CHAPTER II

THEORETICAL CONSIDERATIONS

I. Composing and Revising

Composing is "the most complex of human mental activities" (Flower and Hayes 1981a), and composition research can be characterised as a quest for an adequate theory on composing. This quest draws substantially on the theoretical and applied work in linguistics, discourse analysis, problem-solving, reading, cognitive psychology, literary criticism and artificial intelligence. Although knowledge on composing is now much more sophisticated than it was in the past, many aspects of composing still remain unsolved, out of which, one is 'revision'.

A. Position of Revision in Traditional Composing

Research on composing and revising are not entirely separate. Until recently, composing was considered in terms of a stage process model that described the writing process as a linear series of stages separated in time and characterised by the gradual development of the written product. In these discreet stages of composing, revising was the last stage. The best in the examples of the stage models are the Pre-Write/Write/Rewrite model of the stage models are the Pre-Write/Write/Rewrite model of the stage of the stage and the the the the stages and the the the stages and the the the the stage models revising is depicted as a final substage of production.

The models of writing as depicted by Rohman (1965), Rohman and Welcke (1964) and Britton et al (1975), focus the development of the written product across well defined stages. The models also consider writing as stages in a linear sequence, making distinctions between these operations and view revision merely as a rewording activity, an isolated process, that is carried out at the end of the writing activity.

Sommers (1978) challenged the linear stage models of composing through her seminal dissertation on revision. Most research on revision focused primarily on retranscriptions. That is, even though revision was seen as a recurrent process, research on revision was largely limited to the final stage in a sequence of stages. However, recent work on composing and revising challenged the traditional linear models primarily for two reasons :

1. linear models did not allow for the various processes of composing to function recursively; and

2. linear models represented composing as linear rather than hierarchical.

B. Recursion and Hierarchy

Recognising the concepts of 'recursion and hierarchy' in composing, the work of Sommers (1979) and Nold (1981) represents a major breakthrough. Both the concepts, represent significant advances over the traditional fixed-stage models of composing. Though Sommers (1979) recognised, that any observable behaviour such as composing must unfold linearly over time, yet, she criticized the stage models of composing because they failed to recognize that writing often comprises subprocesses, that can function both simultaneously and recursively. According to her, stage models described only the written product than the process, because they identified "stages of the product and not the Recognising composing as recursive and process" (1979: 47). hierarchical, Sommers (1979), conceptualised revising as a recursive process largely unfixed in time, which can interrupt other composing processes at any given time, rather than as an activity that writers activate after composing to 'clean up' a rough draft.

Further, on the basis of her studies of experienced and inexperienced writers, Sommers (1980) redefined revising as "a sequence of changes in a composition - changes which are initiated by cues and occur continually throughout the writing of a work" (1980:380). Conceptualising revising as recursive largely unfixed in time, she allows revision to be understood as:

- 1. a process that can interrupt other composing processes at any given time, and
- 2. a process that cannot be dissociated from a more general review process.

The review process, Sommers says, allows the writers to recognize and resolve the dissonance they sense in their writing, dissonance that is caused by detecting "incongruities between intention and execution" (1980: 385). Thus, according to Sommers (1980), to conceptualise revision as a recursive process, is to assert that revising is potentially a more complex process than mere polishing a rough draft.

The importance of conceptualising revision as a recursive process is also stressed by Nold (1979, 1981). She limits revising to "retranscribing of text already produced" (1981:68) and also sees revising as a subprocess

of "reviewing". Reviewing is a process during which writers respond to a complex set of cues, only some of which have to do with 'tidying up' the texts. But it is not a "one-time process" as linear fixed models of composing would indicate. According to her, all composing processes are recursive, and "as the text grows and changes, writers plan, transcribe and review in irregular patterns" (1981: 68). Revising thus, for Nold is motivated or caused by "dissonance". Both Sommers (1980) and Nold (1981), therefore view revising as being motivated or caused by dissonance. Before revising can occur, the writer must first identify a problem in an extant text and only then solve the problem, the solution to which manifests in the altered text. If problems are anticipated and avoided before committing the text to the page, or solved through revising, the result would be little observable retranscription. It is asssumed that, as texts grow longer and more complex, reviewing inorder to retranscribe the text becomes increasingly more demanding and cognitive. The amount of retranscription is dependent on two factors one, the nature and complexity of the writing task (Nold 1981) and two, its relationship to the quality and the kind of planning and the pretextual revision that occurs. Reviewing and retranscribing the text is thus a more demanding and a cognitive task.

The concept of hierarchy is also crucial to the notion of revision. Sommers (1979) asserts that it is possible to view composing as a hierarchical set of sub-processes, which conceives the writer moving in a series of non-linear movements from one sub-process to another while he/she constantly shifts attention among matters of content, style and structure, solving complex, cognitive, lexical, syntactic and rhetorical problems. Sommers' (1979), and Nold's (1981) notion of revising being sub-processes of reviewing - a process capable of interrupting composing at any point, implies that revising can be embedded in other processes and can interrupt and affect those processes. This notion is consistent with the notion of the hierarchical system model (Flower and Hayes 1981a.) than with the linear ones.

It is the "Cognitive Process Theory" of Flower and Hayes (1981a, 1984) and Hayes and Flower, (1980) that allows revision research to move beyond its moorings in 'traditional' conceptualisation of composing. In this theory, both concepts - recursion and hierarchy receive considerable attention. It consolidates the shift from product to process by focusing on acts of the mind that individuals continuously go through when writing, regardless of the stage their text is in. This cognitive process model

attempts to show how writers bring complex and recursive mental activities to interact during composing.

Representing a major departure from the traditional paradigm, in the process model (Flower and Hayes 1981a, 1984), the major units of analysis are the elementary mental processes. These mental processes are heirarchichal in nature, and further, each of these mental acts may occur at any time in the composing process. A number of sub-processes are available to the writer which are recursive and heirarchically organised. Writers do not move through these processes in a simple 1,2,3 sequence but use these processes over and over again. This recursiveness is possible because writing is not a sequence of stages but writing processes are hierarchically organised with component processes embedded within other components.

The cognitive process model (Flower and Hayes 1981a), includes three major components with possible interactions among all these componentsthe writer's **long term memory** includes knowledge of the topic, audience and writing plans; the **task environment** includes components like the "rhetorical problems" consisting of "topic, audience and exigency" and the "text" produced so far; and finally, the writing processes include

planning, translating/ writing and reviewing / revising. Planning and creating a text, according to Flower and Hayes, (1980, 1981a, 1981b, 1984), consists of three processes - goal setting, goal generating, and organising. In the planning stage, writers construct mental representations of 'procedures' and substantive goals for their intended Although writers may frequently evaluate goals and sometimes texts. alter them, some goals are in turn 'translated' into written texts. Through 'evaluation' (which is a sub-process of reviewing), when 'the text produced so far' is found to be incongruous with the writer's mental representation of the goals or the text, "revising" can result.

The model of Flower and Hayes (1981a) depicts all the major components of composing - both the internal processes of the mind and the external and internal cues that may affect the decisions writers make during composing. This view seems to be consistent with the views expressed by Sommers (1980) and Nold (1981) on composing and revising. A process that is hierarchical and which has many embedded sub-processes is powerful because it is flexible. It allows the writer to do a great deal with the help of a few relatively simple processes - the basic ones being planning, translating and reviewing. Reviewing depends on two subprocesses - evaluation and revision. Reviewing itself may be a conscious

process in which writers choose to read what they have written either to further translate or for systematic evaluation or revision of the text. These periods of planned reviewing frequently leads to new cycles of planning and translating. However, the reviewing process can also occur as an unplanned action triggered by an evaluation of either the text or one's own planning. The sub-processes of revising and evaluating along with generating, share the distinction of being able to interrupt any other process and can occur at any time in the act of writing. Thus, according to Flower and Hayes (1981a), 'revision' need not be defined as a unique stage in composing, but as a thinking process that can occur at any time a writer chooses to evaluate or revise his text or plans.

Thus Sommers (1979), Nold (1981) and Flower and Hayes (1981b), view revision as recursive, hierarchical and capable of interrupting any process at any point of time during composing. Retranscribing and pretextual revising both are affected by the writer's ability to manipulate the process through the writer's perception of the 'task environment', 'long term memory' and by interactions among all these components. Accordingly, any theory and study of revising must in some ways accommodate the writing task, composing and its sub-processes, that is, the pre text, the text produced so far and the interactions among them.

II. Models on Revision

The view of writing being a network of goals and revision being recursive and hierarchical leads us to think on revision in three ways - one, if subprocesses could be hierarchically embedded, then revision could occur at any time in the composing process, that is, before or after articulating the thoughts. Two, if revision could be embedded in other sub-processes of writing, such as planning, it could help build a notion that revision means more than making minor editorial changes. Now reviewed with a new perspective; it incorporates both, surface and meaning based changes and macro and micro structural related changes. Three, as researchers explore the process of revision, that is, what actually goes on in a writer's mind as revisions occur, it becomes significantly difficult to define revision or to interpret what the term 'revision' means.

A. Earlier Models

Researchers seem to differ in their opinion whether the term 'revision' should be referred to as the **product**, (the actual changes made), or as the **process** (the thoughts that go through the writer's mind). Sommers' (1980), thought it was both. According to her, revision is bringing writing into line with the writer's intention. Likewise, Beach's (1984)

problem-solving model and Bridwell's (1980) model of revision appear to include both the mental process and the actual changes made. Scardamalia and Bereiter (1983) preferred to separate revision process and product. According to them, revision referred to something that happened to a text. Their model included actually making the change, that is, something that happened to the text - a product. Scardamalia and Bereiter (1986) also coined the term "reprocessing" which referred to the mental aspects of revision. According to them, "reprocessing is a suitable theoretical term" rather than 'revision' because it refers to what goes on mentally in the writer's mind (790). "Reprocessing" say Scardamalia and Bereiter (1986), "spans everything from editing mistakes to reformulating goals. Revision is a special case of reprocessing, applied to actual text" (790). Thus, the term 'revision' reserved for making changes, in the product, was actually embedded in or subsumed under the mental operation, a process. Hayes and Flower (1983), used the term "reviewing" to refer to the "act of evaluating either what has been written or what has been planned" (209). This reviewing in turn could lead to revisions.

Reviewing seemed to refer to the mental process and revision to the product, that is the actual change. Whatever be the variations in labeling,

some consensus on how revisions occur can be drawn from Bridwell's (1979, 1980) view of revision, Beach's (1984) problem solving model of revision, Scardamalia and Berieter's (1983) compare/diagnose/operate model (CDO), part of the composing process and the working model of revision by Flower et al (1986). Each model is related to, or grew out of the problem solving view of writing of Flower and Hayes (1981a), and their discussion on reviewing, evaluating, revising and editing (Bartlett 1982; Hayes and Flower 1980a, 1980b, 1983). The problem-solving view of revision may also be rooted in, or related to some dissonance in revision, that is, the recognition of incongruities between goals and instantiated text (Della-Piana 1978; Faigley and Skinner 1982; Flower and Hayes 1981a, Perl 1980). Details of each researcher's views may vary slightly but the essence of the models can be characterised as follows:

- Writers identify. Discrepencies between intended and instantiated texts are at first identified by the writer Identification of discrepencies require the ability to recall and represent relevant knowledge and the ability to write/read one's own writing from reader's perspective (Bartlett 1982).
- 2. Writers diagnose. When problems are identified, writers determine what changes can be made or need to be made, and find alternatives as to how the changes could be made.

3. Writer's operate. That is, the actual changes that are carried out by the writer.

A contemporary definition can thus be conceived to encompass both product and process. Revision means making any changes at any point in the writing process. It involves identifying discrepencies between intention and execution; deciding what could or should be changed in the text and how to make the desired changes. Changes may or may not affect the meaning of the text. Changes may also be made in the writer's mind before being instantiated in written text, or at the time text is first written, or even after the text is written (Beach 1984; Bridwell 1980; Faigley and Witte 1981; Flower and Hayes 1981a; Flower et al 1986; Nold 1981; Scardamalia and Bereiter 1983, 1986). This definition of revision guided the researcher in the present study. She is of the opinion that if learners detected discrepencies in their texts, it was likely that they would make changes in their texts to resolve them. Keeping this in view, the theoretical construct governing this research is the "Cognitive Processes in Revision" by Hayes, Flower, Schriver, Stratman and Carey (1987).

B Cognitive Processes in Revision

The view that revision is initiated by the discovery of dissonance between intention and execution needs to be defined keeping the two key concepts of 'intention' and 'text' in mind.

By intention we refer to the author's plan in the mind to produce a text that has a purpose to accomplish such as, conveying facts or convincing audience. This writing plan or network of working goals is constructed out of the writer's knowledge of goals, plans, constraints and criteria for discourse and problem-solving in general.

Text means the external written product produced by the writer with greater or lesser skill, in an attempt to carry out the writing plan. If the text is reasonably well written, a reader can usually infer the major aspects of the writing plan from the text alone. The writing plan, although available to the writer is also available in various degrees to others.

The model of the various cognitive processes involved in revision is presented below :

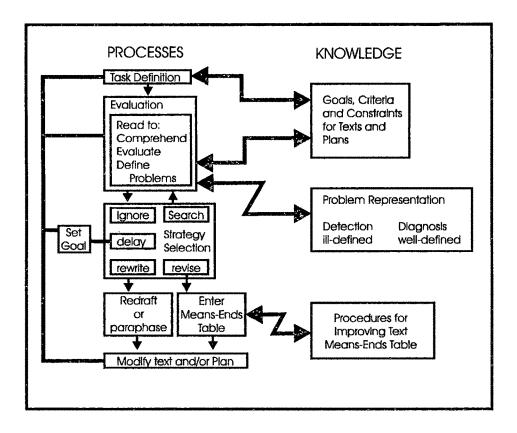


Figure 2. Process Model of Revision [Hayes et al. 1987]

The model is divided into two major sections. Processes in which the reviser engages are on the left and categories of knowledge that influence these processes are on the right. Among the processes task definition comes first. To perform a task, a person must have a definition of the task to be performed. The task definition for revision specifies:

- 1. the goals of the reviser, for example, revision for clarity or elegance,
- 2. the features of the texts that should be examined, for example, global features local features or both;
- 3. how the revision process should be carried out, for example, a) should the text be examined in one pass or in several ? b) should the gist of the text be extracted before revision begins?

Two important points need to be mentioned about the task definition. Firstly, revisers may modify their task definitions during the course of revision and secondly, definition of revision varies from person to person.

The goals, criteria and constraints that define acceptable texts and plans may be the ones the reviser brings to the revising task, or they may be the ones that are suggested in the course of the revision process. For example, if the reviser notices several problems of wordiness in a text, he/she may set the goal to be aware of such problems. Goals, criteria and constraints then may be dynamically modified during revision.

Next the evaluation process applies the goals and criteria relevant to the reviser's task definition to the text and plans. The primary output of evaluation is (1) an initial problem representation, and (2) sometimes important discoveries that influence the revision process. Thus, the

evaluation process, operating under the goal to modify the text, may generate useful alternatives to text features and goals

The process of evaluation leads to **problem representation**. Problem representation varies on a continuum from simple detection, through relatively vague diagnoses to very specific diagnoses. At the ill-defined end are simple detections, for example, the reviser recognizes that some sort of problem exists, but the exact nature of the problem is not clear. At the well-defined end, are highly specific diagnoses. Diagnoses are based on concept recognition - they categorise the problem and give the writer access to appropriate procedures. Between these two extremes of simple detection and diagnosis, are representations that contain some information about the nature of the problem, but are not yet specific enough for the reviser to take appropriate action without further effort.

Next comes the strategy selection which depends upon the initial problem representation Strategy selection in revision involves strategies for managing the revising process. Two types of strategies are available to the revisers :

- strategies that modify or control the revision process, that is, a) ignoring the problem; b) delaying action; and c) searching for more information to clarify problem representation; and
- strategies that modify the text, that is, a) revising the text; and b) rewriting the text.

Ignoring the problem occurs when the reviser determines that however the problem is defined, it is not worth fussing over. For example, when the nature of the problem is not clear to the reviser, he/she may just ignore it. Delaying action often occurs when the reviser decides to deal the text in two passes - one pass for high-level problems and one for surface problems. On the first pass, the reviewer may notice that the text has spelling problems, but decides to wait until the second pass to fix them. Searching for more information may occur when the reviewer's diagnosis is not specific enough to suggest a clear choice of action. The search for specific information has the purpose of moving the problem representation from the ill-defined towards the well-defined end of the continuum.

When revisers decide to modify the text, they have two major options : rewriting and revising. At this point distinction needs to be made

between rewriting and revising. By rewriting, we refer to the strategy by which the writer abandons the surface structure of the text, attempts to draw the gist, and rewrites the gist in his or her own words. Rewriting may be done either, at a local level, when the reviser paraphrases individual sentences or at a global level, when the reviser redrafts a large section of the text. Rewriting as a strategy may be chosen by the reviser either, when he/she does not have adequate strategies for fixing the text problem or when the reviser judges that the text has too many problems to make revision worthwhile. Revising is a strategy by which, the learner attempts to fix the text problems while preserving as much of the original text as possible. It is assumed that successful revising requires the writer to diagnose the text's problems and fix them without completely rewriting Though the distinction between rewriting and revising is the text. difficult to establish, yet both can be viewed as points on a continuum whose positions depend on the extent to which the writer attempts to save the original surface of the text.

Lastly, to carry out the revision process, writers may vary in the goals and criteria they bring to task, in the kinds of problems they are able to identify in the text and in the sophistication of the methods they employ. Each reviser can be thought of having a means-end table in which the problem to be fixed (the end) is associated with appropriate rules, maxims and problem-solving procedures (the means).

To summarise, this model presents a new conceptual integration and elaboration of the cognitive processes involved in revising a text. In revising, the mental activity of the writer revolves and organises around the sub-processes of defining the task followed by its evaluation. The process of evaluation leads to the detection and diagnosis of problems that are in the text, which in turn lead to strategy selection. The writer chooses either the ignore, delay or the search option, or if she/he wishes to modify the text, then he/she is likely to opt either for the revise or the rewrite strategy. Finally, the means-end repertory includes general problem-solving procedures in which symptoms of problems are matched to strategies for solving them.

As this model suggests, revision is not a mere rewording activity or an error-detection technique. It is an intense, mental, problem-solving activity which involves numerous subprocesses. Perhaps learners are unaware of the cognitive nature of revising and its effect on the text. Therefore they do not attach much importance to the act of revising. It is observed that learners are unable to communicate effectively the intended meaning. If they are taken through the processes of revision as the model suggests, it is likely that they would be able to transform the extant "writer-based" prose into a "reader-based" text (Flower 1979).

The two expressions, "writer-based" and "reader-based" text coined by Flower (1979) need to be defined. It is seen that the simple act of writing or expressing what one thinks is a very difficult proposition. To communicate, writers undergo mental struggles, yet readers seem to misinterpret the meanings. That is, the writers may be able to **express** thought, but they are unable to **transform** the thought into certain complex but describable ways for the needs of the readers. These writers can offer at best, an "unretouched and under-processed version of their own thought" (Flower 1979 19). Thus, writer based text in function, is one that is a verbal expression of the writer written **to himself** and **for himself**. It is a record of his/her own verbal thought. In structure, the text reflects the associative and the narrative path that the writer takes to express his/her meaning, and in language, it reveals the use of privately loaded terms and unexpressed contexts.

In contrast, reader-based prose is a deliberate attempt to communicate something to the reader. It offers the reader an issue-centred rhetorical

structure rather than a replay of the writer's discovery process. In its language and structure, the text reflects **the purpose of the writer's thoughts** while a writer-based text tends to reflect only its **process**. The reader-based text is often a cognitively demanding transformation of the private expressions of the writer and its structure and style is adapated to a reader.

Given this distinction, it is clear that reader-based text is highly communicative which involves reader awareness. The writers need to extend their communication to take into account the reader's purpose in reading and thus transform their text suitably to meet reader needs. Keeping the cognitive model on revision propounded Hayes et al (1987), as the governing construct, the present study intends to map revision strategies of ESL learners and explores the possibility whether learners could be made aware that revision strategies need to be evolved and applied to the texts to communicate meaning. It also attempts to find out whether teaching learners the process of revision could be an effective writing technique which could transform their writing to include the reader in the entire thinking process.

Researchers have undertaken studies in revision to find out more about the complex process of revising. Most studies are conducted in L1 and few in L2. A brief overview of the different research studies conducted in first and second language is presented.

III. Overview of Research on Revision

Views on revision and its role in writing have changed over the years. In the linear stage models of writing, revision was considered a 'mop up activity' to be carried at the end of the writing task. In the process centred approach to composition, writing is viewed as recursive, in which students are encouraged to revise as they write and produce multiple drafts of their essays. The role of revision now seems central as it is seen to enable writers to organise what they know, to affect the writer's knowledge as they use revision to rework thoughts and ideas and to enhance the quality of the written work.

The amount of research undertaken on revision is relatively meagre. Traditionally, practitioners have claimed that good writing entails considerable revision (Hilldick 1965). Earlier, revision was considered an 'error-detection' technique (Tressler 1912; Lyman 1929). De-emphasis on creativity allowed little opportunity for revision and changes were confined to sentence polishing or what today might be termed as editing.

Studies conducted in the second half of the century removed itself from investigating the relationship between revision and error detection. Instead, studies focused on effects of revision on the quality of the final draft. **Buxton** (1959), typically defined revision as the opportunity to rewrite, without clearly explaining what students did to their papers and **Hansen** (1978), comparing two college classes on measures of proof reading, editing and general composition skills, reported no significant differences between the two and concluded that rewriting was a waste of time.

It was from the 1970's that theories on revision started emerging. With a shift in perspective in writing from a linear stage model, to a recursive, generative, exploratory and an ongoing process, revision began to be viewed as integral and important to the writing process. And perhaps the first researcher to point to and study the importance of revision was **Murray** (1978a), who defined revision as "what the writer does after a draft is completed to understand and communicate what has begun to appear on the paper" (87). He recast the three components of writing as

prevision, vision and revision. He discussed two types of revision: internal revision or "everything writers do to discover and develop what they have to say" and external revision or "what writers do to communicate what they have found" (91). According to him focus on seeing the text again and on internal formulations was central to the development of an understanding of revision. Though Murray's work on revision was embedded in a linear model of writing, his work can be seen as a transition from

- 1. a time when revision received little or no theoretical attention to a time when the meaning of revision began to take shape,
- 2. from a long-standing view of the alterations in the text which meant relatively minor editorial changes, to a new view of text changes which included reflections of major reconceptualizations of ideas and meanings, and
- 3. from a product-focused view of revision to an increasingly process oriented one.

A. First Language Studies

There are relatively few empirical studies on revision. Almost all studies have been conducted in L1 (First Language/Mother Tongue). The literature reviewed establishes four points:

- expert revisers attend to more global revising problems than novices do;
- 2. writers differ greatly in the amount of revising they do;
- 3. writers have more difficulty in detecting faulty expressions while revising their own text than when revising the text of other writers; and
- 4. the ability to detect text problems appears to be separate from the ability to fix these problems.

1. Expert revisers attend to more global revising problems than novices do

Broadly, revision can be defined as the writer's attempt to improve a plan or text. Within this definition, expert writers appear to attend more systematically to different aspects of the text rather than novices. When asked to revise, they exhibit more sophisticated repertoire of revision strategies and attend to more global concerns in the text. Inexperienced writers or novices on the other hand, define revising as rewording, error hunting and scratching out activity. They typically make only low-level, mechanical and word level changes.

There is evidence of strikingly different revising strategies used by experienced and novice writers in the study of **Stallard** (1974). Classifying spelling, syntax, multiple word, paragraph and single word revisions, he reports that though single word changes dominated revisions of both groups, good writers also initiated more multiple word and paragraph level changes.

Beach (1976), compares extensive revisers and non extensive revisers among college juniors and seniors and notes the ability of revisers to see the text holistically. Non-revisers were more egocentric, were not able to view their writing with detachment and evaluated their papers in parts. Extensive revisers on the other hand, conceived their papers in holistic terms and 'inferred general patterns of development'.

The first year college students of **Sommers** (1980) understood revision as a "rewording activity" (381). They concentrated on particular words, were unable to detect dissonance in their text and evolved strategies to

resolve them. In contrast, experienced writers described the primary objective of revising as "finding the form or shaping their argument" (384). More importantly, they showed concern for "readership" (384) and recognised revision as a process of resolving "the dissonance they sense in their writing" (385).

Of particular interest is the taxonomy and the descriptive scheme developed by Faigley and Witte (1981). This scheme differs from the taxonomies of Bridwell (1980) and Sommers (1980). Sommers' (1980) and Bridwell's (1980) taxonomies identify only linguistic levels (word, clause, sentence) and the operations (addition, deletion, substitution) entailed by revision. Faigley and Witte (1981) on the other hand, sought to identify revisions that affected the meaning of the text. To this end, they together set up a taxonomy of revisions based on two distinctions: those that affect meaning (text-based changes) and those that do not affect meaning (surface changes). Meaning affected changes introduce new information or remove old information, while surface changes simply paraphrase the content without altering information. Faigley and Witte's (1981) study replicated the results summarized earlier that skilled writers revise in very different ways from unskilled writers. The former are likely to change meaning through revision by making text

based changes, focusing on audience while, the latter are likely to resort to surface level changes with diminished focus on audience awareness.

The points at which revisions are initiated and the frequency of their use has been investigated by **Monahan** (1984). He finds that his competent writers revised more extensively from the first to the final draft, in contrast to his basic writers, who viewed shaping and reshaping of ideas a laborious process.

2. Writers differ greatly in the amount of revising they do

Emphasising the importance of revision Murray (1968, 1978a, 1978b) asserts, for learners "writing is rewriting." He describes revision as the "least researched, least examined and the least understood" (1978a, p. 85) of the writing skills. He distinguishes between two types of revision internal and external. When the writer goes through the process of discovery, it is internal revision; the changes the writer makes in his text to accommodate audience, constitutes external revision. He asserts that internal revision is far more important to the writing process, but teachers and text books tend to employ the external kind because firstly, they do not know enough about the writing process, and secondly, they

themselves do not accept the notion that many drafts may be required to produce an acceptable piece of writing.

Bracewell, Scardamalia, Bereiter (1978), report significant differences in the ability to revise of the fourth, eighth and twelfth grade students. Students at grade four make no significant changes, they hardly revise at all; eighth grade students make detrimental changes and grade twelve students make some improvements that outnumber the harmful ones. Even **Bridwell** (1980), found that her twelfth graders' second drafts were better in general merit and mechanics, than their first draft. It is thus observed that writers differ widely in the amount of revising they do. It appears that expert writers spend greater proportion of their writing time in revising than inexperienced or novice writers.

3. Writers have difficulty detecting faults in their own texts

Research studies report that writers can direct focal attention to correct certain kinds of errors and detect problems of referential ambiguity in others texts, than in their own. **Bartliet's** (1981), research on revision strategies reports that while revising their own texts children could focus attention on certain errors and not on their own faulty expressions. On the other hand, they could detect more faulty expressions while revising texts of other writers. It seems that knowledge of their own intention as writers apparently made it difficult for them to detect faulty references in their own texts.

4. Finding and fixing problems appear to be separate skills

Bartlett's second study (1981) hypothesised that the ability of sixth and seventh grade learners to detect problems depended on the ease with which relevant knowledge could be recollected or represented. The findings suggest that young writers could not do the special 'rereading' required to detect problems in their own texts and were also limited in their ability to solve identified problems. This indicates that writers focused their attention on 'high level meaning' representation of texts.

Scardamalia and Bereiter (1983) claim, that the sixth, seventh and eighth grade students have limited ability to revise because they are unable to find solutions to the problems. They concluded that both, the ability to detect problems and the ability to resolve them once detected, act independently, thus limiting the student's ability to revise.

Apart from these major issues on which first language revision studies are based, the only study dealing specifically with revision and instructional strategies is that of **Beach** (1979). He compares three treatment groups those receiving between-draft teacher evaluation, those completing guided self-evaluation and those receiving no evaluation at all. He notes that more successful students were those that received between-draft evaluation from teachers. He also recommended that this strategy could be applied in the classrooms.

A recent development in writing research is the investigation into the composing processes of bilingual students. This issue has prompted researchers to conduct cross-language studies. The notion of L1 and L2 writing being inter-related is gaining prominence. It is argued that interdependence of languages and transfer of literary related skills is due to the cognitive/academic proficiency underlying each languages (Cummins 1981). It is also claimed that this interdependence across languages is not restricted only to proficiency but is carried across performance as well (Vanikar and Mujumdar 1994). As revising is considered integral to the writing process, revision strategies are also seen interdependent and transferable across languages.

Of the few research studies conducted on the revising processes of learners across languages, Gaskill's study (1986), is considered significant. Using Faigley and Witte's (1981) analysing scheme, he investigated the revision process in Spanish speaking and English speaking subjects. Analysing video-tapes of students' composing and their written products, he concluded that revision processes in English resembled those in Spanish. Surface level corrections dominated L1 and L2 revisions and both, L1 and L2 subjects revised mostly during the actual drafting of the texts. Hall (1990), in his study of the texts of proficient second language writers, attempted to identify the linguistic and discoursal features of revisions across languages. The results revealed striking similarities between L1 and L2 revisions with regard to both, linguistic and discoursal features of the changes and the stages at which these changes were initiated. The revisions made by learners suggested that advanced ESL writers were capable of utilizing a single system of revision across languages. It appeared that the system was first shaped in L1 and subsequently transferred to L2. Further, Hall also reported that L2 learners used "reviewing episodes" (Monahan 1984), and recursiveness in revision also took on an additional function in L2 revision studies as writers grappled with the semantics of words and structures of sentences. These insights sometimes prompted learners to change entire sentences.

B. Second Language Studies

Very few L2 studies deal exclusively with revision. Researchers like Zamel (1982), Raimes (1985b) and Cumming (1989), have mainly considered 'revision' as a variable while investigating the composing processes of ESL learners. They have devoted a part of their discussion on composing processes to establish the revising behaviours of ESL learners. Considering the paucity of literature available exclusively on revision in L2, their investigations and findings assume importance. Zamel (1982), investigating the composing behaviours of advanced ESL learners, assigns a part of the discussion to revision. She notes that skilled L2 writers revise more and spend more time on their essays than unskilled writers. They concern themselves with ideas, revise at the discourse level, exhibit recursiveness in their writing and save editing until the end of the process. Unskilled writers on the other hand, revise less, spend less time on writing, focus on small portions of the essay at a time, attend to local problems, edit from the beginning to the end of the process and rarely make changes that affect meaning.

Offering insights into the revision behaviours of unskilled writers, **Raimes'** (1985b), observed that majority of the editing and revising changes were made by students during the writing of sentences rather than between sentences or while reading over a passage. Though "clarification of idea" (246) seemed to be the motive behind changes in the text, revisions concentrated only on surface forms and learners seemed to reread their work only to let ideas germinate. Interestingly, non-remedial students of Raimes' (1985b), as a group, revised and edited more than remedial students

Investigating decision-making skills and problem solving behaviours **Cumming** (1989), observed that professionally expert writers, reviewed their previous texts, reread it every few minutes and thought how composition would take shape with reference to the current decisions taken. The operations of adding, amending, reordering phrases which they frequently indulged in their texts, indicated progressive rewriting. On the other hand, basic writers seemed visibly constrained in decision making and mainly concerned themselves with surface features of the

language, correcting grammar, verifying spelling to the point of neglecting semantic and pragmatic dimensions.

Studies of Zamel (1982), Raimes (1985b) and Cumming (1989) are not exclusive studies on revision. They are basically research studies investigating the composing processes of ESL learners, in which two key issues are addressed: one, whether proficiency in L1 and L2 affects composing and two, whether writing expertise in L1 and L2 leads to better quality of essays. The findings of these studies claim that proficiency in L1 or L2 does not affect composing processes of ESL The discussion related to the revision behaviours of ESL learners. learners addresses only one issue - the difference between the revising process of skilled and unskilled learners (Raimes 1985b, Zamel 1982). This distinction between skilled and unskilled learners is based on the writing abilities of the learners. Their discussion on revision does not take into account whether language proficiency has any role to play in the revising process. According to Cumming (1989), writing expertise is proved to relate to problem-solving behaviours and revision is considered to be a problem-solving activity (Hayes et al. 1987). Yet, the literature reviewed does not discuss whether writing ability in L1 or L2 determines the use of revision strategies.

This research is an attempt to map revision strategies of ESL learners. The issues that the researcher intends to address through this study, are one, the relationship between revision strategies and proficiency in L1, and L2 which is not discussed either in the studies of Raimes (1985b), Zamel (1982) or Cumming (1989); two, the role cognitive measure plays in the use of revision strategies. Revision is considered an intense, mental, cognitive activity in which problem-solving activities and heuristic devices are used. Learners are observed to use problem-solving devices to enhance their written work, therefore, a relationship is perceived between the two. The third issue $\overset{that}{\sim}$ the research attempts to address is the issue of the relationship between L2 writing expertise of learners and use of revision strategies.

IV. Learners and the Revision Process

Revision in writing is affected to a significant degree by dissonance or the problems that writers perceive between intentions, goals and execution the written text. If no dissonance is perceived, or if the writer cannot resolve the dissonance, little or no retranscription (Nold, 1981) or "retrospective structuring" (Perl and Edgendorf, 1979 125) can occur. If

learners 'detect' and diagnose problems then, they may use a variety of problem-solving strategies to redefine and reconstruct their texts. Thus, perception of dissonance must be regarded necessary to cause revision. It can also be argued that the purpose the learner has in mind affects the problem he/she detects in the text and the detection of problem in turn determines strategy selection. Revision, thus adopts a problem-solving approach. It trains learners in problem-solving and decision-making.

Unfortunately in schools and colleges, writing is given a low priority. Though writing of compositions form an integral part of the language learning curriculum, it is hardly taught in the classrooms. It is not considered an activity that needs to be taught to the learners. As a result, learners are unaware that revision strategies are to be evolved and used to enhance their written work.

Use of revision strategies is a matter or training. A study (Beach, 1979) on instructional strategies in revision claims that those students were more successful who received "between-draft evaluation" from teachers. If students are instructed in the use of revision strategies, they are able to detect problems in their texts, and further evolve strategies to resolve the dissonance detected (Sommers 1980). Hayes et al. (1987), also consider

revision a problem-solving activity, in which learners identify problems in their texts and decide on various strategies to apply in order to enhance their written work. Covertly or overtly, learners are observed to use revision strategies. But the strategies evolved are restricted to surface corrections. The changes they make hardly effect any change in meaning. Therefore, there is a felt need to incorporate revision as a classroom activity and make learners aware that meaningful changes can be made in the text with the use of different revision strategies.

The existing classroom situation does not provide for writing and revision. Most of the class time is spent on explication of passages and decoding meaning while, hardly any course time is spent on writing Learners are not taught how to write, yet all marks are allotted to writing as they are tested through writing in the examinations. A disparity thus exists between teaching and testing. The need therefore, is to focus **more on the writing activity of the learners.** All efforts should be directed towards enhancing the writing skills of learners, training them and assisting them to evolve strategies that would enable them to articulate what they intend to communicate. Revising is an effective writing strategy in which learners reread their texts, detect dissonance and make use of problem-solving techniques to resolve them. The study therefore,

calls for revision to be incorporated in the writing classrooms. It is strongly argued that if learners are trained to use revision strategies, it is likely that their dormant writing strategies could be put to use. It would help develop in them independent thinking, it would sharpen their decision-making skills and allow them autonomy and freedom of expression to articulate effectively their intended meaning. The use of these strategies would help them to transform their writing according to reader needs. By recognizing transformation as a special skill and task, they would develop a greater degree of control over their writing abilities and would also be initiated into some skills which they may yet have to develop.