

CHAPTER I

INTRODUCTION

1.1 Background of the Study

The translation of scientific texts is an essential need in the modern Indonesian context since most of the scientific texts are written in English and most of all, at present, there are tendencies of establishing international schools in the levels of primary up to university. The foreign language development (especially English) not only mean as the development of vocabulary but also the uses of language in the domains of science and technology. Within the Indonesian context, whenever the scientific texts are translated, the gap in the terminology are filled either by coining terms through borrowing or adapting English words into Indonesian language system. The gap can also be found in the translating system (from the level of morpheme, word, phrase/group, clause, and even text) where the bilingual scientific textbooks are composed.

English language development must be an integral objective of all science instruction. It is important to incorporate vocabulary development into science lessons both to ensure that students understand the science and to improve their English language skills. Teachers should review the English terms or names to be used in a lesson before it is begun; help students label with stickers items to be used in an experiment and verbally describe what they are doing, by using language

appropriate to the students' proficiency level. They should follow up by asking students to repeat the activity and describe it in their own words.

One way for students to develop English language skills is for them to carry out investigations within a group of students with varying levels of English proficiency, and to engage in follow through activities that motivate them to use English. Examples of such activities include writing summaries of the procedures used and results of their investigations, preparing a verbal presentation on it, and drawing a picture of it and explaining the picture in writing or verbally. By using bilingual textbooks, the students are expected to be able to explain items related to the subject matters through the English translation versions.

Related to composing or writing scientific textbooks, it is known that the basic ground of a scientific study is the continuous relationship between a cause and its effect. In other words, wherever there is a cause there is an effect. In the modern context the term 'Science' is moved away from its original definition and is presently used for areas of study which do not show the relationship between cause and effect in a traditional sense. Sciences such as political science, psychology, etc. fall under this category. In the modern world the areas of knowledge are divided mainly in three categories, i.e. (1) Natural Sciences, (2) Social Sciences, and (3) Humanities. The Natural Sciences study, natural phenomenon which are not man-made. Social Sciences concentrate on the study of human behavior and humanism. The areas under Humanities try to explore aesthetic and creative aspects of human mind. In fact, these three categories are not mutually unrelated but one finds a narrowness of approach in

these areas of study. For instance, Psychology on one hand is related to the Neuroscience and on the other to Social Sciences since the human being is created as the result of a natural process and the society controls his/her social behavior. Related to this research, the bilingual scientific textbooks as the data resources are Physics, Chemistry, and Biology textbooks that are used for Grade X of Private Senior High School (*Sekolah Menengah Atas: SMA*) *Dwitunggal*, which is located on *Jalan Tanjung Morawa km 14.5 Tanjung Morawa, Medan*.

Scientific text, whether in original or in translation, is different from other texts because scientific text is factual and information-oriented. The language of a scientific text is clear, simple, and unambiguous. Since science is an objective in its approach, the language of a scientific text is also more objective and subjectivity of the author is kept out of it (Fries, 2001:2–19). Within science itself, the language may vary according to the area under study. For example, the language of Physics may vary from the language of Chemistry. However, both are objective in their presentations of the subject. In other words, the language of scientific texts is more specific, making the texts more clear and unambiguous as opposed to the literary text where language is often subjective. The language of a scientific text, as opposed to the language of literary texts, is factual in its content. Every word is concrete and real. The style is not figurative and the language is semantically single layered and less ambiguous. But, in the process of transferring the contents of the original text written in Indonesian language as the source text (ST) into English as the target text (TT), especially those that are related to thematization there are some difficulties found

which are caused by the difficulties are caused by the differences in grammatical rules of the ST and TT.

Apart from describing the fundamental elements of translating and setting translation into the context of historical changes in principles and procedures over the last two centuries, and with his/her emphasis on text being understood within their central contexts, it is believed that translating a scientific text contains familiarity with sentences in different languages. It is also believed that if translating scientific materials from a language contributing to the progress of science is difficult, then translating scientific materials from a language that is outside the domain of science would extremely difficult.

The focus of the analysis in this thesis is on the process of translation especially those that are related to thematization (the process of constructing theme and rheme in each clause of the texts). Before proceeding to the thematic analysis in part three, it is necessary to define the terms and method used to discuss thematization at each level of discourse, starting with the clause level and moving upward to the paragraph level. The discussion on thematization is under the umbrella of functional grammar. Thomson, (2004:118) explains that in functional grammar, repetition, conjunction and thematization are regarded as three of the main ways in which textual meanings are constructed in a text. In this analysis the writer just concentrates in analyzing thematization. Repetition and conjunction are not included in the analysis.

Brown & Yule (1983:133-134) mention that thematization as a discoursal rather than simply a sentential process. What a speaker or writer puts first will influence the interpretation of everything that follows. A more general, more inclusive term than tematization (which refers only to the linear organization of text) is called 'staging'.

Theme, according to Halliday (1994:38) thematization is one element in a particular structural configuration which, taken as a whole, organized the clause as a message; this is configuration of Theme + Rheme. A message consists of Theme combined with Rheme. Within that configuration, the Theme is the starting-point for the message; it is the ground from which the clause is taking off. (for detail, see chapter 2: Review of Related Literature).

1.2 Focus of the Study

As mentioned in the background of the present study, the ultimate goals of this study are three folds, i.e. (1) translation analysis, (2) thematization, and (3) bilingual scientific textbooks. Thematization is the core subject that will be analyzed.

In line with this, the problems of the study can be formulated as the followings,

- 1) What types of thematization are there in source text and target text?
- 2) What is the dominant thematization type found in source text (ST) and target text (TT)?
- 3) Why the certain theme can be dominant?
- 4) How is the topical theme shift in source language and target language?

1.3 Objective of the Study

Finding the answers of the research questions is the most important objective of this study. This study is mainly intended for the following objectives.

- (1) to describe the themes in source text and target text,
- (2) to describe the dominant theme found in ST and TT,
- (3) to describe why certain theme is dominant,
- (4) to describe the topical theme shift in ST and TT.

1.4 Scope of the Study

The study in this thesis is limited on the discussion of thematization in the process of translation of source text (ST) to target text (TT). All types of thematization, i.e. marked and unmarked themes will be analyzed in bilinguals science textbooks. There are three science textbooks altogether that are analyzed as the data source, i.e. Physics, Chemistry, and Biology.

1.5 Significance of the Study

The results of the analysis are expected to have both theoretical and practical importance to both translation as a process and product, especially within the frame of translating themes in ST into the TT.

1. Theoretically, the results of the analysis are expected to enhance the theories of translation studies and to support the empirical evidences

of the importance of translation studies in transforming messages from one linguistic aspect, i.e. thematization.

2. Practically, the results of the analysis are expected as an informative feedback to the Indonesian – English or vice versa concerning on thematization.
3. The results of the research are also intended to be used as a reference in translation studies.

