CHAPTER ONE

INTRODUCTION

This chapter presents the background of the study, which is started with a brief illustration on nominalisation, the scope of the study, research questions, purpose and significance of the study, some definitions of key terms, limitation of the study, and organisation of the thesis.

1.1 Background of the Study

Nominalisation holds a very important role in a written text. The importance of it is illustrated with the following situations (adapted from Eggins, 2004:94-95):

i) Someone is behind in her university work and has to explain to her tutor why her essay has been handed in after the due date. When speaking to her tutor, she might say something like this:

I handed my essay in late because my kids got sick.

ii) Now that she has to write a letter of explanation, accompanying her essay. In her letter she will probably write something like:

The reason for the late submission of my essay was the illness of my children.

In sentence i), one sentence is made up of two clauses (I handed my essay in late // because my kids got sick). They are linked with logical connective (conjunction) because. Each of the two clauses describes the concrete actions (hand in, get sick), expressed by verbs, performed by different actors (I, my kids), with the actors occupying first position in each clause.

In sentence ii), the message has been condensed into one clause by turning the actions of handing in and getting sick into nouns: submission, illness. The only verb is the non-action verb is. The logical relation between two events is expressed using the reason.

There are many movements from spoken to written version. The main means of achieving these changes is through the process of nominalisation: turning words that not normally nouns into nouns. All changes are summarised below:
Halliday (1992) asserts that “Most of what we learn, we learn through language. Language is so central to the whole of educational process, since no one could conceive of education without it” (p. 96). Then, he argues that “Learning is essentially a process of constructing meaning” (p. 98) and that “Meaning is realised in language in the form of text” (p. vii).

Moreover, Halliday (1992) states “All use of language embodies a great deal of metaphor” (p. 94) and that “Written language is associated with the use of grammatical metaphor” (p. 95). He also mentions that “Grammatical metaphor that dominates the language of science is nominalisation” (in Halliday & Martin, 2005:141).

It can be inferred from the Halliday’s statements that language plays very strategic roles in educational process, for constructing meaning realised in text. So, when we learn, we use language (text) to understand its meaning. Thus the phenomena of using language in educational process in Polytechnic need to be investigated, particularly with the realisation of nominalisation in scientific texts.

Some previous studies have focused on nominalisations used in academic writing (Galve, 1998; Briones et al., 2003; Banks, 2005; Holtz, 2009; Tyrkko & Hilturen, 2009; Yuliana, 2011; and Ahmad, 2012). Baratta (2010) is the exception. He studies nominalisation development across an undergraduate academic degree program within the community of ‘Language, Literacy and
Communication’ (LCC), part of Humanities. He found that nominalisations do not necessarily play a prominent role within the academic writing of this community.

However, the students’ level of understanding and realising nominalisation in scientific texts has not been investigated, especially for the students of undergraduate program majoring in mechanical engineering. That is why the researcher is highly motivated to investigate the phenomenon of realising nominalisation among undergraduate or Polytechnic students.

Furthermore, there is another argument to carry out this study. Students need to understand the application of nominalisation, as it dominates scientific language (Halliday & Martin, 2005). Despite of this, due to the lack of time, the topic of nominalisation has not been taught in English program in Polytechnic whose study background is mechanical engineering. Therefore, to portray the phenomenon of understanding and manifesting nominalisation in scientific texts does really encourage the researcher to conduct this study in Polytechnic.

1.2 Scope of the Study
This study focuses on nominalisations, as the results of derivation, manifested in scientific texts based on Systemic Functional Linguistics theories. Theoretically, there are four types of nominalisation (Halliday, 1998, as cited by Chen & Foley, in Ravelli et al., 2004). In this study, for some reasons, only Types I and II are investigated. For Polytechnic students, it is hard to comprehend nominalisations Types III and IV. Even in native’s texts, these types of nominalisation are rarely used. Further discussion of these reasons is posted in Chapter III.

The investigation of understanding nominalisation in a scientific text and the realisation of nominalisation is addressed to 20 undergraduate students of year three in a state-owned Polytechnic in Bandung. Further details about the participants are elaborated in Chapter III. The data analyses are mainly on identifying and unpacking nominalisations as the results of derivation, using nominalisation suffixes, manifesting (how many) nominalisations in students’ texts, and realising the types of nominalisation in their written texts.
1.3 Research Questions
Based on the statements written in the background, this research is carried out in order to address the following research problems:

1. What is the students’ level of understanding on the realisation of nominalisation in a scientific written text?
2. How are nominalisations manifested in the students’ written texts?
3. What types of nominalisation are usually found in students’ written texts?

1.4 Purpose of the Study
The main purpose of the study is to portray the students’ understanding on nominalisations in a scientific text and the students’ manifesting nominalisations in written texts. To answer the questions stated above, the first thing to do is to investigate the students’ understanding nominalisations in a scientific text, copied from an engineering textbook (Dieter, 1991). After that, the investigation is continued on the manifestation of nominalisations in students’ texts, as it is expected that their understanding on nominalisations is productively reflected in their written texts. Furthermore, within the same texts, the types of nominalisation are able to be identified.

1.5 Significance of the Study
This study is potential to contribute to English education theoretically, practically, and professionally. This contribution is particularly essential to the teaching of scientific writing to undergraduate students.

Theoretically, the results of this study are expected to improve the variety of findings of the same topic and to enrich the literature of nominalisations. Therefore, they will motivate further investigation on the application of nominalisations in academic written text.

Practically, the results of this investigation might advance the educational practice, by incorporating nominalisation into the teaching academic writing.
They will also enable practitioners in education to improve the condition of technical English teaching for Polytechnic students.

Professionally, the report of the study will not only contribute to the professional sources in the teaching profession in Polytechnic in particular, but also in teaching technical English in general. It can be reached by publishing the results of this study in an applied linguistic journal, for example. In addition, they may increase the teachers’ awareness with the importance of nominalisations in academic texts. It can be achieved by disseminating those findings in institutional meetings held periodically for presenting and discussing current findings resulted by several researchers.

1.6 Definitions of Key Terms
In this section, many prominent terms need to be clarified in order to avoid any sort of misunderstanding or misinterpretation. Some of them are as follows.

- **Grammatical metaphor** is a source for construing meanings in ways that depart from the grammar through which ‘ordinary life’ is typically construed; for example, by realising as a nominal element something that is congruently a process:

  Ex 1: *The bomb exploded at Hiroshima.*

  Ex 2: *The explosion of the bomb at Hiroshima*........

  (Schleppegrell, in Ravelli & Ellis, 2004; Ravelli, 1999)

- **Nominalisation** is “the single most powerful resource for creating grammatical metaphor. By this device, processes (congruently worded as verbs) and properties (congruently worded as adjectives) are reworded metaphorically as nouns. Instead of functioning in the clause, as Process or Attitude, they function as Things in the nominal group” (Halliday, 1994:352). In this study, nominalisation is defined as the formation of nouns which come from verbs, adverbs, adjectives, and conjunctions. It refers to the meaning of *nominalise*, to form a noun from verb and adjective (Hornby, 2010:1035).
- **Procedure Text** is a piece of text containing factual article, giving instructions or a sequence of steps to follow (eg. instructions, directions, rules and recipes) for making or doing something. The structure of the text consists of social purpose, a list of materials or equipment needed for completing the procedure, and some steps. (Butt et al., 2006; Droga et al., 2011; Anderson et al., 2003).

- **Unpacking** means rewording. Droga & Humphrey (2011) mention that the term currently used for rewording in this direction – from metaphorical to congruent – is unpacking. Unpacking grammatical metaphor means suggesting what the congruent realisation of the same meaning might have been. For example:
  - Recognising that war at any level can be won or lost, .....  
  - We must recognise that war at any level can be won or lost.

- **Level of understanding** refers to levels (i.e. low, medium, or high) of understanding on nominalisation realised in a text among Polytechnic students. It is resulted by categorising the data from an English test.

1.7 Limitation of the Study

There is a limitation in the study of portraying the capacity of Polytechnic students in understanding on nominalisations realised in scientific text. The limitation is in term of the research instrument. In Test #2, that is an essay test, the students were instructed to write **Procedure Text**. Within this text type, instructions or commands are usually found. These constructions use verbs. Nevertheless, by using this text type the students still have some possibilities to realise nominalisations. The imperative sentences do not limit the students to use nominalisations, because after the verb, in other part of the sentence, nominalisations can still be used. The following example is taken from the student’s text (Text #5, clause 6), in which the underlined word is nominalisation: *Press the Emergency Stop button to terminate all operations.*
1.8 Organisation of the Thesis

The five chapters of this thesis will be respectively presented as follows. **Chapter One** discusses the introduction, covering its background, its scope, research questions, purposes, significance of the study, some previous studies on nominalisations, definitions of key terms, limitation of the study, and organisation of the thesis. **Chapter Two** includes review of related literatures concerning to the manifestation of nominalisations in written texts. It will elaborate definitions, realisation, formings, types, functions, nominalisation suffixes and the effects of nominalisation in academic texts. **Chapter Three** presents the methodology of conducting this study. It includes three sections: Research Design, Data Collection, and Data Analysis. The first describes the nature of research design characterising this study, research site and participants. The second does not only mentions the techniques of data collection, including English Tests #1 and #2, and some interviews to some participants, but also the comprehensive procedure of collecting data. The last reveals the methods of data analysis including data analysis framework, based on a taxonomy of metaphor proposed by Halliday (1998. In Ravelli & Ellis, 2004). **Chapter Four** presents and discusses the data resulted from two English tests and interview. There are three main findings, each of which is elaborated individually. It is followed by its argumentation based on theoretical aspects elaborated in chapter two and practical aspect experienced by the researcher, and some interview sessions to some participants representing low, medium, and high achievers. **Chapter Five** will close this thesis. It provides some research findings, conclusions and recommendations for the stakeholders who are in charge of developing the educational results, and for other researchers intending to do future study of the similar topic.