

## CHAPTER III

### RESEARCH METHOD

The present chapter elaborates the method of the present study, covering *Research Design*, *Data Collection*, and *Data Analysis*. The *Research Design* discusses the paradigms and the characteristics of qualitative research. *Data Collection* section presents the data collection technique, the data types, the participants, and some related consideration of the data collection. *Data Analysis* section focuses the discussion of procedures in identifying and classifying theme, thematic progression patterns, and in determining the thematic progression trend to see the thematic progression consistency.

#### **3.1. Research Design**

Based on its design, the study belongs to non-experimental research, particularly the text analysis. It is non-experimental because the study only considers texts as products rather than as results of treated learning process of writing. It does not either attempt to control variables in the writing process (see Bordens and Abbott, 2008: 238). The primary concerns of this study is how to provide answers for the research questions addressed, although this study can also be classified into qualitative research because some features of qualitative approach which are adopted, as presented by Guba and Lincoln (1985, cited in Alwasilah, 2008: 78-9). Some primary features of qualitative approach are natural settings, the human as primary data gathering instruments, qualitative methods, purposive sampling, emergent design, idiographic interpretation, tentative application of the findings, case-study reporting modes, focus-determined boundaries, and special criteria for trustworthiness.

Regarding the objects of the analysis, this study focuses on students' explanatory texts, particularly in terms of Theme and Thematic Progression in

written text. Therefore, the analysis is on words, clauses, paragraphs and the larger extent of text. As presented by Grabe and Kaplan (1996: 38-40), the text analysis formerly derives from three traditions of research. The *first* tradition is hermeneutics (Eagleton, 1983; Ong, 1982), the *second* one is rhetorical tradition, which goes back to Aristotle and other classical Greek scholars, as conducted by Berlin (1984, 1987), Neel (1988), Phelps (1988), and Young (1987), and the *third* tradition is that of modern literary criticism and stylistics, as conducted by Comprone (1987), Crowley (1989), Eagleton (1983), and Fowler (1986). As Grabe and Kaplan explain, these three traditions, combined with the development in linguistics, form the historical basis for the rise of text analysis as a field of study whose good detailed summary of the development is provided by de Beaugrande and Dressler (1981 in Grabe and Kaplan 1996) and Tate (1987 in Grabe and Kaplan 1996). In line with this historical development in text analysis and in linguistics, functional linguists have focused considerable attentions on discourse analysis, both spoken and written (Brown and Yule, 1983; Grabe 1992). As Grabe and Kaplan further presents, the work of Coulthard (1994), Givon (1983), Halliday (1994), Halliday and Hasan (1976, 1989), Mann and Thompson (1988, 1992), van Dijk (1985) and others have explored aspects of discourse structure, and from this research has come both a better understanding of a text and a set of techniques for examining the nature of text.

Under such a historical development of text analysis, Theme and Thematic Progression analysis has a close relation with the work of Halliday (Grabe and Kaplan, 1996: 51). For Halliday, theme-rheme structure in texts is treated as an independent concept. It is further suggested that thematic structure represents the text's development; that is, the sequences of clause themes across a text point to the development of the major ideas (or macro-theme) in the text (Fries 1994; Martin 1992; cited in Grabe and Kaplan 1996).

This study has primary data in the form of texts and applies a quantitative description of the data; the trends of the unmarked Topical Themes and of Thematic Progression patterns. The trend of unmarked Topical Theme becomes the basis for identification of thematico progression, while the trend of thematic

progression patterns is to determine the consistency of the students' texts in terms of thematic progression compared to English scientific texts, which commonly have Simple Linear Progression (SLP) and Constant Thematic Progression (CTP) as the dominant patterns (see Nwogu and Bloor, 1991: 379).

### 3.2.Data Collection

This section describes the data collection technique, the data type, the participants, and some related consideration for the data collection. Concerning the data collection techniques, several steps were taken. First, students in grade XII in a private school is purposefully preferred, as suggested in the features of qualitative research (c.f. Lincoln and Guba (1985) cited in Alwasilah, 2008: 78), because the students study explanatory text, as suggested by the curriculum guideline. (c.f. KTSP 2006 for secondary school). They were then asked whether they had attended writing class discussing explanatory text to make sure that students understand what explanatory text is. Secondly, the students were asked to write an explanatory text based on their own interests for the data of this study. Thirdly, the students then submitted their texts to the English teacher in order to convince that the writing process in a natural setting without being manipulated. Fourthly, those texts were then arranged alphabetically based on students' names because some texts have quite similar titles. Finally, the texts were identified and classified into explanatory and non-explanatory texts based on their social functions, their generic structures and their language features.

Regarding the data type in this study, the data are twenty students' written texts. The twenty students' texts are grouped into explanatory text although some of them lack certain generic structure, such as conclusion in the end of the text. *Nine* texts discuss how a water boiler system works, *six* texts are about the working system of technological instruments, such as facebook, dry-cells, computer, four strike engines, submarine, and television, *four* texts discuss how certain products are made, such as chocolate milk, japanese sushi, fried noodle,

and green tea cupcakes. *One* text discusses a natural phenomenon; how the rain happens. These twenty students' explanatory texts can be perceived as product recorded and studied for linguistic analysis (as stated by Halliday and Hasan, 1986: 10), particularly for thematic progression analysis in this study.

The participants are the grade 12 students in science program. The students are preferred because they generally study the explanatory genre to explain natural phenomena or technical instruments based on scientific themes. Concerning research setting, a private school in Bandung, West Java, was selected because it applies the standards of national curriculum which recommend the students to study explanatory genre (c.f. KBK 2004 and KTSP 2006 for secondary school).

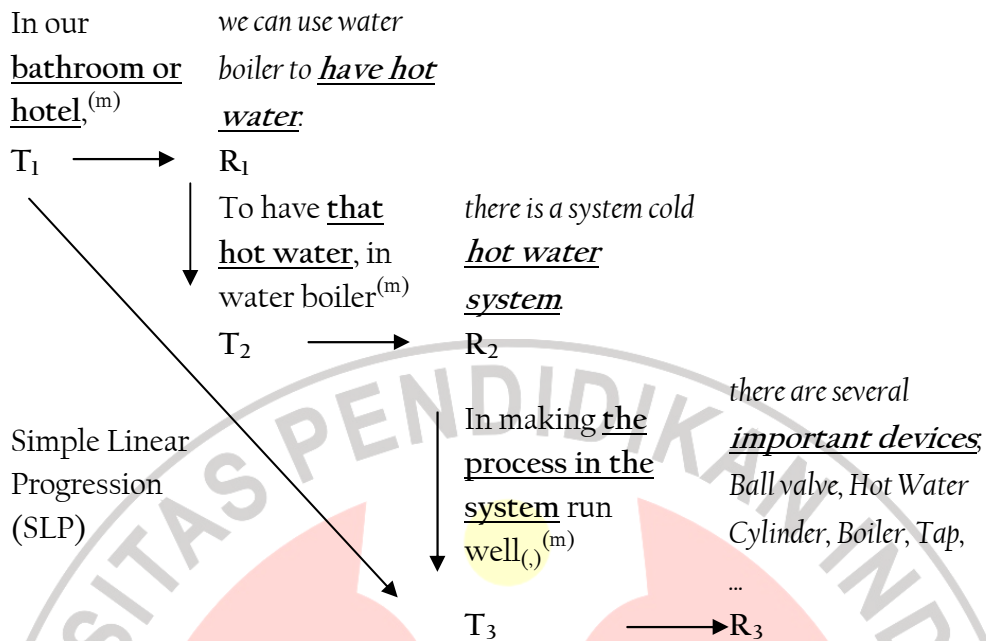
### **3.3.Data Analysis**

The students' texts are ready for the analysis after being identified as explanatory text based on their features, such as the social function, generic structure, and language features. The analysis then involves the identification and classification of theme, of thematic progression and the identification of thematic progression consistency. Therefore, it goes through several steps with the final result as presented in Table 3.1. The *first* step of the analysis is constructing every clause in theme-rheme nexus. The *second* step is posting the theme and rheme in theme and rheme columns respectively. The *third* step is identifying the existence of textual theme, interpersonal theme and topical theme in the clause to be posted in columns of textual, interpersonal and topical theme. The *fourth* step is classifying the topical theme into unmarked and marked Topical Themes. Only the marked Topical Theme is indicated by notation <sup>(m)</sup>, because its limited number, while the unmarked Topical Theme does not have such notation. The *fifth* step is determining the relations of the unmarked topical Theme. This theme may have relations to the one in the following clause(s) and to the Rheme of the previous clause. The *sixth* step is identifying the thematic progression based on

the relations of the unmarked themes whether to the ones in another clause or to the Rheme of another clause. The *final* step is determining thematic progression consistency based on the dominant occurrence of both Simple Linear Progression (SLP) and Constant Thematic Progression (CTP) patterns.

No	No of Clause	Theme			Rheme	T	+	R	TP Type
		Textual	Interp	Topical					
<i>Paragraph 1</i>									
1	(1)			In our bathroom or hotel, <sup>(m)</sup>	<i>we can use water boiler to have hot water.</i>	T <sub>1</sub>	+	R <sub>1</sub>	HT
2	(2)			To have that hot water, in water boiler <sup>(m)</sup>	<i>there is a system cold hot water system.</i>	T <sub>2</sub>	+	R <sub>2</sub>	SLP
3	(3)			In making the process run well, <sup>(m)</sup>	<i>there are several important devices; Ball valve, Hot Water Cylinder, Boiler, Tap, ...</i>	T <sub>3</sub>	+	R <sub>3</sub>	SLP

Thematic progression analysis can also be presented in Picture 3.1. It is intended to present thematic progression in different way where linear progression the themes are clearly presented, although it is only applicable in limited number of clauses.



Picture 3.1. The Analysis of Thematic Progression

### 3.3.1. Identification and Classification of Theme

The identification of theme is intended to separate clearly between the Theme and Rheme in every clause. After the Theme is identified, it is classified into several kinds. The classification is based on Theme type, markedness, and predication. Regarding its type, Theme can be classified into single and multiple Themes. Based on its markedness, Theme can be categorised into unmarked and marked Themes, while based on its predication, it can be grouped into predicated and non-predicated Themes. Because thematic progression is the relation between unmarked topical themes, this study primarily focuses on the unmarked Topical Theme.

A functional clause element is identified as Theme if the element is in the beginning of a clause (Halliday, 1994; Eggins, 2004). Based on its type in the Theme system, the theme can then be classified into topical, interpersonal, or textual. A theme is topical when a transitivity function can be assigned to the theme. A theme can be categorised as interpersonal when it expresses vocative,

modal, or mood marking. A theme is grouped into textual theme when it presents continuative or conjunctive adjunct or conjunction.

Based on its markedness, Theme can be classified into unmarked and marked Theme. A theme is unmarked when it is commonly realised by certain functional label in a clause concerning mood type of the clause: declarative, interrogative, and imperative. In declarative, a theme is considered unmarked when it is a participant in the clause, such as actor, goal, or beneficiary, etc. When the theme does not belong to them, it is considered marked, i.e. circumstance. In polar interrogative, a theme is considered unmarked when it is realised by finite, and the others are considered marked. In wh-interrogative, a theme is considered unmarked if it is realised by wh-words, and the others are consequently marked. A theme in imperative is classified as unmarked when it is realised by process, and the others are then marked Themes.

In terms of predication, there are Predicated and Non Predicated Themes. Theme is considered predicated when a clause is introduced by '*it is*', as in '*It was Diana who had donated blood for 36 times*'. Predicated Theme in the clause is not '*it is*' but '*I am going to tell you about Diana that is news*'. Theme is considered Non Predicated when it is in canonical clauses, without introductory '*it is*', as in '*Diana had donated blood for 36 times*' (Adopted from Halliday, 1994: 58-61).

### **3.3.2. Identification of Thematic Progression**

Identification of thematic progression is based on the theme features, such as *references, identical wordings, synonymous expressions* and *semantic inferences* as presented by Danes (1974 cited in Nwogu and Bloor, 1991: 273). Two or more themes are considered having a pattern of progression when they have one of the above features. Simple Linear Progression (SLP) pattern has a theme which derives from an element in the rheme of the preceding clause. Constant Theme Progression (CTP) has an unmarked Topical Theme which has the relation to the one in the following clause. Derived Theme Progression (DTP) has an element or

some elements in one unmarked Topical Theme of a clause which are then distributed in the themes of the following clauses. A thematic progression is classified into Split Rheme Progression (SRP) when an element or some elements in rheme of a clause is divided into several Themes in the following clauses.

The occurrence of the above thematic progression patterns can be calculated. The dominant occurrence of Simple Linear Progression (SLP) and Constant Thematic Progression (CTP) patterns becomes the parameter of text consistency for English texts in general and especially for explanatory texts in this study. This is based on the common feature of scientific texts which mostly present greater percentage of Simple Linear Progression (SLP) and Constant Thematic Progression (CTP) (see Nwogu and Bloor, 1991: 379).

### **3.4. Conclusion**

This chapter has elaborated the research method which includes research design, data collection technique, and the data analysis with their specific foci. These sections provide the frameworks and guidelines for the data analysis in the Chapter IV. This chapter then presents the application of data analysis and is organised into data analysis, the findings, and the discussion.