

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

#### 2.1. Previous Studies

There are two previous studies related to this study. They are the studies from Rameswari (2012) and Rahmawati (2014). Both are theses from English Study Program of Dian Nuswantoro University.

First, the study of Rameswari (2012) used a scientific article entitled *A Review Gender Differences in Human Brain* by Zeenat F. Zaidi as the data that is included written one. The objectives of her study were to find out the types of lexical cohesion and to describe how the use of it to make cohesiveness in the data. She took theory of Halliday and Hasan (1976) as the reference. For the result of data analysis, it was found all of lexical cohesive devices that are Repetition, Antonymy, Synonymy, Meronymy, Hyponymy and Collocation. Antonymy had the highest number in this study about 226 occurrences (54,6%). While hyponymy presented the lowest number of occurrence was only about 8 occurrences (1,9%). The result concluded that the article was cohesive because the meaning between paragraph in the article was related each other by using lexical cohesive devices.

Second, the study of Rahmawati (2014) was different from the first previous study because of the data. She used song's lyrics in Agnezmo Album as the data in her study which contained 10 songs. It was purposed to identify the types of lexical cohesive devices found in the data and to identify how the use of lexical cohesive itself. The result in analyzing the data was based on Halliday and Hassan's framework (1984:320) that presented Repetition, Synonymy, Antonymy, Hyponymy and Meronymy. In this situation, Repetition was mostly used in the data with 30 words (56.60%). Furthermore, the distribution of lexical cohesive devices found in the lyric's songs were in the song 1 had the most number of lexical devices with 14 because it was long verse and repeated the verse many times. Then, the song 9 showed 7 lexical devices, the song 5 and the

song 7 with 5 lexical devices, the song 3, 4 and 10 with each 4 lexical devices. For the lowest found was the song 8 with 3 lexical devices only. However, there was no any lexical device in the song 6 because it contained a lot of message and it was slow beat song.

These two previous studies and this study have three similarities. First, they aim to analyze lexical cohesion. Second, the objects of their studies are written form. Third, they use theory proposed by Halliday and Hasan. However, they are different types in the genre of data. The first previous study chooses the scientific article in medicine field as the data. The second previous study uses song's lyrics while this study chooses journal article in linguistic field.

Between the first previous study and this study are similar in using the journal article as the data. Therefore, the first previous study can give reference in order to increase this study through the theory. Especially, this study uses the theory proposed by Halliday and Hasan (1976) which is also applied in the first previous study. There is the supporting theory from Paltridge (2000) in contributing the theory of lexical cohesion in this study, namely reiteration, synonymy, antonymy, hyponymy, meronymy and collocation. The aim is to highlight the use of lexical cohesion in creating the meaning relation or the cohesiveness within text.

## **2.2. Theoretical Review**

In this chapter, the researcher presents the explanation briefly about some theories that are related to this study. They are Text, Discourse Analysis, Cohesion, Cohesive Devices: Grammatical Cohesion and Lexical Cohesion, and Journal Article as the data in this study.

### **2.2.1. Text**

The word *text* refers to any spoken or written passage that forms a unified whole in linguistic system. It is not specified by its size. It is best regarded as the meaning unit, not a form. It happens since a text can be a single sentence or the integration of sentences. The meaning is encoded in sentences (Halliday &

Hasan, 1976: 1-2). In order to make sense of a text, it needs some requirements, such as understanding the use of grammar and vocabulary in constructing the sentences within a text. It determines the relation of text to the best sentence that can be interpreted. Therefore, the semantic unit of a text can be expressed by using cohesion among the composed sentences. On the other hand, according to Halliday and Hasan (1976:294), “a text is usually reasonably homogeneous, at least in those linguistic aspects which most closely reflect and express its functional relationship to its setting”.

A text has “linguistic features which can be identified as contributing to its total unity and giving it texture” (Halliday and Hasan, 1976:2). All of texts have texture which can distinguish whether this is a text or not a text. Texture can be categorized as a property of being a text that presents the unity of a text. Texture is provided by cohesive relation that exists within and between sentences (Halliday & Hasan, 1976: 2-3). If there is a part contains more than one sentence, it could be perceived as a text. If a text contains an item which is referred again after a previously item and it is related to another element, it could be considered a tie. In applying a semantic tie between one sentence and another sentence, it can produce cohesion.

It can be described that text refers to the combination of sentence as an object of linguistic formally. The application of a sentence combination is called discourse. In addition, text refers to written form that has relation with discourse analysis. It is because discourse analysis can be used to analyze the language use in written form.

### **2.2.2. Discourse Analysis**

In communication, every language serves first and foremost to convey information. The information is expressed not only explicitly by the use of spoken or written language but people also use symbols, gestures, mimics, voice quality, pitch range and other signals, so called paralinguistic features, when communicating. All these signals help the addressee receive and understand the

message as well as meaning of the better message. In the other hand, it does not always use gestures and mimics that serve information to be better understanding. It is not possible to perceive such signals in the written. Nevertheless, there must be some hint of meanings even in written text. The writer uses many lexical means to influence the reader. Similar as the psychologist can analyse the meaning of the particular gesture, the linguist is able to analyse the text, written or spoken, according to different levels. This discipline is called discourse analysis.

The main concern of discourse analysis belongs to examine how language is produced by a given participants whether spoken or written which is used in communication for a given information or situation. In written and spoken forms, both have relation with discourse analysis. Written forms can be interpreted in written texts. Discourse analysis of written text is used as a means to present ideas in their relation of the text through analyze the structure and its content. In this case, the structure and content can give influence for the readers in reading, understanding, remembering, and learning of written text.

Not only discourse analysis but also discourse devices can also help to string language element. According to Allen and Corder (1974: 200) "discourse analysis is taken to be the investigation into the formal devices used to connect sentences together". Yule (1996) declares that discourse structure is very important because with focusing on the main elements, it can create a well-stretched text. These structural connections between sentences create cohesion. In the other hand, it must determine the units of these larger part of language, how these units are signalled by specific linguistic markers, and the process involves in producing and comprehending larger part of language.

Brown and Yule (1983:1) make more simple about the definition "The analysis of discourse is, necessarily, the analysis of language in use". From this point of view, it is clear that only the language in its authentic natural form must be analyzed so that the study is meaningful. They also add, " 'Doing discourse analysis' certainly involves 'doing syntax and semantics', but it primarily consists

of ‘doing pragmatics’” (Brown and Yule, 1983:26). Especially there are three views of it, they are text as product, discourse as process and sentence as object (Brown and Yule, 1983:196). Because of this study concerns with the journal article as printed text, the researcher uses the first one that is text as product. In this view, Brown and Yule (1983:196) state that there are producers and receivers of sentences or extended texts, but the analysis concentrates solely on the product, that is words on the page. As the product view, it uses approach of the cohesion view that belongs to the relationship between sentences in a printed text or written form.

### **2.2.3. Cohesion**

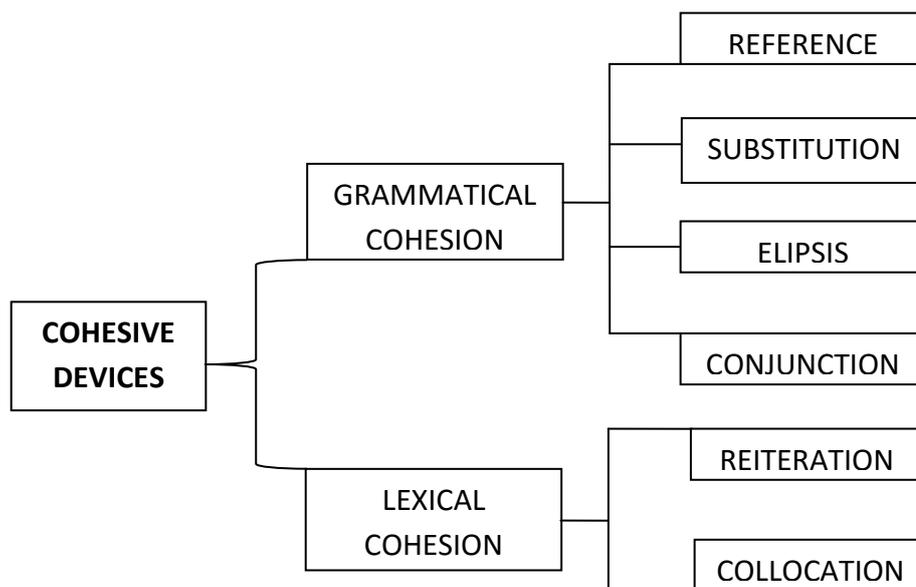
Cohesion is the compatible relationship between one element and another element in discourse that can create a good sense. There was a study of theoretical sources which revealed that cohesion has been one of the most productive areas in the investigation of texts (Halliday and Hasan 1976, Brown and Yule 1983, Gutwinski 1976, Hoey 1983, 1991). Hoey (1991: 4) describes cohesive ties that “require the reader to look to the surrounding sentences for their interpretation”. As Scott and Thompson (2001:14) state, “cohesion depends on repetition within the text”.

Actually, the term *cohesion* has been defined by Halliday and Hasan (1976). “Cohesion occurs where the interpretation of some element in the discourse is dependent on that of another” (Halliday and Hasan 1976:4). The concept of cohesion is semantic one (Halliday and Hasan 1976:4). While in semantic relation itself, cohesion could be expressed through the structural organization of language. It is also realized through the system of lexicogrammar. Richard (1985:45) stated that cohesion as “the grammatical and or lexical relationship between the different elements of a text. This may be the relationship between different parts of a sentence”. Therefore, it is the reason why there are grammatical cohesion and lexical cohesion.

Cohesion refers to relation meanings between sentences in the text. It is analyzed in the sentence form. A sentence has the highest position in grammatical structure and it determines how the way to express cohesion. Cohesion can be expressed in the whole text by using the structure of sentence. The whole text generally contains multiple sentences. Meanwhile, cohesion includes all of the meaning relation within a text because it refers to unit of meaning, not a form. A text should be created becomes a unified whole. Therefore, it needs a device which can tie it together, that is by using cohesive devices.

#### **2.2.4. Cohesive Devices**

Cohesive devices can give the logical relationship between sentences and paragraphs within a text. They are almost like the bridges between parts in a text. It means they contribute to what Hasan terms a text's *unity of texture*. The schematic structure of the text, in turn, provide a text with "unity of structure" (Hasan, 1989) as cited in Paltridge (2000: 139). A text functions as a single meaningful unit when linguistic items correlate in sentences. Moreover a text has meaning as a text when each individual sentence has its cohesive relations with other sentences within a text (Halliday and Hasan 1976:28). Especially, cohesive devices is defined as the device that link among clauses, sentences, and paragraphs in a text to be communicative or cohesive. In other words, they can help the reader to understand the interpreted ideas within a text itself. There are two types of cohesive devices namely lexical cohesion and grammatical cohesion. In each type of it, there are some kinds that will be described in figure 2.1 :



**Figure 2.1 Halliday and Hasan's Theory of Cohesive Devices (1976)**

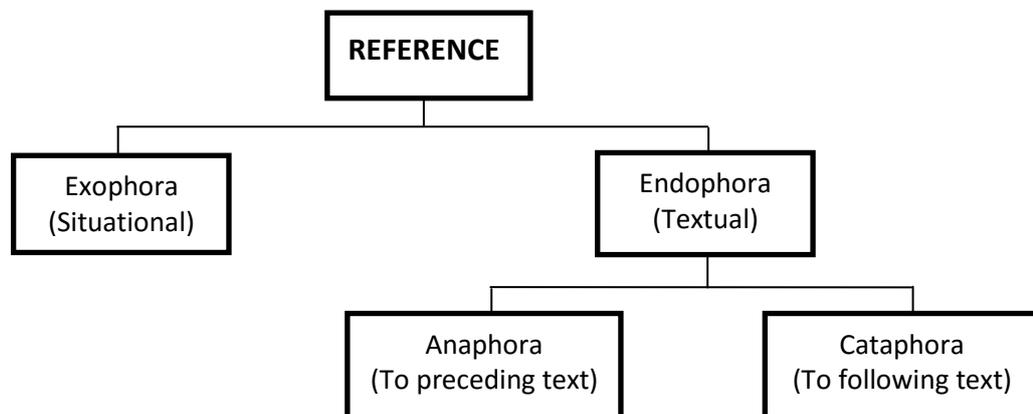
#### **2.2.4.1. Grammatical Cohesion**

Grammatical cohesion belongs to the various grammatical devices that can be used to make relations between one sentence and the other sentences to be more explicit. Based on the theory by Halliday and Hassan (1976) provide the basic categories of grammatical cohesion pointing that can systematize this concept by classifying it into a small number of distinct categories. They are reference, substitution, ellipsis and conjunction.

##### **1). Reference**

Reference is the point one that English grammar offers creating surface links between sentences. It uses the signaling items such as words or parts to create meaning. But, it is not about the semantic meaning of reference itself so that it needs the referential meaning to represent what signaling items. The types of reference can only be clarified based on the potential reference. It can be accounted as two functions namely *exophoric* or *endophoric*. Exophoric reference directs the receiver 'out of' the text and into an assumed shared world (McCarthy, 1991: 41). Endophoric function refers to the text in its interpretation. Brown and Yule (1983: 192) point that "where their interpretation lies within a

text they are called *endophoric*". In endophoric or also known as endophora consist of two types, anaphora and cataphora. Anaphora refers to preceding text while cataphora refers to following text. This relationship could be presented in figure 2.2 below:



**Figure 2.2 The ways of referring (Halliday & Hasan, 1976: 33)**

The reference item has potential reference and a systemic account in the different types of reference. They have to take place based on general concept of reference, it doesn't include particular form. Especially, there are three reference items namely personal reference, demonstrative reference, and comparative reference.

#### 1. Personal Reference

Personal reference is reference by means of function in the speech situation, through the category of *person* (Halliday and Hasan, 1976:37). It usually implicates personal pronouns, possessive determiners and possessive pronoun.

For example:

**Mrs. Chintya** is an English teacher. All of her students like her very much.

The two words her refer back to Mrs. Chintya. The first word her serves personal pronoun. From that sentence, it is defined as anaphoric reference because Mrs.Chintya is followed by its pronoun.

## 2. Demonstrative Reference

Demonstrative reference is reference by means of location, on a scale of *proximity* (Halliday and Hasan, 1976:37). It usually functions as head, modifier, and adjunct. It involves singular participant (*this* and *that*), plural participant (*these* and *those*), related to the place (*here* and *there*) and related to time (*now* and *then*).

For example:

I spent my holiday in ***my grandmother's house in Yogyakarta***. I do like staying ***there***.

The word *there* which is related to the place refers back to *my grandmother's house in Yogyakarta*. These presuppose the item in the previous sentence. Thus, it can also be classified as anaphoric reference.

## 3. Comparative Reference

Comparative reference is indirect reference by means of *identity* or *similarity* (Halliday and Hasan, 1976:37). The compared elements include the thing of quality and quantity which could be expressed by using certain class of adverbs and adjectives.

For example:

She is ***the most*** beautiful woman that I have never met.

The phrase *the most* beautiful woman refers to comparative reference in superlative degree. There is no comparison between two things in the example above. In other words, superlative degree refers to the top level which is incomparable. Meanwhile, any comparative degree attaches to one concept or entity so that it can imply the other concept or entity.

## 2). Substitution

Substitution is a way to avoid repetition in the text itself. Halliday and Hassan (1976:89) state that substitution is a relation on the lexico-grammatical level, the level of grammar and vocabulary, or linguistic *form*. It takes place when one feature in a text replaces a previous word or expression. According to

Kennedy (2003), there are three types of substitution: nominal, verbal, and clausal.

### 1. Substitution of nominal

Substitution of nominal describes the process of noun-substituting by using *one*, *ones*, and *same*. It always substitutes for a noun which expresses typically the item of person or people, object, or many things in creature form. The items can be substituted, if their position and function are similar. They might only differ in number. However, they should remain similar in the category of a count noun. On the other hand, the only suitable form of substitution for uncountable noun is referred to substitution by zero or ellipsis.

For example:

There are some new ***tennis balls*** in the baf. These *ones* have lost their bounce.

The word *tennis balls* are replaced by the item *ones*. It is because the item *ones* have function to substitute the nominal group of *tennis balls*. *Ones* here are presented to change and to differentiate from previously mentioned, that are the word *tennis balls*.

### 2. Substitution of verbal

Substitution of verbal could be expressed by using *do*, *do so*, *can do*, *can*, *does*, *did*, and *done*. The item *do* is usually substituted a verb which represents an action or doing something, event, or relation.

For example:

Annie says you ***drink too much***. So you *do*?

*Do* refer to substitutes *drink too much*. The example above is defined as verbal substitution process because *drink too much* here represents an action or includes the verbal group. While *do* is assumed like the previous element within the sentence itself.

### 3. Substitution of clausal

Substitution of clausal is used to substitute an entire clause instead of within the clause. There are three environments that are suitable to apply clausal

substitution such as condition, modality and report. It can be presented by using the word *so* and *not*. The word *so* is used to express the positive form while *not* expresses the negative form.

For example:

***It is going to rain.*** I think *so*

The clause *it is going to rain* is substituted for *so*. It likes the substitution for the whole clause in the sentence and has position as the object.

### 3). Ellipsis

Ellipsis is defined as a means to create semantic relation through the use of grammatical cohesion. Carter et al(2000:182) state that “ellipsis occurs in writing where usually 30 functions textually to avoid repetition where structures would otherwise be redundant”. An item is elliptical if its structure does not express all the features that have gone into its make-up all the meaningful choices that are embodied in it (Halliday and Hasan, 1976:144). Actually, ellipsis consists of three items which is similar with substitution items, they are nominal, verbal, and clausal ellipsis. Even though both are similar, they are different in the pattern and structure. Ellipsis can be understood without saying. Therefore, it is substituted by zero.

#### 1. Nominal Ellipsis

Nominal Ellipsis is one type of ellipsis to omit the position in the nominal group. It takes the position of word as pre-modifier like numerative, epithet, deictic or classifiers to Head.

For example:

This ***bread***'s stale. Get some fresh. (Haliday & Hasan, 1976: 92)

*Bread* here is substituted by zero or the omission concerned with *bread*. The example is categorized nominal ellipsis because *bread* includes the nominal group.

## 2. Verbal Ellipsis

Verbal ellipsis represents an ellipsis process in the verbal group. The previous verbal group supposes to the next verbal group which is not fully stated in the systemic features.

For example:

- (a) Have you been swimming? Yes I *have*.
  - (b) What have you been doing? *Swimming*.
- (Halliday & Hasan, 1976: 167)

Here, the omission of the verbal group depends on what is said before and it is concerned with have been swimming (a) and have been doing (b). *Have* and *swimming* could be considered as stands for I have been swimming.

## 3. Clausal Ellipsis

Clausal ellipsis refers to the omission in the two elements of clause which are modal and prepositional elements. The element of modal contains subject and finite element whereas the element of prepositional consists of remains the verbal group, any complement or adjunct that may be occurred.

For example:

- The whole sentence is:  
***The duke was going to plant a row of poplars in the park.***
- (a) What was duke going to do? Plant a row of poplars in the park.
  - (b) Who was going to plant a row of poplars in the park? The duke was.
- (Halliday & Hasan, 1976: 197-198).

In the example (a) omits the modal element which is located in the answer while in the example (b) omits the prepositional element.

## 4). Conjunction

According to Halliday and Hasan (1976:320), conjunction is based on the assumption that there are in the linguistics system form of systematic relationship between sentences. Conjunction usually refers to a text structure or discourse in a precise way and bring the presented elements into a logical order. It refers to links between clauses or “the ways in which the different parts of a text fit together” (Scott and Thompson 2001: 4). There are four types of it that

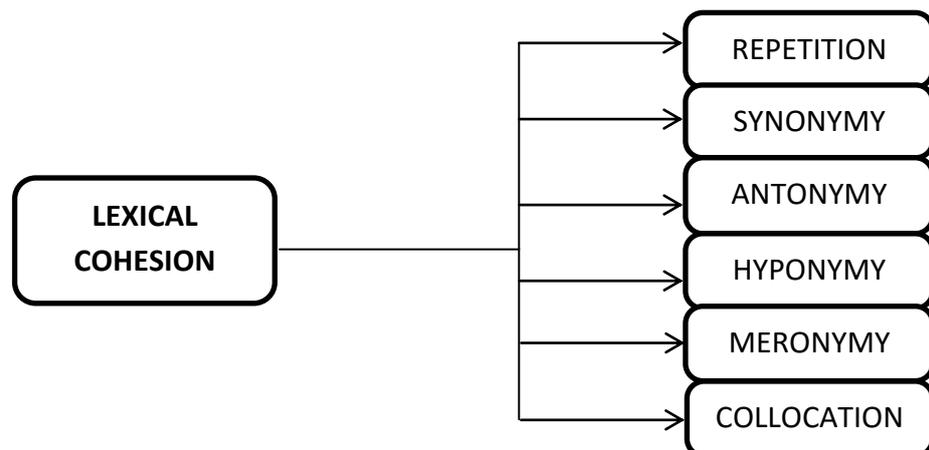
mentioned by Halliday and Hasan (in Brown and Yule, 1983): additive, adversative, causal and temporal. To more clearly, it will be describes by the following table 2.1. about the types of conjunction:

<b>Types of Conjunctions</b>	
<b>1. Additive</b>	and, or, furthermore, similarly, in addition
<b>2. Adversative</b>	but, however, on the other hand, nevertheless
<b>3. Causal</b>	so, consequently, for this reason, it follows from this
<b>4. Temporal</b>	then, after that, an hour later, finally, at least

***Table 2.1. The Types of Conjunction by Halliday and Hasan in Brown and Yule (1983)***

#### **2.2.4.2. Lexical Cohesion**

When two words in a text are related in terms of their meaning, it means that there is a concept of lexical cohesion that happens in the text. Lexical cohesion belongs to the relationships among lexical items in a text and in particular among content words. Halliday and Hasan (1976) state that as the elements of it, in lexical cohesion consist of two elements, they are Reiteration and Collocation. Reiteration is one form of lexical cohesion which involves the repetition of a lexical item, at one end of scale, the use of general word to refer back to lexical item, at the other end of scale, and a number of things in between—the use of a synonym or near-synonym, super-ordinate (Halliday and Hasan, 1976: 278). According to Paltridge (2000:134), the main kinds of lexical cohesion are repetition, synonymy, antonymy, hyponymy, meronymy, and collocation that can be seen by the following figure 2.3:



**Figure 2.3 Types of Lexical Cohesion by Paltridge (2000:134)**

### 1). Repetition

Paltridge (2000:134) states that “Repetition refers to words that are repeated in the text, as well as words that have changed to reflect tense or number such as *feel*, and *felt* (reflecting a change in tense), and *feeling* and *feelings* (reflecting a change in number)”. It belongs to one lexical item refers back to another, to which is related by having a common referent. Hoey (1983, 1991) distinguishes between simple and complex lexical repetition. The former one occurs when a lexical item is repeated with no alteration. The latter one occurs when “two lexical items share a lexical morpheme, but are not formally identical, or when they are formally identical, but have different grammatical functions” (Hoey 1991: 55).

For example :

Explicit instruction is helpful not only when **discovery** is impossible, but when **discovery** may be inaccurate, inadequate, incomplete, or inefficient. (The researcher’s documentation)

The word discovery is repeated one time in one sentence. It belongs to simple repetition because the meaning is still related each other.

## 2). **Synonymy**

Synonym refers to lexical cohesion results from the choice of a lexical item that is in the some sense synonymous with a preceding one. Halliday and Hasan (1976:33) stated “lexical cohesion results from the choice of a lexical item that is in some sense synonymous with a preceding one...”. Synonyms are used to avoid repetition of the exact same word. It refers to the relationship between words that are similar in meaning such as *customer* and *patrons* (Paltridge 2000:134).

For example :

One of the greatest tools available to us in this pursuit is ***explicit*** instruction. Instruction that is systematic, ***direct***, engaging and success oriented. (The researcher’s documentation).

The example shows that the words *explicit* and *direct* have similar in meanings which occur in different sentence. The relation of synonym is usually used to make the variation in the sentence or text itself.

## 3). **Antonymy**

The term *antonym* belongs to the relationship between the words that have opposite in meaning or the meaning is different. Antonymy refers to opposite or contrastive meanings such as *good* and *bad*, *happy* and *sad* (Paltridge 2000:134).

For example :

His sister is ***beautiful***. But, his brother is ***ugly***.

The meanings of *beautiful* and *ugly* are opposite. Both refer to such a pairs of lexical item which characterize antonym. It presents the relation of different meaning.

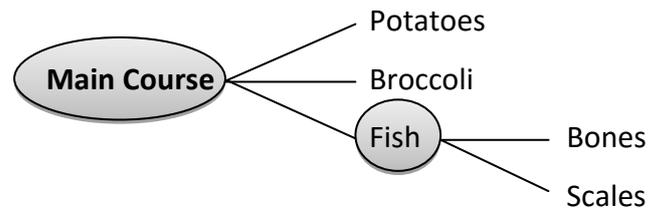
## 4). **Meronymy**

Meronymy belongs to the lexical item to express part or member make a cohesive link with the first item express whole.

For example :

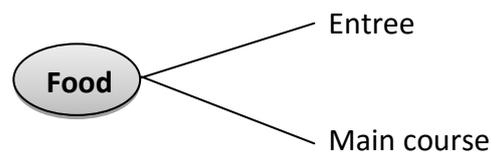
The relationship between *main course*, *potatoes and broccoli*; and *fish, bones, and scales*. The items *potatoes* and *broccoli* can also be described as co-meronyms of the superordinate item *main course*. As are bones and scales in relation to item *fish* (Paltridge 2000:134).

It can be seen diagrammatically as below:



### 5). Hyponymy

It refers to one of lexical item that there is the relationship is one of general to specific. In this case, it shows the more specific item to create the link with the general item. Hyponymy refers to class of lexical item where the relationship is one of *general-specific* or *a type of*, such as *entrée* and *main course* in relation to the item *food* (Paltridge 2000:134). It could be described diagrammatically as below:

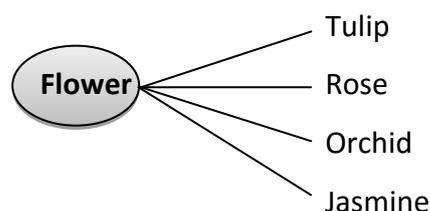


For example :

There are many *flowers* in her garden. She plants *tulip*, *rose*, *orchid*, and *jasmine* there.

Here, *flowers* is an example of super-ordinate while its hyponyms are *tulip*, *rose*, *orchid* and *jasmine*. They refer to the *types of flower* as general item.

It could be presented diagrammatically as bellow:



## 6). Collocation

While about the another of lexical cohesion that is about collocation. In collocation, (Paltridge 2000:135) it describes associations between words that tend to occur, like the combination of adjectives and nouns as in 'quality product', 'snide remarks', and 'discerning customers'. It also includes the relationship of verbs and nouns such as 'eat' and 'food' and the pairs of nouns like 'friend' and 'neighbour'.

Halliday and Hasan (1976: 286) understand by the term of "collocation are pairs or chains of lexical items that tend to share the same lexical environment". They can occur freely both within the same sentence or across sentence boundaries. In some cases collocation makes it difficult to decide whether the words are semantically related and form a cohesive relationship, or whether this relationship does not exist. That is why collocation can cause some problems for discourse analysis.

### 2.2.5. Journal Article

The article which is used in this study refers to one of the journal article; it is sometimes called as the scientific article. It could be concluded the journal article is designed in a journal or an article book collection. In creating the journal article, it needs the support element which is called as the scientific format. Probably, it seems confusing for the beginner writer because it is so different from the usual writing activity. There is the main reason why this format used in journal article, that is scientific format provides to be read the journal article at different levels. It means the readers focus on Title first to find out what the subject of information. They may read titles and abstracts only. If they want to know more deeply, the readers can look information at the table and figures in the part of Results, and so on. As for the point here is that the scientific format can help to make certain the readers will get the key results and conclusions. Although, they read the article beyond title skimming at whatever level.

Most journal-style article is subdivided into the following sections: Title, Authors and Affiliation, Abstract, Introduction, Methods, Results, Discussion, Acknowledgments, and Literature Cited, which parallel the experimental process (Bates College, 2011:1). It can be described in the following table 2.2:

Experimental process	Section of Paper
What did I do in a nutshell?	Abstract
What is the problem?	Introduction
How did I solve the problem?	Materials and Methods
What did I find out?	Results
What does it mean?	Discussion
Who helped me out?	Acknowledgments (optional)
Whose work did I refer to?	Literature Cited
Extra Information	Appendices (optional)

**Table 2.2 The Section of Journal-style Article (Bates College, 2011:1)**

Based on the characteristic, it can be divided into research article and non-research article (Rusyanti, 2003):

1. Research Article

Research article refers to scientific article that is arranged in a journal or collections of article's book by using procedure for scientific and following guidelines or scientific convention that has agreed or stipulated. There are three ways of the procedure in writing this article. First, it is written before the technical report for the purpose in order to get inputs. Second, it can be written after the technical report. The last one, the journal article is the only one of compiled writing that is usually for self-funded research, where the system of writing article without uses a system of number and alphabet. As scientific article, article is written by following a systematic as follows: Title Name of Author, Sponsor, Abstract and Key words, Introduction, Method, Result, Discussion, Conclusion and Suggestion, References/Bibliography.

## 2. Non-research Article

Non-research article refers to all of scientific article types that do not include research report. The provision in writing non-research article is similar with the provision in writing a short paper that is no longer than 20 pages, except in a short paper, abstract and keywords should not be existed. So, the systematic in writing non-research article does not use numbering and alphabet. It contains many things that are essential only with the pages number between 10-20 pages. The main elements that must be presented in the non-research article are Title, Name of the author, Abstract and Keywords, Introduction, The main content, Ending, and References.