



# Cohesion and Coherence In Text

*Supong Tangkiengsirisin*

*Language Institute, Thammasat University*

## ABSTRACT

This paper provides a general overview of “cohesion” and “coherence”, two essential elements that facilitate textual continuity. The article begins with the presentation of different views and definitions of the two terms. Subsequently, cohesion and coherence are discussed in terms of their use in written texts. The following section provides a review of research studies on cohesion and coherence. The article ends with a discussion of the role that cohesion and coherence play in texts. Pedagogical implications are also provided.

The terms “cohesion” and “coherence” are defined differently by different linguists. For some, the two terms are interchangeable or imply each other; for others they are independent of one another. This paper presents various points of view regarding cohesion and coherence in text and provides a review of research studies on cohesion and coherence in writing.

**Keywords:** Cohesion, Coherence, Linguistics, Writing

## DIFFERENT VIEWS ON COHESION AND COHERENCE

The concept of “cohesion” was introduced by Halliday and Hasan (1976), whose major concern is to investigate how sentences are linked in a text.

For them, the various parts of a paragraph are connected together by cohesive ties:

*A text has texture, and this is what distinguishes it from something that is not a text... If a passage of English containing more than one sentence is perceived as a text, there will be certain linguistic features present in that passage which can be identified as contributing to its total unity and giving it texture (2).*



According to Halliday and Hasan (1976), the writer is able to hold together meanings in the related sentences in a number of ways, and cohesion is created to establish the structure of meaning. They also claim that cohesion is a factor that indicates whether a text is well-connected or merely a group of unrelated sentences. It should, however, be noted that though involved with meaning between sentences, cohesion does not deal with content of a text. Halliday and Hasan (1976) explicitly state that “cohesion does not concern what a text means; it concerns how the text is constructed as a semantic edifice” (26). That is, although cohesion usually plays a role in a paragraph, it does not lead to the global flow of a text across paragraphs.

While cohesion is perceived as the overt linguistic signal between propositions, coherence is viewed by Widdowson (1978) as the relationship between illocutionary acts. The utterances are not considered coherent unless the actions performed by the utterances are recognised. Discourse involves the context and needs to be interpreted through the understanding of discourse structures and the use of many strategies; for example, to comprehend discourse, we interpret the discourse assuming that if one thing is said after another, the two things are related in some way.

Coherence can be regarded as a connection between utterances with discourse structure, meaning, and action being combined (Schiffrin, 1987). In Schiffrin’s view, cohesion is available in various types of discourse and can be identified as a tool of communication completed by interaction between the speaker and the hearer, such as question/answer pairs (9). To Schiffrin, cohesive devices are clues that help locate meanings and accommodate the understanding of a conversation. Discourse coherence, therefore, is dependent on “a speaker’s successful integration of different verbal and nonverbal devices to situate a message in an interpretive frame and a hearer’s corresponding synthetic ability to interpret such cues as a totality in order to interpret that message” (39). With regard to coherence, discourse markers are part of participants’ linguistic tools that facilitate oral communication and are both verbal and nonverbal features for the participants who “jointly integrate forms, meanings, and actions to make overall sense of what is said” (39). Schiffrin



(1987) also points out that arguments may be organised without discourse markers. She proposes that markers are not compulsory when a conversation moves on within their contexts and “the potential meaning relationship between them is already constrained” (319). The semantic relations of propositions are usually adequately clear for listeners or readers to identify the meanings held between two discourse units without the presence of markers.

Blakemore (1987) describes discourse as “the linguistic form of the utterance, contextual assumptions and the assumption that the speaker is being relevant” (44). According to Blakemore (1987, 1992), to understand an utterance requires two processes. The explicit process involves establishing what proposition the utterance has actually expressed, and the implicit process involves establishing extra proposition. From his viewpoint, the relevance theory is comprehensive and can account for cases where a hearer’s interpretation is not actually based on the proposition expressed, but rather on the non-linguistic features or contextual features. Blakemore also points out those daily utterances are often elliptical; that is, a complete proposition derived from isolated utterances such as “Any e-mail?” in an everyday conversation is recoverable and interpretable by hearers. Discourse coherence directly interacts with a hearer and is not evidence for the presence of discourse markers. From her point of view, utterances can be comprehended when the speaker makes coherence in a text become relevant to the hearer, and the hearer assumes that the speaker is being relevant. In such a case, the hearer or reader is given considerable responsibility for interpretation from the speaker or writer.

Coherence may be treated as a “semantic property of discourses, based on the interpretation each individual sentence relative to the interpretation of other sentences” (Van Dijk, 1977: 93). Coherence between sentences, in van Dijk’s point of view, is “based not only on the sequential relation between expressed and interpolated propositions, but also on the topic of discourse of a particular passage” (95). Cohesion does not lead to coherence, but coherence does not suffice to make a text coherent while there must be some additional linguistic property (like



cohesion) that makes a text coherent. The two levels of coherence include micro-coherence, which is the linear or sequential relations between propositions, and the macro-coherence, the global or overall coherence of a discourse in terms of hierarchical topic progression.

Enkvist (1978) distinguishes between two types of semantic connection: (1) connection through cohesion in the surface level and (2) connection through coherence in the profound level. In this instance, cohesion and coherence do not imply each other. It is, therefore, possible that a text can be cohesive but not coherent and vice versa; and it is also possible that a text is both cohesive and coherent.

For example,

(1) *Have you met Virasuda Sribayak? She was here yesterday.*

The two sentences in item (1) are related through the pronoun *she* and there is also a semantic relation between them. That is, they are both cohesive and coherent. In item (2) below, there are no cohesive elements but it is semantically coherent. Therefore, it is coherent without being cohesive.

(2) *Liverpool shot a goal. The whistle blew.*

Item (3) is cohesive but not coherent. It contains the cohesive element *him* but it is not pragmatically appropriate.

(3) *My grandfather died. I shall see him tomorrow.*

A text must have surface cohesion as well as overall coherence, and sentences in a coherent text must “conform to the picture of one possible world in the experience or imagination of the receiver” (Enkvist, 1978: 126), and a message must provide adequate signals for the listener or the readers to make connections for the understanding of a text.

Enkvist (1990) defines coherence as “the quality that makes a text conform to a consistent world picture and is therefore summarisable and interpretable” (14), and coherence is primarily related to the nature and property of the text. Like Enkvist,



Brown and Yule (1983) believe that coherence depends primarily on the interpretation of linguistic messages. As a result, the listener or the reader will try to interpret a sequence of sentences as being coherent, even when there is no explicit cohesive element to signal a relationship:

*Within chunks of language which are conventionally presented as texts, the hearer/reader will make every effort to impose a coherent interpretation, i.e. to treat the language thus presented as constituting “text”. We do not see an advantage in trying to determine constitutive formal features which a text must possess to qualify as a “text.” Texts are what hearers and readers treat as texts. (199)*

Lovejoy and Lance (1991), in their study of written discourse, show that cohesion can be achieved through the operation of theme-rheme. This movement represents how information is managed. According to Lovejoy and Lance, *theme* is “the ‘point of departure’ for the presentation of information,” and *rheme* “constitutes the information the writer wishes to impart about the theme” (256). These two elements are presented alternatively in a text to form a connected text. While *theme* conveys information that is initially introduced in discourse, *rheme* presents specific information regarding the theme. As this movement continues, ideas in a text or discourse are expected to flow along smoothly and are easier for the reader to understand. While old information (theme) is presented as background information in each statement, new information (rheme) is introduced to clarify the information in the theme.

There are also other views regarding cohesion and coherence. Morgan and Sellner (1980) emphasise the role of content within a text, where cohesion is concerned with content but has some linguistic consequence. Carrell (1982) also contends that cohesion does not bring about coherence, for “mere coherence of content does not suffice to make a text coherent” while “there must be some



additional linguistic property (like cohesion) that makes a text coherent” (482). Cohesion is therefore the effect and not the cause of coherence. Relying on schemata, readers can themselves perceive coherence even in discourse that contains very few cohesive elements or none at all.

From a textual perspective, Hoey (1991) examined how lexical cohesive elements would make a text organised. He examined how lexical features and syntactic repetition would contribute to cohesion. His study is focused on the text organisation which can be achieved through the inter-relationship between cohesion and coherence. Within this general framework, cohesion is regarded as an element that accommodates coherence. When a text is cohesive and coherent, it will enable the reader to process information more rapidly. Hoey claims that “cohesion is a property of the text and coherence is a facet of the reader’s evaluation of a text” (12).

According to Hoey (1991), lexical repetition as a major cohesive device constructs a matrix and creates a net of bonds in the text. He proposes that lexical repetitions can show the relatedness of the sentences within the texts. He classifies lexical repetitions into eight types: *simple lexical repetition*, *complex lexical repetition*, *simple mutual paraphrase*, *simple partial paraphrase*, *complex paraphrase*, *substitution*, *co-reference* and *ellipsis*.

*Simple lexical repetition* is identified by a link between two lexical items, the first of which is repeated in a subsequent sentence without great change in form. However, *complex lexical repetition* is identified by a repetitive link between two lexical items that, though sharing a morpheme, are not totally identical or that are identical with different grammatical functions. *Simple paraphrase*, whether mutual or partial, is identified by a link between two lexical items, one of which can substitute for another. *Complex paraphrase* refers to two lexical items which are related to one another without sharing a lexical morpheme (e.g. antonym).

Johns (1986) divides coherence into two types: text-based and reader-based. By her definition, text-based coherence refers to an inherent feature of the text,



which involves cohesion and unity. This type of coherence involves how sentences are linked and how text is unified. Reader-based coherence, on the other hand, requires successful interaction between the reader and the text. In this type, coherence is based on the degree of compatibility between the reader's expectations and the intended meaning through the underlying structure of a text.

Connor and Johns (1990) describe coherent text "as text in which the expectations of the reader are fulfilled" (1). The reader uses his or her knowledge of the world to interpret a text, expecting that his or her knowledge will correspond to the organisation and argument of a text. The reader relies on this kind of knowledge to anticipate information that will be subsequently presented. Interacting with the reader, a coherent text accommodates the reader's expectation of sequential logical ideas, contributing to the reader's comprehension and the clear meaning of a text. By the same token, as logical ideas are presented through well connected words and sentences, the writer helps the reader interpret and process information in a text more easily (Tannen, 1984).

Although the study of discourse topic is an unwieldy area, it constitutes an important aspect of cohesion and coherence as a hierarchical organisation of the discourse. Lautamatti (1987) has examined how the reader is able to understand a text and the discourse theme or topic. Coherence, according to her, is based on a clear sentence topic. Using the terms *topic* and *comment*, she proposed an approach to the analysis of textual flow.

Lautamatti (1987) defines the term *topic* as what the sentence is about and the term *comment* as information about the topic. All sentence topics are related in certain ways to the global discourse topic of the text. The patterns of relations between discourse topics, and subtopics are called *topical development of discourse*. This development is represented as three types of progressions: (1) parallel progression, with the identical topics in the subsequent sentences; (2) sequential progression, with the comment of the preceding sentence becoming the topic of a new one; and (3) extended parallel sequence, representing a parallel progression that is interrupted by sequential progression.



Grabe (1985) also examined the characteristics of coherence, claiming that coherence establishes the relationship between propositions leading to the overall theme. He proposes the pragmatic function of coherence. He identifies three features that are essential to coherence: a discourse theme, a set of relevant assertions relating logically among themselves by means of subordination, coordination, and superordination; and an information structure imposed on the text to guide the reader in understanding the theme or the purpose of the author.

Givón (1983) has achieved the most outstanding results in the study of topic continuity. He proposes a three-level framework for topic continuity: *thematic continuity*, *action continuity*, and *topics/participants continuity*. He suggests the study of *referential distance*, *topic persistence* and *potential interference*. However, Functional Sentence Perspective (FSP) provides another theoretical framework for studying the management of information flow and the organisation of discourse. Most Functional Sentence Perspectivists hypothesise that the primary communicative function of the topic expresses the given information in a sentence. Such information is closely related to preceding sentences. On the other hand, the comment primarily expresses the new information. Such information is not expressed in or derived from prior sentences. The information flow, therefore, moves from topic to comment, reflecting the movement of the mind because it processes information most effectively if given information or background information precedes new information.

Accordingly, theorists of FSP are concerned with the analysis of the sentence into parts that have a function in the total communication process. For instance, an English sentence is often considered to involve topic and comment. The sentence topic often correlates with the grammatical subject and the comment often correlates with the grammatical predicate, which bears the sentential focus. A discourse that correlates with FSP should be more readable and cohesive than one that fails to observe FSP. Connections between themes involve series of sentences regarding identity chains, partial identity, synonymy, antonymy, hyponymy and meronymy. Connections between rhemes involve the repetitions of identical





propositions in adjacent sentences. While patterns of theme and rheme connections can account for only some part of a text, diversity of patterns deal with an entire text. Additionally, whereas the framework of a theme and rheme connections characterise patterns within text types, coherence in contextual genres is not accounted for in different text types. The theme and rheme approach fails to deal with coherence in various contextual and propositional situations.

However, the theory of cohesive ties introduced by Halliday and Hasan (1976) was modified into a theory of cohesive harmony (Hasan, 1984; Halliday & Hasan, 1989). Due to the limitations of the use of cohesive ties to analyse texts as coherent and well-written, Hasan (1984) formulated a new theory to account for the fact that cohesion contributes to coherence. In her new approach, coherence is not determined by the type and quantity of cohesive ties that appear in a text, but it is mainly characterized by the degree and frequency with which these ties interact with each other. According to this theory, there are two cohesive ties which can interact with each other: those that form identity chains, expressed through the use of pronominal cohesion and those that form similarity strings, expressed through substitution, ellipsis, repetition, synonymy, antonymy, hyponymy, and meronymy. Interaction does occur when one member of a string or a chain is in the identical relationship to more than one member of another string or chain. For instance,

(4) *Matthew could no longer work here. He skipped a lot of work.*

Item (4) presents two sentences which are connected by a cohesive tie established between a proper noun, or an antecedent, and pronoun reference. Hasan considers such interaction between chains and strings *cohesive harmony*. This type of interaction is realised through the relationship between participants and actions expressed in sentences. The chain in the example above represents the semantic relation of participants (the antecedent and the pronoun reference) and a string connects the actions in the two sentences. In this context these two



propositions can be considered hyponymous (one is an instance of the other). The chain and string in item (4), therefore, interact through the semantic relation of *material processes* (*work* and *skipped*) and *actors* (*Matthew* and *he*). Items that involve or represent interaction between a chain and a string are considered as central tokens though there are other sentence elements that do not produce chains. Hasan proposes that the higher the proportion of central to non-central tokens, the more coherent the text is likely to be.

## COHESION AND COHERENCE IN WRITING

Differences between spoken and written language would provide a justification for the importance of cohesion in writing. According to Chafe (1982), writing is generally produced under basically different assumptions from those of speaking. Whereas speaking typically occurs in a face-to-face interactive situation, writing is typically performed in “social isolation” (Chafe, 1982) Academic writing, in particular, is usually produced in accordance with certain conventions that differentiate the two language skills. Based on this difference, Chafe characterised speaking as “involvement” and writing as “detachment”. These two concepts primarily address the speakers’ and writers’ relationships to their audience. Chafe explained such relationships as follows:

*The speaker is aware of an obligation to communicate what he or she has in mind in a way that reflects the richness of his or her thoughts—not to present a logically coherent but experientially stark skeleton, but to enrich it with the complex details of real experiences—to have less concern for consistency than for experiential involvement. The situation of the writer is fundamentally different. His or her readers are displaced in time and space, and he or she may not even know in any specific terms who the audience will be. The result is that the writer is less concerned with experiential richness, and more concerned with producing something that will be consistent and defensible when read by different people at different times in different places (45).*



The essential features of a well-written text are the unity and connectedness, making the individual sentences in the text “hang” together and relate to one another (Celce-Murcia & Olshtain, 2000). This textual relationship is partially a result of coherent organisation of the propositions and ideas presented in writing. In addition, this relationship significantly depends on the painstaking process the writer goes through in order to create formal and grammatical cohesion among paragraphs and among sentences in each paragraph (Cornbleet & Carter, 2001). Therefore, the writer can strengthen coherence, and create global and local unity by employing various devices.

The overall coherence of a longer text depends on the coherence within each paragraph or section of the text. (Celce-Murcia & Olshtain, 2000). In expository writing, coherence is an essential feature that links ideas or information in different parts of the text so that the reader can understand the entire text more easily. Each sentence in this type of writing is related to both previous and subsequent sentences. In addition, the purpose and the intended audience of an expository text also play a crucial role. For example, a text focusing on the latest developments in biology might take a different form depending on whether it is intended to be included in a popular magazine, a biology textbook, or a scientific journal. Each of these text types follows certain writing conventions; that is, while a popular magazine is intended to convey information to the public in general, a biology textbook and a scientific journal are intended for students who are being introduced to the subject area and scientists who are specialised in the field, respectively. Therefore, coherence can create a logical progression in a text so that the reader can comprehend the text through the connectedness among the propositions presented in the text while relating the information in the text to his or her own knowledge of the world.

In Harris’s (1990) study on textual coherence, the organisational functions fulfilled by opening sentences of paragraphs in scientific writing were investigated. Opening sentences were analysed and classified into five different groups: sentences which announce or identify the main topic of a text, those that state a fact or define the main topic of a text, those discussing similarities or differences in regard to the main scientific element discussed in the writing, those that identify a significant previous event, and finally those which point out a false assumption or the lack of evidence for understanding some phenomenon. According to Harris (1990), all these opening sentence types play a role in organising ideas or information in a paragraph,



and in some scientific paragraphs there tend to be two sentences that organise ideas or information—the opening sentence and another one that logically follows the opening sentence. All types of opening sentences help the reader read or browse through an easier and more effective interpretation process. Showing consideration for the reader, a skilled writer uses such opening sentences for clearer communication.

### 3. Research Studies on Cohesion and Coherence in L2 Writing

The existing dichotomy between cohesion and coherence is evident in the conflicting results reported in studies which investigated these two constructs and attempted to integrate them into a unified theory to account for writing quality. For example, Tierney and Mosenthal (1983) analysed the correlation between coherence scores and the number of cohesive ties used in compositions written by ESL students. The participants, who were enrolled in rhetoric classes, were randomly provided with two different scenarios and subsequently were assigned to write two essays. In the first writing scenario which was more familiar, the participants watched a film on a writer before writing essays, whereas the participants in the other writing scenario which was unfamiliar watched a film on another writer before writing a biographical essay and developing the theme of evil in an essay. The participants were provided with the outlines to follow in writing essays. The purpose for this provision was to control the content and the structure of the written work. After that, three teachers holistically rated the essays and subsequently ranked them on the basis of coherence. The results, which were derived from the statistical analysis that was used to compare the rankings of coherence in the essays and the use of cohesive devices in the two scenarios and on the two different writing topics, revealed no significant interaction effect regarding the use of cohesive devices although a significant interaction was gained for coherence rankings. As there was no causal relationship between cohesive ties and coherence rankings, cohesion analysis was considered to be a poor index of coherence or writing quality.

In another study, Connor (1984) examined the difference in the cohesive density in argumentative essays composed by two English native speaking writers and two advanced ESL writers (whose mother tongues were Japanese and Spanish). The participants were asked to write expository essays. Two L1 English postgraduate students holistically rated the six essays for coherence and reached 100% agreement in their ranking. The essays were analysed in terms of the percentage of occurrences



of cohesive devices they contained. Connor found that being cohesive, ESL texts might not be coherent, and that there was no difference in cohesive density (reference or conjunction) in essays composed by the English native speaker student and the ESL students. These results, however, contradict Witte and Faigley's (1981) findings that show differences in the frequencies of grammatical cohesive devices in good versus poor essays, but support Tierney and Mosenthal's (1983) conclusion that cohesive density did not discriminate levels of coherence in writing. In addition, Connor suggested that ESL essays lacked lexical variety and elaboration, and a high percentage of repetition and conjunction were used. On the other hand, L1 English texts exhibited greater lexical variety with a higher percentage of collocation and less repetition.

McCulley (1985) investigated the connection between cohesion and writing quality in his analysis of 120 argumentative essays composed by high school students. In this study, he attempted to find out whether there existed a correlation between primary trait ratings of writing quality, coherence ratings based on a scale provided by National Assessment of Educational Progress (NAEP) in 1978-1979, and the use of cohesive devices in the student essays. Each essay was analysed in terms of cohesion by two coders using Halliday's and Hasan's (1976) taxonomy, and it was also rated on the basis of writing quality by two full-time teachers from the English Department. With a high level of interrater reliability regarding both cohesion and writing quality, the results obtained from the statistical analysis revealed that writing quality did not correlate with the total number of cohesive ties used in the essays. However, there was positive correlation between writing quality and the NAEP coherence rating, and between writing quality and specific cohesive ties including demonstratives, nominal substitution and ellipsis, repetition, synonymy, hyponymy and collocation.

It was obvious that McCulley (1985) attempted to resolve the conflicting results obtained by Witte and Faigley's (1981) and those obtained by Tierney and Mosenthal's (1983) and Connor (1984). The significant differences he obtained from his study suggested that, with an adequately large sample size, and cohesion analysis was conducted at the finest level of analysis, significant differences between good versus poor essays would be revealed. The results of his study also revealed that certain cohesive ties (e.g. demonstratives, nominal substitution and repetition) contributed to the positive assessment of writing quality, and suggested that lexical cohesive devices primarily made a more important contribution to coherence.



Neuner (1987) analysed twenty good essays versus twenty poor essays written by college freshman students. The essays, which were produced after instruction and practice, were of the expository mode and were randomly selected from a larger set of essays. Each of the selected essays was holistically rated by two readers, and cohesion analysis was conducted by three coders on each essay. *T*-tests were used to analyse the statistical distinction between the good essays and poor essays in terms of the use of cohesive devices, cohesive distance and chain length. Results revealed that the frequency or percentage of cohesive ties did not correlate with writing quality, and there was no significant difference in cohesive distance between good and poor essays. Longer cohesive chains, greater lexical variety, and effective word choice were essential features of well-written essays. The results obtained from Neuner's (1987) study account for the lack of difference in cohesive density in good versus poor essays.

In another study, Field and Oi (1992) compared the use of conjunction in argumentative essays composed by Australian high school students and Cantonese high school students. The essays were not rated for coherence or writing quality. *T*-tests were used to analyse the distinction in the use of conjunction in the essays composed by English native speaker students and non-native speaker students. Results showed that the L2 English essays contained significantly more conjunctions than did the L1 English texts. This finding contradicts Connor's (1984) finding that there was no significant difference in the use of cohesive devices in L1 in comparison to L2 texts.

Johnson (1992) analysed the use of cohesion in sixty essays. Twenty were written in L1 Malay, twenty in L1 English and twenty in Malay ESL. Two native English readers and one L1 Malay reader rated the essays written in English; one L1 English reader and one L1 Malay reader rated the essays written in Malay. *T*-tests were used to analyse the distinction in the use of cohesive devices and cohesive distance between the good essays and the poor essays. Results showed that there was no significant difference in the degree of cohesion or cohesive distance between the good essays and the poor essays. Additionally, results revealed that the good L1 Malay essays contained more cohesive devices used for repetition than the poor



ones. This finding advocated McCullen's (1985) conclusion that writing quality correlated with the use of repetition in expository essays. Also, it was found that more tokens of referential ties and conjunctive ties were located in well-written native English essays suggesting that there were differences in the use of cohesive devices with regard to specific types of cohesive ties. The result of Johnson's (1992) study indicated that good and poor essays might be similar in terms of the frequencies of cohesive devices but differ significantly in terms of specific types of cohesive devices they contained.

Norment's (1994) study analysed 126 expository and narrative essays written in L1 Chinese and Chinese ESL in terms of the use of cohesive devices. The participants consisted of high-proficiency and low-proficiency writers divided up into groups according to their scores on the essays produced within a four-week period. The L1 Chinese and Chinese ESL essays written by L1 Chinese college students were randomly selected and rated by three L1 Chinese and three L1 English doctoral students who received training on rating essays. Frequencies and percentage of occurrences of cohesive devices and ANOVA were used to analyse the data. With a high level of interrater reliability, results showed that high-proficiency students (both Chinese and English) used more cohesive devices in their writing; the most frequently occurring cohesive devices were repetition, pronouns and conjunction.

In the most recent study, Lee (2002) conducted a classroom inquiry in which she provided instruction of coherence to first-year students at the Hong Kong Polytechnic University. The participants completed the pre- and post-revision tasks which were analysed in terms of cohesive devices, information structure, topical development, propositional relations, macrostructure and metadiscoursal features. Four out of the 16 participants conducted six protocols while they were revising their drafts. The protocol data were translated, transcribed and coded with the coding scheme that contained categories including the coherence topics covered in the lessons and any other topics that arose from the data (i.e. purpose, main idea, audience, context of situation, macrostructure, information distribution, propositions,



cohesion, metadiscourse, content, language use, syntax, mechanics and length). Inter-coder agreement was conducted with 90% agreement being reached. All the 16 students were also asked to complete an evaluation questionnaire at the end of the study to assess the instruction of coherence throughout the course. A group interview was conducted with the four students selected for in-depth protocol analysis to find out their views regarding the teaching and learning of coherence and writing.

In Lee's (2002) study, results revealed all positive findings from all types of data: product, process and perception data. Firstly, regarding the product data, based on the findings from topical structure analysis, in post-revision texts, the participants elaborated on the sentence topics more than the pre-revision texts and produced coherent writing. The results of the independent readers' judgments of the pre- and post-revision drafts also suggested that the participants improved the overall coherence after revisions. Secondly, based on the findings from the protocol data, the results suggested that during the study, the participants were concerned with coherence during revision and attended to the various aspects of coherence taught prior to revisions. Finally, based on the findings from the perception data, the results showed that the participants apparently had developed a better understanding of writing and felt that the teaching of coherence had provided them with resources useful for their writing.

All in all, a study of cohesion and coherence, though theoretical in nature, can provide significant insights for applied linguistics, especially in language teaching. Despite drawbacks and criticisms, cohesion is a useful tool to encourage second language learners to produce texts that are well connected and coherent. Cohesion and coherence can help student writers to avoid producing a discursive or unorganised text. Because most non-native student writers are quite concerned about grammar and syntactic errors in their writing, the teaching of cohesion and coherence will enhance their understanding that writing a text is not simply writing with syntactic accuracy. They should develop awareness towards writing as a means of communication and, through explicit instruction, teacher feedback and essay revision, learn to craft reader-based, well-organised prose. Lessons on cohesive ties and other features promoting textual coherence can raise students' consciousness and give





them insights into how they can express their thoughts with clear directions and create their text in an effective manner. Then instruction and feedback focusing on these elements will encourage and consolidate L2 students' learning of cohesion and coherence, and through the revision process, students should be able to improve their writing skill and the coherence of their texts.

## REFERENCES

- [1] Blakemore, D. (1987). *Semantic Constraints on Relevance*. Oxford: Blackwell.
- [2] Blakemore, D. (1992). *Understanding Utterances*. Oxford: Blackwell.
- [3] Brown, G. and Yule, G. (1983). *Discourse Analysis*. Cambridge: Cambridge University Press.
- [4] Carrell:L. (1982). Cohesion is not coherence. *TESOL Quarterly*, 16 (4), 479-488.
- [5] Celce-Murcia, M., and Olshtain, E. (2000). *Discourse and Context in Language Teaching: a Guide for Language Teachers*. NY: Cambridge University Press.
- [6] Chafe, W.L. (1982). Integration and Involvement in Speaking, Writing, and Oral Literature. In Tannen (Ed.), *Spoken and Written Language: Exploring Orality and Literacy*. NJ: Ablex.
- [7] Connor, U. (1984). A study of cohesion and coherence in English as a second language students' writing. *Papers in Linguistics*, 17, 301-316.
- [8] Connor, U., and Johns, A.M. (1990). *Coherence in Writing*. VA: Teachers of English to Speakers of Other Languages.
- [9] Cornbleet, S., and Carter, R. (2001). *The Language of Speech and Writing*. London: Routledge.
- [10] Enkvist, N.E. (1987). Text Linguistics for the Applier: An Orientation. In U. Connor and R.B. Kaplan (Eds.), *Writing across Languages: Analysis of L2 Text* (pp. 23-44). Reading, MA: Addison Wesley.
- [11] Enkvist, N.E. (1990). *Seven Problems in the Study of Coherence and Interpretability*. In U. Connor and A.M. Johns (Eds.), *Coherence in writing: Research and Pedagogical Perspectives* (pp. 11-28). Alexandria, VA:TESOL.



- [12] Field, Y., and Oi, Y.L.M. (1992). A comparison of internal conjunctive cohesion in English essay writing of Cantonese speakers and native speakers of English. *RELC Journal*, 23, 15-28.
- [13] Givon, T. (1983). Topic Continuity in Discourse: An Introduction. In T. Givon (Ed), *Topic Continuity in Discourse: A Quantitative Cross-Language Study* (pp.1-41). Amsterdam: John Benjamins.
- [14] Grabe, W. (1985). Written Discourse Analysis. In R.B. Kaplan (Ed.), *Annual Review of Applied Linguistics* (Vol. 5, pp. 101–123). New York: Cambridge University.
- [15] Halliday, M.A.K. and Hasan, R. (1976). *Cohesion in English*. London: Longman.
- [16] Halliday, M.A.K. and Hasan, R. (1989). *Language, Context, and Text: Aspects of Language in a Social Semiotic Perspective*. Oxford: Oxford University Press.
- [17] Harris, D. P. (1990). The Use of “Organising Sentences” in the Structure of Paragraphs in Science Textbooks. In U. Connor and A.M. Johns (Eds.), *Coherence in Writing: Research and Pedagogical Perspectives* (pp. 196-205). Alexandria, VA:TESOL.
- [18] Hasan, R. (1984). Coherence and Cohesive Harmony. In J. Flood (Ed.), *Understanding Reading Comprehension* (pp. 181-219). Newark, DL: International Reading Association.
- [19] Hoey, M. (1991). *Patterns of Lexis in Text*. Oxford: Oxford University Press.
- [20] Johns, A.M. (1986). Coherence and academic writing: Some definitions and suggestions for teaching. *TESOL Quarterly*, 20 (2), 247-265.
- [21] Johnson: (1992). Cohesion and coherence in compositions in Malay and English. *RELC Journal*, 23, 1-34.
- [22] Lautamatti, L. (1987). Observations on the Development of the Topic in Simplified Discourse. In U. Connor and R. Kaplan (Eds.), *Writing across Languages: Analysis of L2 Texts* (pp. 87-114). Reading, MA: Addison-Wesley.
- [23] Lee, I. (2002). Teaching coherence to ESL students: a classroom inquiry. *Journal of Second Language Writing*, 11, 135-159.
- [24] Lovejoy, K.B. and Lance, D.M. (1991). Information management and cohesion in the study of written discourse. *Linguistics and Education*, 3 (3), 251–273.



- [25] McCulley, G.A. (1985). *Writing quality, coherence, and cohesion. Research in the Teaching of English, 19*, 269-282.
- [26] Morgan, J.L., and Sellner, M.B. (1980). Discourse and Linguistic Theory. In R.J. Spiro, B.C. Bruce, and W.F. Brewer (Eds.) *Theoretical Issues in Reading Comprehension* (pp. 165-200). Hillsdale, N.J.: Lawrence Erlbaum Associates.
- [27] Neuner, J.L. (1987). Cohesive ties and chains in good and poor freshman essays. *Research in the Teaching of English, 17*, 215-229.
- [28] Norment, N. (1994). Contrastive analyses of cohesive devices in Chinese and Chinese ESL in narrative and expository texts. *Journal of the Chinese Language Teacher Association, 29*, 49-81.
- [29] Schiffrin, D. (1987). *Discourse Markers*. London: Cambridge University Press.
- [30] Tannen, D. (1984). *Coherence in Spoken and Written Discourse*. NJ:Ablex.
- [31] Tierney, R., and Mosenthal, J. (1983). Cohesion and textual coherence. *Research in the Teaching of English, 17*, 215-229.
- [32] Van Dijk, T. (1977). *Coherence. Text and Context: Exploration in the Semantics and Pragmatics of Discourse* (pp. 93-129). London: Longman.
- [33] Widdowson, H.G. (1978). *Teaching Language as Communication*. Oxford: Oxford University Press.
- [34] Witte, S., and Faigley, L. (1981). Coherence, cohesion, and writing quality. *College Composition and Communication, 37* (1), 22-29.