CHAPTER 2

REVIEW OF RELATED LITERATURE AND RESEARCH

This chapter contains four major sections. At the very beginning, errors and their role in language learning and teaching are briefly reviewed to establish relevant theoretical background. The causes and types of errors are also discussed. Secondly, errors in writing are reviewed. In the third part, what the literature says about error analysis and its significance is summarised. Finally, the related research on analysis of errors in writing is reviewed.

2.1 Errors and their Role in Language Learning and Teaching

2.1.1 Significance of Errors

In the process of learning a second language, learners develop their knowledge of interlanguage. Such knowledge may have the same characteristics as those of their native language, their second language, and those which seem to be very general and tend to occur in all or most interlanguage systems (Ellis, 1997; Lightbown and Spada, 1999).

According to Ellis (1997), the characteristics of interlanguage are as follows: 1) the learner creates a system of linguistic rules viewed as a 'mental grammar' which accounts for comprehension and production of the second language, 2) the learner's grammar is subjected to change because of the influence from both outside and inside, 3) the learner's grammar keeps changing as the complexity of second language

knowledge gradually increases, 4) learners use several types of learning strategies to develop their interlanguage, and 5) the learner's grammar tends to fossilise.

In developing their interlanguage, it is natural and unavoidable that language learners usually commit errors, defined by Brown (2000: 217) as "a noticeable deviation from the adult grammar of a native speaker, reflecting the learner's interlanguage competence." Likewise, Richards et al (1993: 127) define error as "the use of a linguistic item in a way which a fluent or native speaker of the language regards as showing faulty or incomplete learning."

Learners' errors indicate what learners are able to do in the target language. This notion is shared by Hahn (1987), Olsen (1999), Ancker (2000) and Yaowaret Ketkaew (2000) who state that errors reflect learners' progress and success in learning and indicate their level of proficiency in relation to L2 norms concerning lexical items or linguistic structures. The significance of errors is noted in three main ways: firstly, they can provide the teacher with information about how far the learner has progressed (Adisa Teo, 1986; Ellis, 1997) and the specific problems that remain; secondly, they give the researcher evidence of how language is learned, and thirdly, the learner learns by making errors (Corder, 1967; cited in Olsen, 1999).

Ellis (1997) also gives other good reasons for paying attention to learners' errors: 1) they are a noticeable feature of learners' language and they bring up the important question of "Why do learners make errors?" and 2) making errors can facilitate learning when learners correct the errors they make by themselves.

It can be seen that errors are important not only to teachers, but also to learners. In relation to the latter, Adisa Teo (1986) states that the making of errors benefits learners in that they are allowed to test their hypotheses about the nature of the language they are learning. Also, Smith (1976; cited in Hahn, 1987) asserts that when learners test a hypothesis there must be a possibility of being wrong. A wrong

hypothesis leads to errors. This makes learners know that they have not learned the language.

2.1.2 Causes and Types of Errors

Various causes of errors have been proposed by many researchers (Richards, 1974; Harmer, 1987; Friedlander, 1990; Ellis, 1994; Towell and Hawkins, 1994; Brown, 2000). One obvious cause is interference from the native language. Learners may make errors because they assume that the target language and their native language are similar, when in fact they are different. Negative transfer or interference occurs when second language learners incorrectly use whatever previous experience they have had with their native language to try to help them acquire the second language. As mentioned by Towell and Hawkins (1994: 7), "transfer seems to affect all linguistic levels: phonetics/phonology (pronunciation), syntax (the construction of sentences), morphology (the internal structure of words), lexicon (vocabulary), and discourse (the communicative use that sentences are put to)." Negative transfer or interference causes an error or inappropriate form in the target language referred to as interlingual errors (Richards et al, 1993). Ellis (1985), Richards et al (1993), and Brown (2000) define interlingual errors as errors caused by the transfer of some non-congruent linguistic features from learners' native language.

Another obvious cause is the overgeneralisation of items within the target language. Brown (2000) states that besides making interlingual errors learners also make intralingual errors resulting from generalising a particular rule or linguistic item in the target language. Examples of causes of intralingual errors are ignorance of rule restrictions and incomplete application of rules (Richards, 1974; James, 1998).

A third common cause of errors is the complexity of the target language. Harmer (1987) states that English appears to be difficult for non-native speakers

because there are many exceptions to grammar rules, e.g. regular past *-ed* and irregular past forms. Similarly, Ancker (2000) states that certain aspects of English are problematic for all learners, whatever their native languages are e.g. third-person singular *-s* and plural *-s*. Spelling is also difficult for non-native speakers of English.

Finally, errors may be caused by fossilisation, which is a normal and natural stage for many learners and occurs when they reach a satisfactory level of competence in the target language and are not worried about persistent mistakes they may make, which may not hinder communication (Ellis, 1994; Ancker, 2000; Brown, 2000). Fossilisation is a process in which incorrect linguistic features, i.e. pronunciation, vocabulary usage and grammar, may become a permanent part of second or foreign language learning (Richards et al, 1993). Selinker (1974) states that fossilisable items, rules and subsystems which occur in interlanguage performance are caused by the five central processes: 1) language transfer (the effect of interference from the native language), 2) transfer of training (the effect of teaching procedures), 3) strategies of second language learning (the effect of approaches by the learner to the material to be learned), 4) strategies of second language communication (the effect of approaches by the learner to communicate with a speaker of the target language), and 5) overgeneralisation of target language materials (the effect of the learner's overextension of a rule or semantic feature).

Interestingly, Faerch et al (1984; cited in Olsen, 1999) describe the factors causing errors as internal and external factors. Internal factors are learners' motivation, e.g. their ability to work or attitude toward the language. If learners are not interested in learning they will resist or ignore any methods attempted by the teacher. Fossilisation may reveal that learners have lost interest because it implies lack of development in learners' interlanguage. External factors can be misleading or confusing teaching or teaching materials, such as teaching words with similar meanings at the same time. Tinkham (1993; cited in Olsen, 1999) states that each

word should be introduced in its own context at different times. This will enable learners to distinguish between words because they will remember the context in which each of them is used.

Errors can be classified into various types. Dulay et al (1982) reviewed studies on errors made by ESL/EFL learners and presented four taxonomies which are useful and commonly used in classifying types of errors. They are 1) linguistic category, 2) surface strategy, 3) comparative analysis, and 4) communicative effect. Errors in the taxonomy of linguistic category are categorised according to the language components, including phonology (pronunciation), syntax and morphology (grammar), semantics and lexicon (meaning and vocabulary), and discourse (style). The surface strategy taxonomy emphasises the ways surface structures are altered. Learners' errors are due to learners' omission of necessary items or addition of unnecessary ones, and misformation of items or misordering of them. Errors in the comparative analysis taxonomy are classified according to comparisons between the structure of L2 errors and some other types of constructions. L2 errors are compared to errors produced by children who learn the target language as their first language and to equivalent phrases or sentences in the learners' native language. While the surface strategy and comparative taxonomies place an emphasis on aspects of the errors themselves, the communicative effect taxonomy classifies errors according to their effect on the listener or reader. It focuses on distinguishing between errors that make a phrase or sentence incomprehensible to the listener or reader and those that do not. Global errors are errors that affect the overall organisation of the sentence and, thus, hinder successful communication. Local errors are those that only affect a single element of the sentence and usually do not hinder communication.

Errors provide both teachers and learners with valuable information on teachers' and learners' strategies and progress. It can be seen that different types of errors arise from several possible sources. Thus, analysing errors in students' written

works and their sources is vital in that it provides teachers with insight into the difficulties students face when writing which, in turn, is useful for them to teach better or to help their students write better.

2.2 Errors in Writing

2.2.1 Types of Errors in Writing

Second/foreign language learners usually find that writing is a very difficult skill to master and they tend to make many errors in their writing. Norrish (1983) states that writing is a language skill most problematic even to native speakers and some of them are not able to master this skill. When writing, writers need to pay more attention to grammatical and lexical items. They must be able to construct grammatically acceptable sentences and spell correctly. Scarcella and Oxford (1992) state that grammatical competence is one of the important components of writing proficiency. It includes learners' competence in using grammar, vocabulary, and mechanics of the language. Johns (1990) states that if there are many grammatical errors in the writing, it is possible that the reader may not be able to comprehend the writer's intended meaning and, therefore, miss or misunderstand the intended message.

James et al (1979) state that errors in writing made by second/foreign language learners can be divided into three main types: (1) errors which lead to a misunderstanding or a breakdown in communication resulting from translation from one's native language into English, grammar patterns which are similar in forms but different in meaning, too long and complex sentences, or too short and incomplete sentences, (2) errors which irritate and mislead a reader as a result of wrong selection of word, concord, word order or article usage, and (3) errors of style and usage.

According to Byrd and Benson (1989; cited in Byrd and Benson, 2001) there are twelve common writing problems that ESL learners have. These common errors can be divided into three groups: (1) the most serious problems involving fragment, verb, agreement and run-on/comma splice, (2) intermediate problems including parallelism, word order, word choice, word form and article, and (3) problems of punctuation, capitalisation and spelling.

2.2.2 Global and Local Errors

Errors can be considered global or local depending on the degree of the reader's difficulty in understanding the writer's intended message. Richards et al (1993: 127) define a global error as "an error in the use of a major element of sentence structure, which makes a sentence or utterance difficult or impossible to understand." With regard to Burt's (1977; cited in Hahn, 1987) view, global errors are errors that affect the overall organisation of the sentence. Burt and Kiparsky (1972; cited in Norrish, 1983) suggest a distinction in errors related to comprehensibility. Basically, they agree with two types of errors, global and local errors. Global errors are errors which affect the interpretation of the entire sentence or lead to misunderstanding of the sentence. Local errors, on the other hand, are errors that affect a single element of the sentence and usually do not cause problems of comprehension or impair communication (Burt and Kiparsky, 1972; cited in Norrish, 1983; Burt, 1977; cited in Hahn, 1987; Richards et al, 1993).

In line with the above researchers, Hendrickson (1981) defines a global error as a communicative error that makes a proficient speaker of a foreign language misinterpret a spoken or written message or regard the message as incomprehensible within the context of the error. In contrast, a local error is defined as a linguistic error that causes awkwardness in a form or sentence structure but gives a proficient speaker

of a foreign language little or no difficulty in understanding the intended meaning of a sentence.

Norrish (1983) states that in any piece of written work it is the global error which would be given most attention and lead more easily to failure in understanding the writer's intended meaning. For that reason, teachers will come up with a list of priorities which would be global rather than local. With the distinction between these two types of errors, teachers will be able to judge to what extent a learner's written text is likely to be comprehensible to a reader. Norrish also notes that "as far as remedial teaching is concerned, the global error would need treatment before the local type." (p.108)

2.3 Error Analysis and its Significance

2.3.1 Error Analysis

Error analysis is the study and analysis of the errors produced by second/foreign language learners (Richards et al, 1993). Ekmekci (1984: 262; cited in Hahn, 1987) states "error analysis examines the actual errors produced by the learners in the target language. It views both first- and second-language acquisition as a process involving the active participation of the learners."

One pedagogical use of error analysis is that teachers are able to diagnose specific linguistic features in the target language of learners' speech or writing which learners have not yet mastered. Likewise, Richards et al (1993) state that error analysis can be employed in identifying strategies used by learners in language learning and causes of their errors, and getting information about common difficulties in language learning. Such information can be used as an aid to teaching or in the preparation of teaching materials.

Also supporting this idea, Sharma (1981) states that error analysis can be useful both at the beginning and during the various stages of a foreign/second language-teaching program. For instance, it can reveal to the teacher, the course designer, or the textbook writer the problematic areas of the language that the learners are facing. It can also reveal both the success and the failure of the program, and thus help teachers design proper remedial materials and plan appropriate teaching techniques in order to consolidate the success and eliminate the failure.

The significance of error analysis is summarised by Olsen (1999: 191):

> Error analysis as an approach for studying learners' language has traditionally been used for three different purposes: firstly, in second language (L2) acquisition studies where the interlanguage of learners is examined for errors; secondly, as evidence of cross-linguistic influence from the first language (L1) on the L2; and finally, as an approach used for pedagogical reasons, to point out problematic areas to be focused on in teaching.

2.3.2 Steps in Error Analysis

The steps in error analysis research are 1) collection of a sample of learner language, 2) identification of errors, 3) description of errors, 4) explanation of errors and 5) evaluation of errors (Corder, 1974; cited in Ellis, 1994). Ellis (1997) proposes similar steps in error analysis. For him, the first step in analysing learners' errors is to identify them. Then errors can be described and classified into categories when all of them have been identified. The identification and description of errors are preparatory for the more interesting task of trying to explain why they are made. He also expresses that the purpose of the error analysis is to help learners learn a second language and there is also a need to evaluate errors. Some errors can be regarded as more serious than others because they are more likely to interfere with the comprehensibility of what someone says.

Sharma's (1981) theoretical and practical considerations concerned with error analysis involve six steps: 1) theoretical framework (precise definition of error), 2) designing and constructing a diagnostic test, 3) selection of participants for the diagnostic test, 4) detection, classification, and tabulation of errors, 5) description of errors, and 6) tracing errors to their sources.

It can be noted that the aforementioned procedures of error analysis share four common steps in analysing errors, namely identification, description, explanation and evaluation of errors. This study will follow this procedure of error analysis.

2.4 Related Research on Analysis of Errors in Writing

There are several studies on errors in second language writing, both in the Thai and non-Thai contexts. Studies conducted in the non-Thai context are first reviewed.

In the non-Thai context, studies on errors in second language writing seem to fall into four groups: those focusing on types of errors made by ESL learners (Kam, 1973; Hendrickson, 1981; Kim, 1983), those examining both types and sources of learners' errors (Kerr, 1969; Sharma, 1981, Olsen, 1999), that focusing on one specific type of errors and feedback to help eliminate learners' errors (Lott, 1983), and that aiming at identifying types and sources of learners' errors and studying the effectiveness of error analysis (Haded, 1998).

Kam (1973) investigated types of errors found in English compositions of some pre-university students in Singapore. A classification system of errors was established and errors were organised into seven general categories. They were: 1) the articles, 2) number in nouns, 3) verbs, 4) function words, 5) lexical items (form and meaning), 6) sentence structure, and 7) spelling. The results showed that with regard to errors in the use of articles, omissions accounted for more than fifty percent of the

errors in this category, substitution of the wrong articles about thirteen percent, and unnecessary use of *a(n)* or *the* the rest. The failure to make singular-plural distinctions in nouns accounted for the third largest group of errors. Errors related to verbs in the main areas of tenses, subject-verb agreement and non-finite verb problems together made up the largest single group in the study. As for errors in function words, errors in preposition usage made up about seventy-eight percent of errors in this category. Errors in lexical selection accounted for approximately sixty percent of the errors in the lexical item category. As for errors in sentence structure, the largest single group involved the omission of verbs and verbal phrases. Spelling errors were caused by false analogy.

Unlike Kam (1973), Hendrickson (1981) focused on the seriousness of errors. As part of his study, he attempted to identify and examine the different types and frequency of global and local errors that 24 adult students produced on picture story composition. These students enrolled in two sections of a non-credit ESL course sponsored by the Division of Continuing Education of Ohio State University. They made nearly 10,000 errors on a total of 552 picture story compositions, including composition pre- and post-tests. The errors were classified into two types, global and local errors, which were further categorised into misused, omitted, or misspelled forms and structures of standard English lexicon, syntax, and morphology. The orthographic subcategory included misspellings of lexical, syntactic and morphological features. Hendrickson found that global syntactic errors, global orthographic errors, local lexical errors, local morphological errors and local syntactic errors occurred most frequently in the composition of every student. The causes of those errors were insufficient knowledge of the nouns, verbs, adjectives, adverbs and English spelling rules, and interference from native language phonology and orthography.

Along the same line, Kim (1983) examined the types of errors in English syntax, lexicon, morphology and orthography of second year Korean and Thai students and further investigated the types of errors which led to communication breakdown as determined by native speakers. The students were assigned to write free compositions used for error analysis. The results showed that students produced errors in the following linguistic areas: 1) use of basic structural patterns, 2) vocabulary usage, 3) use of articles, conjunctions, prepositions, and tenses, and 4) understanding of rhetorical organisation. Various types of errors were presented to a group of fifty native English speakers. They were asked to evaluate each error type in terms of their own linguistic tolerance and judgment using three evaluation criteria: U (Unintelligible), IS (Intelligible but Serious Error), and IL (Intelligible but Light Error). The results of the intelligibility survey revealed: 1) native speakers were more sensitive to word errors than form errors, and more sensitive to insertion errors than omission errors, 2) errors of the same type were evaluated differently depending upon the syntax and context, 3) noun errors were regarded as more serious than verb errors, and 4) native speakers showed less sensitive reactions to some minor errors which did not hinder intelligibility. The results of this study suggested that learners should be trained to write basic structural patterns through extensive practice. They need to learn vocabulary to express their ideas and thoughts effectively in written communication, and teaching writing compositions should emphasise rhetorical skills for organising and developing ideas logically.

It should be noted that the studies reviewed above did not determine the sources of learners' errors. However, there are some studies that examined the types of errors and also tried to explain the sources of these errors.

Kerr's (1969) study aimed at identifying the errors in over a thousand essays or free compositions written by adult learners in Greece who were supposed to have advanced knowledge of English. However, no attempt had been made to record every

kind of error appearing in the students' papers. He identified those errors which were typical of advanced-level Greek students attempting to write English in an academic context. The result revealed errors in word order, sentence structure, negation, verbs, prepositions, nouns, articles, determiners, pronouns, adjectives, adverbs, conjunctions and other connective words and phrases, frequently confused or misused vocabulary items, and spelling. He found that the sources of errors were: 1) ignorance of the words or constructions required to express ideas, 2) the influence of the mother tongue, 3) carelessness, and 4) making false analogies with other elements of the foreign language. Kerr suggested that language teachers should find the kinds of remedial teaching which would be useful in dealing with students' errors in written works.

Sharma (1981) conducted an extensive project on error analysis in the written English of 387 twelfth graders in and around Delhi. 11,356 errors relating to morphology and syntax were found in the study. The sources of errors were: 1) negative transfer, 2) ignorance of correct English patterns, 3) a combination of analogy and negative transfer, 4) cultural variance, and 5) translation.

Olsen (1999) looked deeper to try to find the underlying sources of errors by investigating the strategies employed by the learners. He conducted a study of English written by Norwegian secondary school learners of English. He analysed learners' errors on different linguistic levels and their use of compensatory strategies to explain the process of the production. The results revealed that less proficient learners had a higher number of grammatical, orthographic and syntactic errors which appeared to be related to cross-linguistic influence. He discovered that compensatory strategies employed by the learners were: 1) avoidance, 2) description, 3) generalisation, 4) language mixing, and 5) code-switching.

Unlike Kerr (1969), Sharma (1981) and Olsen (1999), Lott (1983) focused on one specific category of errors and tried to find ways to decrease these errors. Lott's

study aimed at analysing interference errors and several approaches to diminishing interference errors. The errors due to interference from the native language in the examination papers of Italian learners of English were analysed according to the following criteria: 1) overextension of analogy, 2) transfer of structure, and 3) interlingual errors. The findings of this study were as follows. First, overextension of analogy errors were caused by the students' misuse of a vocabulary item because the item shared features with an item in their native language. The solutions of overextension of analogy errors were to establish in the learners' minds a distinction between Italian and English and also a distinction in their conception of English. Second, transfer of structure errors were caused by a contrast of rules in the native and target languages. The way to solve this problem was to make the students aware of the contrasting grammar rules of Italian and English. Third, interlingual errors were caused by the lack of grammatical and lexical distinctions in the native language. He found that guided discovery was effective in eliminating such errors. For example, to help the students use the simple past and the present perfect correctly, he began with an explanation of the grammar, using diagrams or pictures, and the contrasting usage was exemplified in a dialogue. He then asked the students a series of questions involving the language point. Lott concluded that error analysis has obvious advantages for teachers because it offers them a clear picture of the cause and frequency of the examined errors, thus they can determine whether mother tongue interference, teaching techniques or problems existing in the target language are the major cause of their students' errors. In this way teachers will be able to plan lessons or remedial teaching to provide very specific help to the students.

Haded (1998) examined both types and sources of errors, like other researchers. However, an additional purpose was to study the effectiveness of error analysis. He conducted a study into how error analysis could be employed to identify the errors of twenty Arab learners of English in Malaysia and explain their sources.

He used a test consisting of two parts. In the first part the students were required to answer four items in each of the following English tenses: the simple present, the simple past, the present progressive, the past progressive, and the past perfect, and five items in the present perfect, giving a total of twenty-five items tested. The students were asked to choose only one correct response, and to answer all twenty-five items. The sentences in part two were of unequal complexity, with the blanks found in any position to be filled with one verb-phrase belonging to one of the tenses tested. He found that error analysis was effective in discovering the errors of L2 learners and explaining the causes of such errors. He also found that the students' interlingual errors such as the omission of an auxiliary were due to their reliance upon the native language when they tried to initiate utterances in the target language. Intralingual errors were caused by overgeneralised inflections, incorrect participle formation, atypical use of 'be+infinitive', unmarked third person singular verbs and ignorance of rule-restrictions on tense-sequence. Haded suggested that much further research is required in order to replicate his study and also to verify whether error analysis alone is an effective tool to help teachers teach a foreign language to students with a different language background.

Based on the aforementioned research findings, it can be seen that error analysis has been useful and effective in discovering learners' errors and explaining the causes of those errors. Most learners' errors fell into two main categories, namely syntax and lexicon. The dominant source of errors was L1 interference. Intralingual errors were mainly caused by overgeneralisation and ignorance of rule restrictions. It was suggested that effective approaches to eliminate errors are guided discovery and raising learners' awareness of distinctions between their native language and the target language, and also clarifying their conception of the target language.

In the Thai context, there are several studies on errors made by university-level students learning English. Some studies focused on types of errors (Charas Ubol,

1981; Preeya Teerawong et al, 1982). Other studies identified types and sources of errors made by learners (Suphat Sukamolsun, 1980; Suttirat Rujikiatgumjorn and Somchoen Chiewkul, 1987; Suwannee Lukanavanich, 1988; Bamrung Torut, 1997; Lush, 2002). Interestingly, there is one study on learners' ability in using error analysis techniques to analyse grammatical errors in writing (Yaowaret Ketkaew, 2000).

Charas Ubol (1981) studied types of errors found in English composition and translation written by first and third year students at Prince of Songkla University, Pattani Campus. The findings were divided into three main categories: 1) grammatical or structural errors, 2) lexical errors, and 3) errors of style. He also found that third year students produced fewer errors than first year students and this was evidence of the students' progress in learning the language.

Preeya Teerawong et al (1982) aimed to investigate the English writing proficiency level of first year students at Chulalongkorn University and analyse their errors. They also developed a set of remedial materials based on these students' errors and evaluated these materials. The subjects of the study were 730 students randomly selected from twelve faculties and then classified into three groups by cluster sampling. The first experimental group took a pre-test, studied the remedial materials and then took a post-test. The second experimental group studied the remedial materials and took a post-test. The control group took only a post-test. A 21-item writing proficiency test was constructed and used as a research instrument. The results showed that the level of writing proficiency of the students was low. The main types of their errors were sentence arrangement, punctuation usage, and grammatical structure usage.

While the focus of the studies reviewed above was on types of errors made by the learners, some studies attempted to examine both types and sources of learners' errors. These studies are reviewed below.

Suphat Sukamolsun (1980) conducted a comparative study on some syntactic errors made by ten first and ten third year Thai teacher college students learning English. In the middle of a semester, they were asked to write three short stories by means of completing three passages according to three sets of pictures given. The results showed that seven types of syntactic errors occurred with high frequency. These were: 1) articles, 2) verb agreement, 3) tense agreement, 4) tenses, 5) parallelism of verb forms, 6) perceptive verb usage, and 7) infinitive with to. He found that the errors were mainly from three sources: 1) overgeneralisation, 2) false concepts hypothesised, and 3) language transfer.

Suttirat Rujikiatgumjorn and Somchoen Chiewkul (1987) examined the most frequent syntactic and lexical errors made by 250 first year students at Konkaen University in composition and translation. The errors were classified into two types: 1) interlingual errors, 2) intralingual and developmental errors. The results were divided into the following areas: 1) articles, 2) tenses, 3) verb forms, 4) prepositions, 5) 3rd person inflection, 6) comparative constructions, 7) hypothetical: past perfection, 8) negation-tag clause, and 9) spelling. Insufficient lexical knowledge led to the errors of overgeneralisation, ignorance of rule restrictions, incomplete application of rules and building of false concepts. They also stated that syntactic errors might result from inadequate learning and the complexity of English structure. They concluded that the errors made by the students were both from interlanguage and mother tongue interference, although the latter was reflected in only a small proportion of the errors.

Suwannee Lukanavanich (1988) studied the types of errors made by 256 first year students at Bangkok University. The subjects were required to write a composition of 150-200 words within sixty minutes. The students made grammatical or structural errors, lexical errors and stylistic errors. The most frequent type of errors were grammatical (tense, determiner and agreement). She found that most of the

errors were due to ignorance of rule restrictions, mother tongue interference, incomplete application of rules, overgeneralisation and false concepts hypothesised.

Bamrung Torut's (1997) study analysed errors in the free-writing compositions of 132 first year students who were studying English in the Faculty of Education of Silpakorn University. Errors made by the students were identified and grouped according to the four main linguistic components: 1) grammatical morphemes, 2) syntax, 3) lexicon, and 4) orthography. Errors with respect to grammatical morphemes occurred most frequently. The top five categories of the errors in this area were tense errors, article errors, preposition errors, adverb errors, and errors in the use of determiner-noun agreement respectively. Syntactic errors included word order errors, ill-formed sentence errors, compound sentence errors, complex sentence errors, and passive voice errors. As for lexical errors, they were grouped into four categories: overgeneralisation of the use of one translation equivalent, literal translation, divergences, and overuse of a few general words. Possible sources of lexical errors were the students' limited knowledge of English vocabulary and their technique of literal translation from L1 to L2. Orthographic errors were categorised into three groups: punctuation errors, capitalisation errors, and spelling errors. The sources of these errors were: 1) students' insufficient knowledge of sound-letter correspondence, 2) the inconsistency of the English spelling system, and 3) students' carelessness and handwriting habits. Bamrung Torut (1997: 78) suggested that "teaching writing should not be concerned with only mechanical writing (such as an emphasis on grammar points), but training students to develop, organise, and express ideas in well written forms. The writing process in the classroom, therefore, should begin with the forming of ideas. Mechanical error corrections such as on grammatical morphemes should be taught as remediation. They should not be taught separately as part of the grammar course."

Recently, Lush (2002) investigated the types and sources of errors in English essays of third year undergraduate students at Thammasat University. He discovered that the five main categories of grammatical errors were misuse of definite and indefinite articles, singular and plural nouns, incorrect tense, subject-verb agreement, and use of prepositions. He also found that most of these errors were self-corrected when they were highlighted in one-to-one feedback sessions. These errors were caused by L1 interference, i.e. students used their knowledge of Thai grammar to write English essays. He suggested that it is necessary for Thai students to be exposed to English grammatical usage through supplementary analysis of authentic materials and additional writing practice. In addition, one-to-one student feedback is also helpful in overcoming these common errors in student writing.

It should be noted that all the aforementioned research on error analysis was conducted by teachers or researchers. However, students are also able to make use of error analysis. Yaowaret Ketkaew (2000) conducted a study to investigate to what extent students reflected on the use of analysis of grammatical errors in writing. The subjects were six students who were studying in Mattayomsuksa 4 at the Islamic College of Thailand, Bangkok. They were trained to correct grammatical errors in four sets of material using the step-by-step technique of providing cues. At the beginning the cues were given at the word level, then at the line level, then at the paragraph level, and finally no cues were given. The results of the study showed that the students benefited from using this kind of error analysis technique. They were able to improve their ability to correct errors. In addition, this technique helped make them aware of the use of their language. As for the process of students' analysing errors, it was found that various strategies in detecting errors were employed. The students also had a positive attitude towards the use of error analysis. However, they faced some problems in analysing errors. For example, they were often not sure which word was wrong or they did not know the meaning of some words, and consequently they could

not correct such errors. The main causes of their mistaken corrections were: 1) their inability to identify or locate the position of the errors, 2) insufficient linguistic knowledge, and 3) an inability to understand the meaning contextually from the sentence and/or the story.

The studies conducted in the Thai context reviewed above revealed that learners frequently made grammatical and lexical errors in their writing. Interestingly, the prominent sources of their errors were overgeneralisation, ignorance of rule restrictions, incomplete application of rules, and the complexity of the target language. Also, L1 interference was the cause of certain types of errors. Besides, it was found that error analysis was useful not only for teachers, but also for learners who employed error analysis by themselves. They were able to improve their ability to correct their peers' errors and this made them aware of their own language use.

Based on the review of all aforementioned research, three observations can be made. First, language learners both in the Thai and non-Thai contexts made a large number of errors in writing. Most of their errors were syntactic and lexical errors. The main sources of errors were overgeneralisation, the complexity of the target language and L1 interference. Second, most of the studies reviewed above identified types and sources of errors in learners' writing. However, very few studies attempted to identify and examine students' errors in terms of the degree to which they result in communication breakdown. Third, compositions were used in most of the studies as a research instrument. This is probably because they produce more different types and sources of errors than other types of tests do such as multiple choice or cloze tests. According to Brown (1980; cited in Bamrung Torut, 1997: 73), "compositions can provide a broad sample of linguistic abilities that may be derived from their linguistic repertoire." In support of this idea, Webber (1981: 29) states:

It is evident that errors may occur in the productive or receptive mode of the written or spoken medium. Collecting errors from both media and modes is possible; however, it is easiest to collect them from written texts. Obviously, these will not yield all the errors a learner is making; nevertheless, I believe that the majority of grammatical errors, some lexical and semantic errors, and even, through faulty spelling, some phonetic errors, can be thus recorded.

To summarise, error analysis research is considered effective in investigating different types and causes of students' errors in written works. However, none of the previous studies on error analysis in the Thai context attempted to identify and examine students' errors in terms of the degree to which they cause a breakdown in communication. To be specific, none of the studies paid attention to the distinction between global and local errors. This study, then, aims at first analysing different types and frequency of global and local errors found in students' written works, and takes the further step to analyse the comprehensibility of these written works based on the different types of error. Such information can be useful in attempts to identify the types of errors which make students' written works incomprehensible and, thus, impair communication.