeong Ki) or overemphasized it (Winako). In this respect, the unskilled writers were unable to strike a balance between their planning/transcribing and reviewing processes.

Both unskilled writers limited their revision search primarily to those changes that improved but preserved the original meanings. They seemed unable to focus their attention on developing the content further, attending instead to either syntactic inadequacies or semantic clarifications. There were, however, differences between these two writers. Although both writers limited their revisions to surface
concerns, Jeong Ki was not nearly as overwhelmed by the need to make revisions as Winako was. Indeed, Winako overemphasized the role of revision to a point where it broke down the natural flow of her writing. She was constantly going back to scrutinize her text and this certainly affected her planning and transcribing. For Winako, writing meant perfection, so she made revising a high priority in her writing process. But since her revisions were somewhat limited in scope, the amount of time devoted to revising did not result in substantial improvement in the final draft. In fact, her overemphasis on revising probably detracted from rather than aided her efforts to improve her work.

The revision strategies of Winako, in particular, seem to resemble the unsuccessful revising efforts of Perl's unskilled writers (1979). In her study of L1 student writers, she observed how a preponderance of revision searches, primarily mechanical concerns, "broke down the rhythms generated by thinking and writing." In this regard, Winako was also extremely preoccupied with detecting inadequacies and this overriding concern most likely affected her planning process. Since she found it necessary to review her work for accuracy, this activity prevented her from developing her original intentions further. Perl also concluded that for her unskilled writers, editing (her term for revising) meant "error-hunting." Similarly, both of my
unskilled writers devoted 25% or more of their revisions to formal concerns. This focus on grammar was less prevalent with my better writers, which seems to suggest that the degree of emphasis placed on finding grammatical inadequacies corresponds with proficiency levels. My semi-skilled writer had 12% of her changes related to grammar, and one of the skilled writers, Maili, had only 5%. And, even though Andrea had 19% formal revisions, almost all of them were stylistic changes, e.g. adding or deleting commas, quotation marks, dashes, etc. As this suggests, the poorer writers needed to stress grammatical concerns to a much greater extent than the better writers did.

Faigley and Witte also report that in their study the degree of attention devoted to grammar related directly to writing level proficiency. This is, of course, not surprising as it is obviously a reflection of the degree of syntactic sophistication. This finding does, though, correspond with my finding, in that my less skilled writers placed a rather high level of emphasis on attaining grammatical perfection. And since the less skilled writers had few meaning changes, it is conceivable that such undue emphasis on grammar detracts from a writer's ability to improve other shortcomings in the text.

Indeed, the fact that the revisions of better writers included all types of changes while the least skilled writers did not appear to be able to focus as intensively on
all of these concerns, may suggest that concentrating on grammar curtails the ability of unskilled writers to revise their meanings qualitatively. On the other hand, it might also result from an unawareness that there is a whole range of revision types. Additional research is, of course, necessary to provide insight into these possibilities. It would, for example, be extremely interesting to determine whether unskilled writers differ in their L1 and L2 revision strategies. On-going research by Gaskill (forthcoming) is designed to address this particular area.

Sommers (1978) has noted that her L1 student writers tended to be vocabulary conscious, often attaching undue importance to the selection and rejection of words. She found her writers incapable of identifying and correcting problems at a textual level because they employed a strategy of lexical substitution instead of semantic elaboration. All of my writers also had a high degree of lexical meaning-preserving changes devoting at least 50%–60% of their total changes to this revision type. The main difference, of course, between the good and poor writers in my study is that the good writers were able to extend their scope of revision types to include meaning changes. As a result, their changes influenced the quality of their essays more than the changes of the poor writers did.

Lexical selection may actually be of greater concern.
for L2 writers, again because this is their second language and they have not yet achieved native-like fluency. Reviewing text in order to evaluate language choices may require additional processing time as ES/FL writers may not yet be familiar with a wide range of semantic meanings. They may need to spend additional time actually searching for the appropriate choices or for that matter, translating from L1 to L2. Future research could examine the extent to which L2 writers need to use the translating process when writing in a second language.

Faigley and Witte's study also provides some rather interesting comparisons of developmental differences because their study looked at the revisions of three different groups of writers: inexperienced, advanced, and expert. Not unexpectedly, they observed that revising efficiency clearly corresponded with the writing level of their writers. In particular, their unskilled writers, like mine, revised largely at a surface level. And the better writers in both of our studies made changes reflecting a better balance between revision types. Indeed, the revisions of our skilled writers contrasted sharply with those of the unskilled in that they were much more sophisticated and extensive. Both Meili and Andrea were able to make qualitative changes throughout the progression of their work. The review process seemed to be more interrelated as well as interdependent with other composing processes. In this way,
revising aided the content of the essays, as the review process interacted with the transcribing and planning processes to improve the surface and deep structure shortcomings of their essays.

My semi-skilled writer showed revision strategies that were characteristic of both skilled and unskilled writers. On the one hand, she was much more aware of the utility of revising ideas qualitatively and also to revise in this manner at all stages of the process than was the case with the less skilled writers. On the other hand, her improvements were mostly lexical or phrasal. Thus, she was aware of the importance of improving her work beyond her original transcriptions both surface and meaning types, but she had not yet reached a level of revising sophistication that included revising complex syntactic constructions.

Furthermore, there are similarities between the expert writers of Faigley and Withe's study and the most skilled of my writers, Andrea. They found their expert writers revising less than advanced writers but doing so in some rather diverse and idiosyncratic ways. Andrea revised considerably less than any of the other participants in my study, with the vast majority of her changes consisting of lexical units. She had fewer text-based changes and more surface-preserving changes than either of the other two more skilled writers. This is perhaps because her excellent
writing ability coupled with a writing assignment, which she was able to conceptualize through the use of an outline, contributed to her ability to plan and transcribe her ideas successfully the first time so that she did not have to go back to make substantial improvements. Thus, there was little need for her to develop her content any further. Since she had already brought her text intentions close to an accurate approximation of her ideas, there was little need to spend a great deal of time improving them. It is hardly surprising then that Andrea's revisions were to a large extent surface changes. In fact, most of her formal changes dealt with punctuation. Furthermore, Andrea's strategy of reading her entire essay allowed her to proofread her work, and this most likely contributed to her concern for such typical editing concerns. If, as Perl (1979) contends, writing skill corresponds with one's ability to adapt to the Task Environment, Andrea certainly was able to do this successfully and with minimal effort.

Thus far, my discussion of the comparisons between L1 and L2 revising development has strongly emphasized the similarities between them. My findings, however, are more suggestive than definitive since the study is descriptive in nature. I have suggested that there are rather general similarities between the development of revising capabilities of the writers in my study and that from related L1 studies. However, my study does not examine the development
of L2 writers over time. A longitudinal study could result in significant and pertinent implications relating specifically to L2 writing development. In particular, L1 writing development appears to depend to a great extent on cognitive development, yet L2 writers often begin learning to write in a second language after this development has started. If, as I am suggesting, L2 writers go through developmental stages, a major question remains to be answered as to how much faster and more efficiently they are able to progress through this developmental sequence than are L1 writers.

The role of reading in the revision strategies of my subjects also appeared to be related to L2 writing development, varying from writer to writer and, like other aspects of revision, generally indicated the writer's level of writing proficiency. Jeong Ki and Andrea certainly were the most different in this regard. Jeong Ki did not use reading at all to evaluate or crystallize ideas during her writing session. Her only reading behavior was reserved for first draft transfer to a second draft (Rd). In other words, it was primarily away to help her recopy her initial work onto the second draft.

Unlike Jeong Ki, Andrea used this same reading behavior very little as she was apparently quite familiar with her content and did not need to spend so much time simply reading to recall what had been written the first time.
Andrea employed another reading behavior (Rw) to check large chunks of her draft. In fact, she devoted over thirteen minutes to rereading her drafts. Because of this, she was able to use reading as a strategy to review and evaluate her work from a holistic perspective—one that used a macro-level overview to check both her short segment as well as large chunk contexts.

The other unskilled writer, Winako, devoted so much time to pausing and contemplating her words that she did not have a great deal of time remaining for other activities. She read primarily short segments of text and did not bother or was unable to focus on paragraph or essay contexts. She seems to have had a tunnel vision approach to reviewing as she became bogged down in her micro level contexts.

Shao and Meili had somewhat similar reading behaviors. Since most of their short segment reading was during the first draft, they probably used reading to aid in the crystallization of first draft ideas. Shao spent more time on this reading behavior than Meili perhaps because she was a less than proficient writer and needed to review her work more often because of processing limitations which Meili was able to overcome.

These comparisons of reading behaviors may be indications of the effectiveness of previous instruction. Both Jeong Ki and Winako had had extensive instruction in grammar and usage, yet neither had ever been told to reread what
they had written. This might partially explain why they both limited the extent of their revision searches—they simply did not consider using reading for other than low-level concerns.

On the other hand, Andrea, who had had little grammar instruction, used an effective reading strategy to aid her revising. She specifically remembers being told always to "reread what you've written." In addition, much of her early instruction had consisted of reading books, which most likely resulted in the realization that reading can be an effective scrutinizing tool.

The role that reading takes in the review process of ES/FL writers may also depend on how it is used when writing in the first language. That is, reading may be an activity which can be transferred from L1 to L2. A study using my adapted Writing Behavior Protocol would be capable of investigating this issue and might, in fact, result in some interesting implications for writing pedagogy. Such a study could be designed to discover the extent to which reading is used in L1 and whether similar reading behaviors transfer to L2 writing. Relevant findings could have an effect on the teaching of reading as a revising strategy.

There are always at least a few limitations to the conclusions one reaches in laboratory studies. My study certainly is no exception. In fact, there may actually be
a great deal more to consider than is usually the case because of the wide ranging scope of investigation of this study. In that I was attempting to learn more about the revision strategies of L2 writers at quite different developmental levels, one must realize that writing proficiency is greatly affected by the writing assignment. The ability of Shao and Meili to perform well may be closely associated to the suitability of the task to their proficiency levels. On the other hand, the writing assignment most likely required writing capabilities that Jeong Ki and Winako did not possess. And for Andrea, the assignment was a relatively easy exercise in written expression as she completed the task quite handily.

Another major limitation is, of course, time restrictions imposed on the writers. Revising, in particular, is highly dependent on the amount of time one can devote to this activity. For example, if writing time is excessively limited, a writer may have to forego or restrict revising in favor of initial idea production.

With only a two-hour writing period, my writers had to devise ways to effectively incorporate improvements without detracting from the time needed for other composing processes. Shao to a lesser extent and Meili more so were able to accomplish this objective in a manner that was representative of writers aware of this need and capable of arranging their priorities to deal with it. Andrea had no
trouble whatsoever, but neither Jeong Ki nor Winako were able to arrange their processing priorities to allow revising to play a major role in their final product. And although they both failed to do this, they did so in rather different ways. Jeong Ki simply deemphasized revising to a point where it was seldom employed. Winako overemphasized it to where it broke down her planning and transcribing processes. Whether or not additional time would have made a difference is a question that future research could address. Studies could be designed to investigate how time elapsed between drafts influences revisions.

Finally, since this was primarily a descriptive study, the scope of investigation was rather broad. This breadth did not allow for a detailed examination of each and every aspect of the analyses. My findings are considered to be baseline data for future studies that can focus on more specific aspects of the writing process. Furthermore, since there were only five participants, it is inadvisable to generalize beyond the scope of the study. Again, this is unfortunate, but L2 research of the writing process is a relatively new phenomenon, and exploratory studies such as mine are obviously necessary to reveal more about the activities ES/FL writers engage in when writing. The use of video equipment for this kind of study proved to be effective, and others may also find it useful. There is still a
great deal to learn, however. Consequently, it is perhaps time to broaden the scope of inquiry to include not only such holistic and descriptive accounts of the writing process as mine but also investigations of actual classroom and personal writing situations.
APPENDIX A

Jeong Ki's Final Draft

I was born in Korea and grew and educated in Korean culture. I have never gone to another country and have never made friends of another country. Therefore, the fact that I will study in Hawaii was a big event to me. When I left Korea I had many worries about living in Hawaii. Because I am poor at English and don't get used to American culture. Otherwise, I had a wish that I will accomplish my study.

When I arrived at Honolulu, Frankly, I feel discouraged because Honolulu is not big than I thought and almost is consisted of Orientals. I couldn't see caucasians at first time. And I thought that I can't learn English and American culture from Orientals.

But after a few days, I felt that the Orientals are just American and although I am Orientals too. They and I are similar to feature. I differ from them and I feel more strange and lonely because of the fact.

There are many differences between American culture and Korean culture. I am confused yet because of differences. Above all, difference is in food habit. American drink a lot than Korean. They drink three cups of beverage at a meal time and drink one can of cola, 7 up, Sunkist... at a time. I have never drunken one can of cola at a time in
Korea.

Besides, when walk or come down or up stair, American walk in right side but Korean walk in left side and when bathroom is empty, open the door in America but close the door in Korea.

When I felt there are many difference culture between two, I thought that American culture is superior to Korean culture. This thought is not that Korean culture is bad. Only, there is order in American culture than in Korean culture.

But I feel that language is the most difference between America and Korea. I can't speak, listen, and write English well. And I had never had oppotunity with conversation, writing and listening in English. Because of above reason, I am afraid of attending the class. I can't listen lecture and can't understand completely. And I feel anxious during class. Since I have arrived at Hawaii, I don't feel comforatable at all because I have to speak English where I go. I think that I don't have euphoria stage since I have been in Hawaii and I guess, I have had depression stage since August.

When I fail to speak English I feel returning my country. But when I feel returning my country I think my mother who wishes I will accomplish my study and prays always for me. And I think my teacher and my friend in Korea. And now, all they wish I will accomplish my study.
I feel hard right now because I can't write about my thought about my problem. But I endeavour and will endeavour to do my best. And I hope I will accomplish my study well and when I accomplish my study, I return my country and meet my family, teacher, and friend with pleasure.
Winako's Final Draft

When I first came to Hawaii, I was scared because the Island looked so big to me. Seeing the new Island made me felt happy. I knew I was going to see many things that I hadn't seen before. like meeting new people, see the houses and other things. But I was not sure if these would cause any problem to me. Maybe It was because ther was somebody from my country took me from the airport to a Hotel where I stayed at for about a week. But then I had to move to another place to stay. I called some dorms but they were full. I felt so depressed that I wanted to fo back home. But days after my friends came and took me with them so I stayed with them till school started.

Housing can be a problem too, to other foreign students. Some may have hard time looking for a place to stay or some may want to live close to their schools but don't know where.

Communicating, is a problem too for a student like me who come from other country rather than the United States. For example, when someone ask me something in English and I don't understand it, I try to translate that question to my own language so that I could understand it.

Now, that I've been in Hawaii for about a month and half I begin to learn many new things. I learn how to cope with other people, how to be prompt, Bow to be on my own and to get use to the things that are surrounding me.
Foreign Students may find it difficult to live in a place different from where they came from because they have problems looking for what they want or whatever. But I think it's a good experience because you'll know how to face these problems. And to adapt these things.
As a foreign student, I totally understand that foreign students will face a lot of problems adapting to the new environment. Now I am going to write about my experiences here and offer suggestions on how to deal with the cultural and language problems.

When I just arrived at Hawaii, I had a lot of excitement. It is because everything is new to me. I say to myself, "Wow! The scenery is very beautiful here! The sky is very clear! The air is fresh! People are nice and friendly too!" However, this kind of excitement did not last long.

After staying in Hawaii for some time, my 'euphoria' was replaced by 'depression', because of the language and cultural problems. When I found that I could not communicate with the others with my second language—'English', I felt depressed. I could not have close friends at that time because I could not express my feelings to them, could not tell them what I needed, could not share something which I would like to share with them. Furthermore, the culture here is much much different from my own country. People here liked hamburgar while I liked Chinese dishes; they liked to share the bill after the dinner while I liked one to pay for the whole; they did not have any Chinese New Year's Festival while I really like to have. Many language and cultural problems made me ask myself, "Why should I come here?!"
Nevertheless, I recovered something new after staying here for longer period of time. The situation did not seem as worse as I think. As times went by, my English improved quite a lot. I could express myself better than before and talk more freely. Also, I gradually could get used to the cultural differences too. Hamburger did not seem horrible anymore, it tasted quite good! Moreover, as a foreign student, it's good, economical and much fair to share the bill after the dinner instead of just paying by one person. Also, although it does not have any Chinese New Year's Festival here, it has girl's day, boy's day and so on, and we had a lot of fun through these kinds of festival too! Actually, above all are the examples only. What I want to point out is that the longer the time I stayed here, the better I could adapt the new environment, including the language and cultural differences.

Therefore, my suggestion on how to deal with the cultural and languages is 'be patient and take time'! Don't be too depressed by the language and cultural shock, be aware that there should have a lot of differences when you come to a new environment, take consideration and prepare yourself well to adapt the new environment. Furthermore, try to get more chances to talk with the others in order to solve the language problem. I sure that one can use the language to help adapt to the culture.
In conclusion, I want to point out that "adaptation of a new environment" is an very important thing for our foreign students to learn. Don't give up the chance because one will surely grow a lot through the process of accultura-
tion. Open up yourself and say, "I am O.K.! Let's go!!"
Meili's Final Draft

After arriving in the US, a foreign student invariably has to face cultural as well as language problems.

One kind of cultural problem may be described as problems in life routines. Whether the food is acceptable, the clothing agreeable, the climate tolerable, etc., is among the first problems the foreign student encounters. Another kind of problem is very often concerned with the learning environment, the classroom, the library, or the laboratory, where he experiences learning. Problems of this area may be the centre of his concerns, for learning is a most important undertaking for the student. He may find ways of teaching and learning in the US very much different from those in his native country. Whether he likes it or not, he has to adjust himself to the new ways. A third kind of problem arises when the student gets into contact with people of the new culture. Wherever he is, he may detect the differences in the underlying values may upset him or have a negative impact on his feelings towards the new culture. Or, he may find the American values acceptable, or even better and would like to adopt them. Thus, different customs, habits, traditions would mostly likely put him into a position in which he has to make a choice.

A foreign student may find similarities between the American culture and his own culture, but difference seems to be the rule, though the degree of difference varies,
choices that may not be easy to make. Perhaps he has to adapt to the new culture. But how far should he go in this adaptation? It is possible that he remains himself but at the same time adapts to the new culture. But again this is no easy job. Even if the student has a strong integrative motivation in learning, problems arise from other angles. He might become upset when his efforts to integrate fall short of the goal. After all, it usually takes time for the Americans to accept him as one among them.

The language problems a foreign student might have to face are, in a sense related to the cultural problems. For language is inextricably tied to culture. It is true that any foreign student, be he proficient or non-proficient at English, has room for improvement as far as the linguistic forms go. He invariably finds himself in need of improving either phonologically, lexically or syntactically, or in all the three aspects. It is also true, and perhaps more so, that any foreign student needs to improve his communicative competence. When one thinks of the language learning task in terms of discourse patterns, which are to a great extent shaped by culture, the language problems become more complicated. Social and cultural appropriateness in speech is essential in communication, but unfortunately, not all the rules of appropriateness lend themselves to teaching and such rules takes time and experience to acquire. Because of
the various language problems life may turn out to be more problematic than it is imagined to be.

The cultural and language problems exist side by side and are interrelated. The existence of one may complicate the other, or the removal of one may ease the other. To solve these problems, one must first define them, seek the interrelationships between the two types of problems and finally work out way to tackle them. This is of course an extremely important but no easy task, but we feel relieved that psychologists like Blown, Lambert, have started research and come up with fruitful results.
No one arrives at a new place—such as a new country or a different part of one's own country—with the expectation of keeping to himself. There is always some need to interact with others. In a "new place" the problem is to know what "the others" are like. In other words, the question is: what expectations can I bring to interaction with others.

Some things about a new culture or new language are learned through explicit instruction from "natives". Some people are willing and capable of actually teaching a newcomer about language and/or culture. As far as language is concerned, Americans provide relatively little by way of correcting errors. Often, people don't even understand what it is that the foreigner doesn't know—i.e., why he makes an error. More importantly, people are reluctant to correct out of politeness. Actually, this is just as well. Getting corrected on extraneous things such as grammar or pronunciation when trying to convey a message may indeed be disconcerting and frustrating.

Although some of our discovery of the new language and new culture does come from explicit instruction, most of it is done spontaneously. The main point of this paper is to point at some factors what favor spontaneous adaptation or assimilation. Most of what I will have to say is based on personal experience. I came to the U.S. in 1964 at the age
of 25: my home country is Hungary.

The factors I'd like to discuss naturally cluster around 4 basic conditions: one should feel the need to adapt; one should have the \textit{willingness} to adapt; one should have some (implicit) \textit{guidance} in how to adapt; and attempts in this direction should meet with a degree of \textit{success}. I will now detail each of these.

To begin with, it is important that one should actually be aware of the \textit{need} to "break into" the foreign culture. When I came to this country, I came by myself and it was up to me to make a living for myself in the new country. I think this situation was more favorable to \textit{adaptation/assimilation} than if I had come let us say as the wife of a rich American, so that my "place in society" would not have been \textit{crucially} dependent on my degree of adaptation.

Secondly, it is good if one is willing to readily go alone with the necessity to \textit{adapt}, rather than straining against it or resisting it outright. Two factors play a role here: whether the person \textit{wants to be in the new country} as opposed to having been forced to come here by family members or other circumstances, and whether he is \textit{willing to abandon himself to the new influences} rather than rigidly holding on the old ways.

Thirdly, it helps enormously to have a "\textit{role model}"; so to speak—someone who has come where I came from and who has
already accomplished much of the adaptation task. In the course of adapting, there are fears about "over-adapting" one is afraid of ending up like X who is seen as "having sold his soul" completely (i.e., has denied his roots) and, also, of ending up like Y who is regarded as having remained too much of an outsider to the new culture, too much of a foreigner. Thus, someone who is liked and respected by the newcomer and who has achieved a degree of adaptation while avoiding both pitfalls provides an inspiring example to follow.

Fourthly, I think it is vitally important to meet with early success and encouragement. If one has a sense of 'having made it" or of "being on the right tract" early on, this fosters further progress. The most rewarding of the most difficult-to-achieve experience is to be able to make new friends in the new culture while not losing communication with the old one from one's past.

Actually, whether adaptation/assimilation has fully been accomplished or not is a difficult matter to judge. I think much of what we accept from the new culture and language remains relatively superficial. In times of personal crises or in one's advanced years traces of the original culture and language tend to surface. An uncle of mine died a couple of months ago. He was a world-famous otolaryngologist, both a practitioner and a researcher. He wrote more than 200 scientific papers in his lifetime, most of them in
English. He came to the U.S. in the 1940s, had lived here since then and had been a member of a number of distinguished research institutions. But in the last two months before he died at the age of 93, all of his communications to people around him in the hospital were in Hungarian. The English veneer had melted away.

Adaptation and assimilation are elusive concepts: it's difficult to say when they have been fully accomplished, just as it is difficult to say how they are accomplished. This paper pointed at a few factors that appear to me to be conducive to the process.

Footnotes: 1. Throughout this paper, no distinction is maintained between adaptation and assimilation (although the difference there is clear and important in general); nor do I make special claims about cultural versus linguistic adaptation/assimilation. A third distinction which is disregarded here is cultural adaptation/assimilation to a new subculture within a culture, as opposed to a "completely" new culture such as in a new country.
APPENDIX B

Formal Change (Stage A, Lexical)

1. Housing can be a problem too to other foreign student. students.
2.

Meaning-Preserving Change (Stage B, Sentential)

1. I was worried because I didn't know where to go.
2. I begin to worry about finding a place to stay.

Micro Change (Stage C, Lexical)

1. If I had come as the wife of an American... a rich American...
2.

Macro Change (stage B, Lexical)

1. You may say to yourself...
2. I may say to myself...
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