

# An Analysis of Grammatical Cohesion in the Introductions of Master Theses from Yadanabon University

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## Abstract

In text construction, the principle component of resources is cohesion which ties words, phrases, sentences and paragraphs together to create a text. This research aims to analyse grammatical cohesion in the introductions of Master theses by Arts and Science students from Yadanabon University. The objectives are to explore the grammatical cohesion and categorize them into four types: reference, substitution, ellipsis and conjunction according to Halliday & Hasan (1976), to investigate which type is dominant and which type is the least used and to find out which group of the students uses grammatical cohesion more frequently. It is found that the use of reference is dominant and substitution is the least frequently used in their introductions of theses. The finding also reveals that the group of Arts students uses grammatical cohesion more frequently. As references are used most frequently, the message is clear and concise and the reader is easy to understand the main ideas of the writer. It is recommended that in teaching language, cohesion and coherence are needed to discuss and students are required to practice how to convey their ideas in structured writing. It is hoped that this research will help students use grammatical cohesion appropriately and effectively in their thesis writing to be a good thesis.

**Key words:** Grammatical cohesion: reference, substitution, ellipsis, conjunction

## 1. Introduction

In academic writing, cohesion is one of the important aspects. Cohesion ties words, phrases, sentences and paragraphs together, to create a text. According to Halliday and Hasan(1976),the concept of cohesion is a semantic one. It refers to relations of meaning that exist within the text, and that defines it as a text. Halliday and Hasan(1976) identify five different types of cohesion: reference, substitution, ellipsis, conjunction and lexical cohesion. These types of cohesion are classified into grammatical cohesion and lexical cohesion. This research is focused on the use of grammatical cohesion in the introductions of theses written by post graduate students. In thesis writing, introduction is the very first chapter and makes the reader understand the writer's own view, the problems, and the ideas. To be a good introduction, it needs to be coherent both at the sentence level and at the paragraph level for the reader to follow the main ideas in writing.

This research aims to analyse the grammatical cohesion in the introduction of Master theses written by Arts and Science students from Yadanabon University. The objectives are to explore grammatical cohesion in the introduction of Master theses and

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to investigate which types are most commonly used and which is the least used and to compare the use of grammatical cohesion by Arts students and that by Science students.

This research is made up of five chapters: introduction, literature review, research methodology and findings and discussion and conclusion.

## **2. Literature Review**

This research investigates grammatical cohesion in the introduction of Master theses by Arts and Science students from Yadanabon University. The research is conducted according to Halliday and Hasan (1976). In this chapter, theoretical background and related researcher are presented.

### **2.1 Theoretical Background**

#### **Cohesion**

According to Halliday and Hasan(1976), cohesion is the grammatical and lexical linking within a text or sentence that holds a text together and gives its meaning. It is related to the broader concept of coherence. There are two main types of cohesion: grammatical cohesion and lexical cohesion. This research is focused on grammatical cohesion.

#### **Grammatical cohesion**

According to Halliday and Hasan (1976), grammatical cohesion is a structural content. In grammatical cohesion reference, substitution, ellipsis and conjunction are included.

#### **Reference**

According to Halliday and Hassan (1976), Reference is the specific nature of the information that is signaled for retrieval. In the case of reference, the information to be retrieved is the referential meaning. Hallliday and Hansan (1976) identify three sub-types of referential cohesions – personal, demonstrative and comparative.

#### **Personal Reference**

Personal Reference is a reference by means of function in the speech, situation, through the categories of person.

The category of personals includes three classes of personal pronouns, possessive determiners and possessive pronouns.

*Eg. John has moved to a new house. He had it built last year.*

## Demonstrative Reference

Demonstrative reference is reference by means of location, on a scale of proximity. Demonstrative Reference is expressed through determiners and adverbs. These items can represent a single word or phrase, or much longer chunks of text- ranging across several paragraphs or even several pages. In addition, in demonstrative reference, the singular forms, *this* and *that* are used without following the noun.

Eg. *They broke the Chinese vase.*

(i) *That was valuable.*

(ii) *That was careless.*

In the first sentence '*That*' refers to the Chinese vase and in the second sentence, '*That*' refers to the total event, 'their breaking of the vase.'

## Comparative Reference

Comparative reference is indirect reference except the demonstrative adverbs, and some comparative adverbs, function within the nominal group (noun phrase). Comparative reference is expressed through adjectives and adverbs and serves to compare items within a text in terms of identity or similarity.

Eg. A: *Would you like these seats?*

B: *No, as a matter of fact, I'd like the other seats.*

In this intersection, '*these seats*' and '*the other seats*' are compared. Therefore, the phrase '*these seats*' is comparative reference.

## Substitution

According to Halliday and Hasan(1976), substitution is the replacement of one item by another. It is a relation in the wording rather than in the meaning.

A: *Which ice-cream would you like?*

B: *I would like the pink one.*

## Nominal Substitution

The normal substitute *one/ ones* always functions as Head of a nominal group and can substitute only for an item which is itself Head of nominal group.

Eg. *There are some new tennis balls in the bag. These ones lost their bounce.*

## Verbal Substitution

Verbal substitute in English is *do*. This operates as Head of a verbal group.

Eg. A: *Annie says you drink too much.*

B: *So do you!*

In this example, part of preceding text '*drink too much*' has been replaced by '*do*'.

## Clausal Substitution

Clausal substitution is a substitution in which an element is presupposed within a clause but an entire clause. The words used as substitute are *so* and *not*.

A: *Is it going to rain?*

B: *I think so.*

In this example, part of the preceding text '*going to rain*' has been replaced by '*so*'.

## Ellipsis

Ellipsis occurs when some essential structural element is omitted from a sentence or clause and can only be recovered by referring to the element in the preceding text.

*Eg. Sylvia: I like the blue hat.*

*Mary: I prefer the green^.*

There are three types of ellipsis: nominal, verbal and clausal.

### **Nominal ellipsis**

Nominal ellipsis means the omission of head nouns in a nominal group.

*Eg. My kids play an awful lot of sport. Both (0) are incredibly energetic.*

### **Verbal ellipsis**

Verbal ellipsis means an ellipsis within a verbal group.

*Eg. A: Have you been working?*

*B: Yes, I have (0).*

### **Clausal ellipsis**

Clausal ellipsis means omission of a clause.

*Eg. A: Why'd you only set three places? Paul's staying for dinner, isn't he?*

*B: Is he? He didn't tell me (0).*

In each example, the point at which material has been omitted from the second sentence of each text is marked by (0).

### **Conjunction**

According to Halliday and Hasan (1976), conjunction is a cohesive device which signals relationship that can only be fully understood through reference to other parts of the text. There are four different types of conjunction: Additive, Adversative, Temporal and Causal.

#### **Adversative Conjunction**

The adversative relation is 'contrary to expectation. It is the relationship which signals the information in the second sentence of each text moderates or qualified the information in the first.

*Eg. I'm afraid I'll be home late tonight. However, I won't have to go in until late tomorrow.*

#### **Additive Conjunction**

Additive conjunction is the relationship which signals the presentation of additional information.

*Eg. From a marketing viewpoint, the popular tabloid encourages the reader to read the whole page instead of choosing stories. And isn't that what any publisher wants?*

#### **Temporal Conjunction**

Conjunction is a relationship which exists when the events in a text are related in term of the timing of the occurrence.

*Eg. Brick tea is a blend that has been compressed into a cake. It is taken mainly by the minority groups in China. First it is ground to a dust. Then, it is usually cooked in milk.*

#### **Clausal Conjunction**

In this type of conjunction, the relationship is one of cause and consequence.

- Eg.*
1. *John came in. He sat down.*
  2. *John came in. Then, he sat down.*

The conjunction '*Then*' does not create the temporal relation. The simple juxtaposition of the clauses in 1 is sufficient to signal the cohesion. The conjunction 'then' makes the relationship explicit.

### **Related Research**

In this section, the research that is related to the present research is presented. The research, '*An Analysis of Grammatical Cohesive Devices of the Short Story 'the Little Match Girl'*' by Hans Christian Andersen 2016/2017' was conducted by AgusHidayat, IAIN RadenIntan Lampung, Indonesia (2016). This research aims to analyse grammatical cohesive devices of the short story, '*the Little Match Girl*' by Hans Christian Andersen. The objectives are analysing the reference of a short story, calculating the amount of the references and determining the type of references into two categories, anaphoric and cataphoric based on the theory of Halliday and Hasan(1976). It was found that references of anaphoric category are used more frequently in the story.

### **3. Research Methodology**

This research was conducted to analyse grammatical cohesion in the introduction of Master theses from Yadanabon University. In this chapter, data collection and data analysis and data interpretation are presented.

#### **3.1 Data Collection and Data Analysis**

This research investigates grammatical cohesion in the introductions of Master theses from Yadanabon University. In this research, 20 introductions of arts and science students are analysed according to Halliday and Hasan(1976).

In this research, four types of grammatical cohesion in the introduction of Master theses are analysed as reference, substitution, ellipsis and conjunction. Referential cohesion is categorized into three sub types as personal, demonstrative and comparative: substitution as nominal, verbal and clausal, ellipsis as nominal, verbal and clausal and conjunction as adversative, additive, temporal and causal. They are shown in Table (1), using the following abbreviations.

Introduction A ( Arts Students) = I A , Introduction B ( Science Students) = I B

1. Reference: a. Personal Reference = PR, b. Demonstrative Reference =DR ,  
c. Comparative Reference = CR
2. Substitution: a. Nominal Substitution = NS, b. Verbal Substitution =VS,  
c. Clausal Substitution = CS
3. Ellipsis: a. Ellipsis Nominal = NE, b. Verbal Ellipsis = VE,  
c. Clausal Ellipsis = CE
4. Conjunction a. Additive Conjunction = AdC, b. Adversative Conjunction = AvC,  
c. Temporal Conjunction = TC, d. Causal Conjunction = CC

Table 1: Grammatical Cohesion used in the Introduction of Master theses by Arts and Science students

Sr No.	IA No.	Sen. No.	Original Sentence	Reference			Substitution			Ellipsis			Conjunction				
				PR	DR	CR	NS	VS	CS	NE	VE	CE	AdC	AvC	TC	CC	
1.	3	10	This in turn has resulted in a need for translation in diverse fields such as education, mass communication, science and technology, literature, tourism religion, trade and business, etc.		✓												
2.	2	30	<i>Although</i> there are other types of linguistic distinctions, this research is to find out the verbal parallelism and semantic oddity and to find out the most frequently used types and the least <u>ones</u> in the selected poems of Edgar Allan Poe.				✓								✓		
3.	3	16	They are - <i>first</i> , the translator must comprehend perfectly the source language, <i>second</i> , he must comprehend perfectly target language, <i>and thirdly</i> , he must be knowledgeable in the subject matter.	✓ ✓ ✓									✓		✓		

**Table 2: Frequency and Percentage of the Grammatical Cohesion Used by Arts Students**

Sr. No	Categories of Grammatical Cohesion	Frequencies	Percentage
1.	Reference	203	63.64%
2.	Substitution	5	1.57%
3.	Ellipsis	20	6.27 %
4.	Conjunction	91	28.52%
	Total	319	100 %

Table 2 shows the frequency and percentage of the grammatical cohesion found in 10 of the introductions of Master theses by Arts students. In analyzing the data, there are a total of 319 grammatical cohesions. In the table, it can be seen that the highest percentage of grammatical cohesion is in the category of reference with 63.64%. The second most frequent use of grammatical cohesion is in the category of conjunction with 28.52%, the third most frequent use of grammatical cohesion is in the category of ellipsis with 6.27 % and the least frequent use of grammatical cohesion is substitution with 1.57 % respectively. Therefore, it can be seen that Arts students use the category of reference most frequently and the category of substitution the least.

Similarly, frequency and percentage of the grammatical cohesion used by Science students are shown in table 3.

**Table 3: Frequency and Percentage of the Grammatical Cohesion Used by Science Students**

Sr. No	Categories of Grammatical Cohesion	Frequencies	Percentage
1.	Reference	116	51.56 %
2.	Substitution	2	0.89 %
3.	Ellipsis	18	8.00%
4.	Conjunction	89	39.55%
	Total	225	100%

Table 3 shows the frequency and percentage of the grammatical cohesion found in 10 of the introductions of Master theses by Science students. In analyzing the data, there are a total of 225 grammatical cohesions. In the table, it can be seen that the highest percentage of grammatical cohesion is in the category of reference with 51.56%. The second most frequent use of grammatical cohesion is in the category of conjunction with 39.55%, the third most frequent use of grammatical cohesion is in the category of ellipsis with 8.00% and the least frequent use of grammatical cohesion is substitution with 0.89% respectively. Therefore, it can be seen that Science students use the category of reference most frequently and the category of substitution the least.

In this research, grammatical cohesions used by Arts and Science students are shown in table 4.

**Table 4: Frequency and Percentage of Grammatical Cohesion used by Arts and Science Students in the introduction of Master Theses**

Sr.No.	Grammatical Cohesion	Frequencies	Percentage
1.	Reference	319	58.64 %
2.	Substitution	7	1.29 %
3.	Ellipsis	38	6.98 %
4.	Conjunction	180	33.09 %
	Total	544	100

Table 4 shows frequency and percentage of four types of grammatical cohesion in the introductions of Master used by 20 Arts and Science students. According to the analysis of the data, it can be seen that there are a total of 544 grammatical cohesions. The most frequent type of grammatical cohesion is reference with 58.64%, the second most frequent type of grammatical cohesion is conjunction with 33.09 %, the third most frequent type is ellipsis with 6.98 % and the least frequent type is substitution with 1.29 %. In this research, according to data analysis, it is found that the category of reference is mostly used and the category of substitution is the least used by the groups of Arts students and Science students.

### 3.2. Data Interpretation

In this research, the grammatical cohesions used in the introductions of Master theses by students are categorized into reference, substitution, ellipsis and conjunction. In this section, interpretations of grammatical cohesions are presented.

**Reference 1.** This in turn has resulted in a need for translation in diverse fields such as education, mass communication, science and technology, literature, tourism religion trade and business etc.

( IA 3, sentence 10)

In this sentence, ‘This’ is demonstrative reference. The word ‘This’ refers to the total event in the previous sentence. It is also anaphoric reference as it refers back to the event.

#### **Substitution**

2. Although there are other types of linguistic distinctions, this research is to find out the verbal parallelism and semantic oddity and to find out the most frequently used types and the least ones in the selected poems of Edgar Allan Poe. (IA 2, sentence30)

In this sentence, the ‘ones’ is nominal substitution. It is substituted in the place of the repetition of ‘most frequently used types’ in the previous sentence.

#### **Ellipsis**

3. Short and catchy phrase of slogans can attach customers’ attention on the product and – can help to distinguish them among other product.( IA 1, sentence 8)

In this sentence, the pronoun ‘it’ is supposed to be written in the previous part of the sentence. But it is omitted. Although the pronoun ‘it’ is omitted, the sentences are still the same and meaningful.



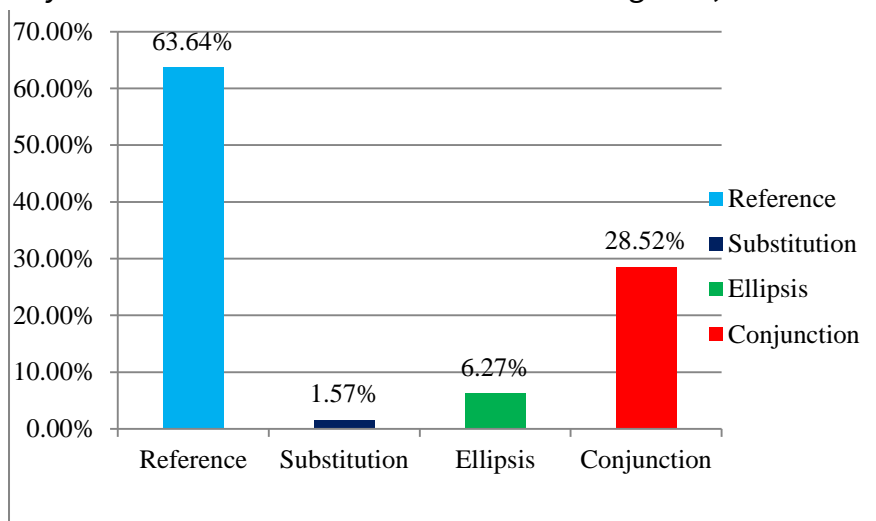
## Conjunction

4. They are – **first** the translator must comprehend perfectly the source language, **second**, he must comprehend perfectly target language, and **thirdly**, he must be knowledgeable in the subject matter. (Intro 3, sentence 16)

In this sentence, the words ‘first, second, thirdly’ are temporal conjunction. It functions to give a sequence or time for something to do. In this section, only four sentences are shown as examples. The interpretations of the data are shown in appendix c.

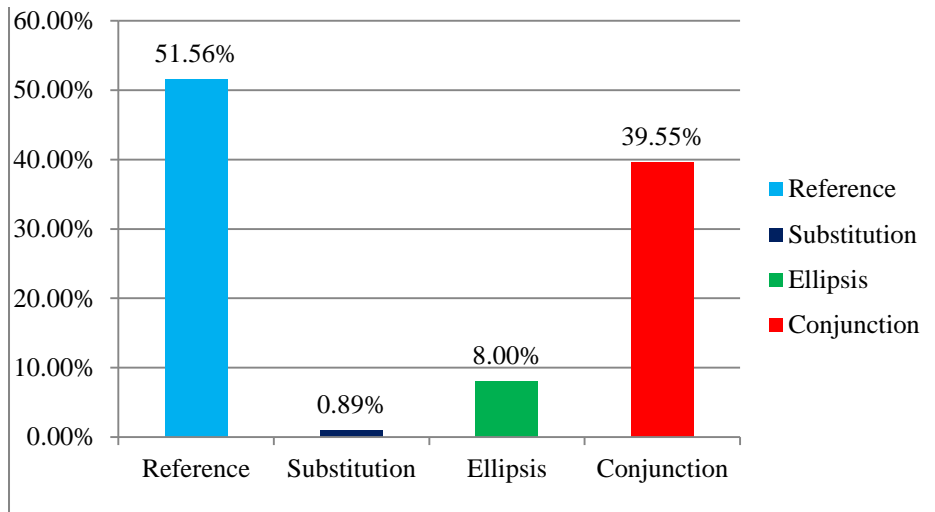
## 4. Findings and Discussion

This research is focused on grammatical cohesion used in the introductions of Master theses by Arts and Science students from Yadanabon University. In this research, 20 introductions of students are used as a source. The data are analysed according to Halliday and Hasan(1976).The use of grammatical cohesion is categorized into four types: reference, substitution, ellipsis and conjunction. In this research, four types of grammatical cohesion are used in the introductions of Master theses by the students. Four types of grammatical cohesion used by Arts and Science students are shown in figure 1, 2 and 3.



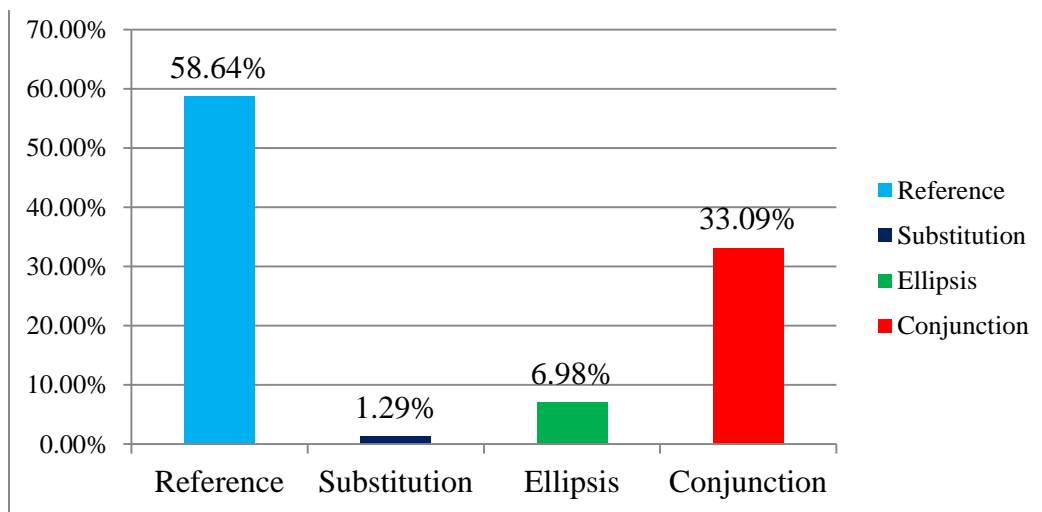
**Figure 1: Percentage of the Grammatical Cohesion in the Introduction of Master Theses by Arts Students**

Figure 1 shows four types of grammatical cohesion in their introduction of Master theses by Arts students. It can be seen that the most frequent type of grammatical cohesion is in the category of reference with 63.64 % and the least frequent type is substitution with 1.57%.



**Figure 2: Percentage of the Grammatical Cohesion in the Introduction of Master Theses by Science Students**

Figure 2 shows the percentage of four types of grammatical cohesion used by Science students in their introduction of theses. In the table, it can be seen that the most frequent type of grammatical cohesion is reference with 51.56 % and the least frequent type is substitution with 0.89 %.



**Figure 3: Percentage of the Grammatical Cohesion in the Introduction of Master Theses by Arts and Science Students**

Figure 3 shows the percentage of four types of grammatical cohesion used by Arts and Science students in their introduction of theses. In the table, it can be seen that the most frequent type of grammatical cohesion is reference with 58.64% and the least frequent type is substitution with 1.29%. Therefore, the category of reference is dominant cohesion in the research.

According to data, it is found that ‘reference’ is the most dominant type of grammatical cohesion used by Arts and Science students. Reference is the specific nature of the information that is signaled to retrieval according to Halliday and Hasan (1976). Most of the references are personal references and are mostly anaphoric as students are

familiar with this kind of reference. The second most frequent type of grammatical cohesion is conjunction. In this research, four types of cohesion are to link words, phrases and sentences together. However, conjunction is structured class word and it makes the text more coherent to understand. The third most frequent type of cohesion is ellipsis with 6.98 %. The least frequent type of grammatical cohesion is substitution with 1.29 %. In this research, verbal substitution and clausal substitution are not found. In ellipsis, nominal ellipses are only found. Comparatively, Arts students use references more frequently in their introduction of thesis writing. However, the two groups of students rarely used ellipsis and substitution. That's why this research is focused on written and not on spoken discourse. These two types of grammatical cohesion: substitution and ellipse can be frequently found in spoken discourse.

### 5. Conclusion

This research investigates the grammatical cohesion in the introduction of Master theses from Yadanabon University. In this study, the data are analysed according to Halliday and Hasan (1976). It is found that the most frequent used grammatical cohesion is reference and the least frequent type of grammatical cohesion is substitution. Comparatively, Arts students use references most frequently in their introductions of Master theses. As references are used most frequently in the introductions of their theses, the overviews, the ideas and the problems presented the writers are clear and easy to understand. Clarity is the fundamental element in writing. As students use conjunctions frequently and appropriately, the text is coherent and the meaning is not ambiguous. They create a good introduction in their thesis writing. Moreover, the findings reveal that students should practice to use four types of grammatical cohesion to produce a good text.

This research is mainly focused on grammatical cohesion in writing. Due to different types of discourse analysis, it is recommended that grammatical cohesion in speaking, lexical cohesion and grammatical collocation and comparative study can be done. It is also recommended that teachers need to motivate students to use grammatical cohesion appropriately and students need processing writing, using grammatical cohesion. It is hoped that this research will help learners of English how to use grammatical cohesion in writing to produce good writings with coherent language.

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